

**Minutes
of the
31st Meeting of the Academic Council
held on
Tue 17th & Wed 18th April 2018
by VLC**



Bahria University Islamabad

Reference Designators & Terms used in this Document

These designators/terms are meant to introduce clarity, standardisation and ease of reference while consulting or referring to this document.

Item Number	o_on_n, where o _o = ordinal sequence of the Academic Council Meeting. n _n = serial number of Item in that meeting.
	Example: Item 2213 means item No 13 taken up by the 22 nd ACM
Decision on New Item	O_on_n Example: Decision 2213 means Decision on Item 2213. Example: Decision 2213.b means Decision 2213, clause 'b'. Example: Decision 2213.b.3 means Decision 2213, clause 'b', sub-clause '3'
Decision on Previous Item	O_oO_o(o_on_n) Example: Decision 22(1930) means Decision taken by the 22 nd ACM on the previous/review Item 1930. Example: Decision 22(1930).b means Decision 22(1930), clause 'b'. Example: Decision 22(1930).b.3 means Decision 22(1930), clause 'b', sub-clause '3'.
Action	Authority, Entity, Official, Person, Unit, Dept, Office, etc required to implement the decision
Responsibility	The supra single Authority, Entity, Official, Person, etc required to: <ol style="list-style-type: none"> Coordinate the actions taken by the Authorities, Entities, Officials, Persons, Units, Depts, Offices, etc listed against "Action". Report to the Council the progress on the matter, through periodic progress reports and at the meeting of the Council. Be overall responsible to the Competent Authority, and the Council, for the case/issue/point/item he or she has been made responsible for.
Statutory Documents affected	Most decisions of the Academic Council imply amendments to the relevant statutory documents. These amendments shall be processed and incorporated into the said documents forthwith and certainly before the next meeting of the Academic Council. The responsibility of processing the amendments and incorporating them into the statutory documents shall be as per the Registrar Notification 23/2015 dated 25 th May 2015.
Deadlines	Any time period deadlines shall count from the date of issue of the minutes. Time period in days shall imply working days.

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Acronyms & Abbreviations used in this Document

ACMROB	ACM Rules of Business
CE	Computer Engineering
CS	Computer Sciences
CSE	Computer & Software Engineering
Dean ES	Dean Engineering Sciences
Dean HS	Dean Health Sciences
Dean M&SS	Dean Management & Social Sciences
Dean PP	Dean Professional Psychology
Dept	Department
DIC	Director Islamabad Campus
DIPP	Director IPP
DKC	Director Karachi Campus
DLC	Director Lahore Campus
DNCMPR	Director NCMPR
DS	Dental Section BUMDC
EDC	Estimated Date of Completion
EE	Electrical Engineering
EES	Earth & Environmental Sciences
ES	Engineering Sciences
HCU	Head of the Constituent Unit (DG, or Director where no DG)
HNS	Humanities & Natural Sciences
HS	Health Sciences
HSS	Humanities & Social Sciences
iaw	in accordance with
ie	that is
IR	International Relations
MS	Management Sciences
M&SS	Management & Social Sciences
SE	Software Engineering
Secy	Secretary to the Academic Council
wef	with effect from

Attendance

BUHO

Present

1. Vice Adm (R) Muhammad Shafiq HI(M)	Rector	In Chair
2. Rear Adm (R) Shahid Saeed HI(M)	Pro-Rector/DGIC	Member
3. Rear Adm (R) Mukhtar Khan HI(M)	DG IMA	Member
4. Cdre (R) Muhammad Hisham SI(M)	Registrar	Member
5. Assistant Professor Dr. Muhammad Ali Saeed	Dir Academics	Member & Secy
6. Cdre (R) Asim Raza SI(M)	DE	Member
7. Snr. Associate Professor Mr Fazal Wahab	DQA	Member
8. Captain (R) Imtiaz Khan PN	DA	Member
9. Surg Cdr (R) Hamidullah Arif PN	DHS	Member
10. Associate Prof Dr Riaz Ahmed	Dir PGP	Member
11. Snr. Assistant Professor Mr. Khalid Mumtaz Khan	DLDC	Member
12. Assistant Director Adeel Ahmed	AD R&D/ORIC	Member
13. Prof Dr M Najam ul Islam	Dean (ES)	Member

In Attendance

14. Cdre (R) Habib Tariq SI(M)	DF
15. Cdre (R) Naseem Anwar Khan SI(M)	DP&D
16. Capt (R) Ahmad Farooq Butt PN	DHR
17. Ms. Sundal Mufti	DSA
18. Senior Assistant Prof Mr M Awais Mehmood	DIO
19. Senior Assistant Prof Mr Rizwan Aamir	DIT
20. Capt (R) Munawwar Ahmad PN	Dy. Registrar (A & C)
21. Capt (R) Azhar Iqbal PN	Dy. Registrar (Academics)
22. Cdr (R) M Khaleeq Khan PN	SO (Coord)
23. Cdr (R) Abdul Ghaffar PN	Dy Director Academics
24. Cdr (R) Zahid Saeed PN	DDREGS

BUIC

Present

25. Cdre (R) Syed Hassan Mustafa SI(M)	Director	Member
26. Senior Prof Dr Tehseen Ullah Khan	HOD(E&ES)	Member
27. Senior Prof Dr Syed Abdul Siraj	HOD(Media Studies)	Member
28. Prof Dr Faisal Aftab	HOD(MS)	Member
29. Senior Associate Prof Dr Atif Raza Jafri	HOD(EE)	Member
30. Senior Associate Prof Dr Faisal Bashir	HOD(CS)	Member
31. Associate Prof Dr Awais Majeed	HOD(SE)	Member
32. Associate Prof Dr Amina Jameel	HOD(CE)	Member
33. Associate Prof Dr Uzma Masroor	HOD(PP)IC	Member
34. Senior Asstt Prof Dr Azhar Ahmed	HOD(H&SS)	Member
35. Assistant Prof Ms Malieka Farah Deeba	HOD(LAW)	Member

BUKC

Present

36. Vice Adm (R) K G Hussain HI(M)	DG	Member
37. Senior Prof Dr Farooq-e-Azam Cheema	Dean M&SS	Member
38. Cdr (R) Muhammad Akhtar PN	Director	Member
39. Senior Prof Dr Mustagis ur Rehman	HOD(MS)	Member
40. Prof Dr Bashir Ahmad	HOD (H&SS)	Member

41. Prof Dr Nurgis Yasmeen	HOD (E&ES)	Member
42. Prof Dr Haroon ur Rasheed	HOD(EE)	Member
43. Associate Prof Dr Humera Farooq	HOD(CS)	Member
44. Associate Prof Dr Sohaib Ahmed	HOD(SE)	Member
45. Senior Asstt Prof Dr Rizwan Iqbal	HOD (CE)	Member
46. Senior Lecturer Mahe Darakhshan	HOD(Media Studies)	Member

In Attendance

47. Erum Shafiq	ADQA
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PNSL

In Attendance

48. Mr Ubaid Ullah Shaikh	AOIC Exam
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BULC

Present

49. Cdre (R) M Amjad Zaman SI(M)	Director	Member
50. Senior Asstt Prof Mr Farhan Saeed Sherazi	HOD(CS&IT)	Member
51. Assistant Prof Dr Muhammad Ahmad	HOD(MS)	Member

In Attendance

52. Assistant Prof Dr Shahid Iqbal	MS Department
53. Senior Lecture M Taimoor Aamer Chaghtai	CS & IT Department

BUMDC

Present

54. Rear Adm (R) Imtiaz Ahmad HI(M)	DG	Member
55. Prof Dr Asadullah Khan	Principal & Dean HS	Member
56. Prof Dr Ambreen Usmani	VP/HOD(Anatomy)	Member
57. Prof Dr Shakeel Ahmed	HOD(Paediatrics)	Member
58. Prof Dr Naheed Sultan	HOD(Surgery)	Member
59. Prof Dr Nasim Karim	HOD(Pharmacology)	Member
60. Prof Dr Iqbal Hussain Udaipurwala	HOD(ENT)	Member
61. Prof Dr Khalida Nasreen Abdullah TI(M)	HOD(Obst and Gynae)	Member
62. Prof Dr Nighat Rukhsana	HOD(Psychology)	Member
63. Prof Dr Mohiuddin Alamgir	HOD(Pathology)	Member
64. Prof Dr M Sajid Abbas Jaffri	HOD (Medicine)	Member
65. Dr Abdul Waheed	Ag HOD (Forensic Medicine)	Member
66. Assistant Prof Dr Mehreen Latif	HOD(MDRL)	Member
67. Prof Dr Wahab Bukh Kadri	Principal (DS)	Member
68. Associate Prof Dr Kalsoom Fatima Rizvi	Vice Principal (DS)	Member
69. Prof Dr Mushtaq Ahmed	HOD(Periodontology)	Member
70. Dr Shama Asghar	HOD(Preventive Dentistry)	Member
71. Dr Saman Hakeem	HOD (Prosthodontic)	Member
72. Dr Syed Ahmed Umar	HOD(Dental Material)	Member
73. Dr Daud Mirza	HOD(Oral Pathology)	Member
74. Dr Beenish Alam	HOD(Oral Biology)	Member
75. Senior Associate Prof Dr Khalid Aziz	Vice Principal (DPT)	Member

In Attendance

76. Brig (R) Prof Dr Syed Parvez Asghar	Prof of Medicine
77. Prof Dr Yasmin Taj	Prof of Pathology
78. Prof Dr Naveed Faraz	Prof of Pathology

79. Brig Shahid Ali Khan	Clinical Coordinator
80. Prof Dr Iram Saddiqা	Prof of Physiology
81. Prof Razia Korejo	Prof of Obs & Gynae
82. Prof Zehra Naz	Prof of Biochemistry
83. Prof Atiya Fasih	Prof of Obs & Gynae
84. Surg Capt Khalida Nisar PN	Senior Instructor PNS Shifa
85. Surg Cdr Shehzad Ahmed Bhutta PN	SMO Trainee at PNS Shifa
86. Surg Cdr Saira Nazneen Zaidi PN	Instructor PNS Shifa

IPP

Present

87. Prof Dr Zainab F. Zadeh	Dean/Director	Member
88. Senior Associate Prof Dr Zainab Hussain Bhutto	HOD (IPP)	Member

Proceedings

Preliminaries

Commencement of the Meeting, Opening Remarks of the Chair and Meeting Schedule

1. With the quorum complete, the proceedings commenced at 09:30 hrs on both days with recitation from the Holy Quran and continued till 19:00 hrs on Day-1 and 20:15 hrs on Day-2. The meeting recessed for lunch and prayer at 13:15 hrs and resumed proceedings at 14:15 hrs on both days.
2. In his opening remarks, the Chair prayed to Almighty Allah and begged from Him to give wisdom and strength to this Council to make right decisions. He also stressed the importance for participation in the proceedings while staying focused on the point under deliberation.

Confirmation of the Minutes of the 30th ACM held on 03 Oct 2017

3. The Secretary apprised the Council that:
 - a. Draft minutes of the 30th ACM were communicated to all members and non-member participants, for comments, on 11 Oct 2017. No comments or observations had been received.
 - b. Consequently, the draft minutes were processed on file and the approved minutes were then disseminated on 13 Oct 2017. There had been no comments or observations on the approved minutes either.
 - c. Later, HOD (HSS) BUIC initiated a case on 10 March 2018 to change the title of one course, from “International Politics of Central Asia” to “Central Asia in International Politics” in Item 3001, which was subsequently approved by the Chairman Academic Council.
4. The Minutes of the 30th ACM were then tabled for confirmation. All the houses on the VLC endorsed the minutes upon which the Council confirmed the minutes.

Decision

5. Minutes of the 30th ACM held on 03 Oct 2017 confirmed.

Review Items

Item 2009: Indigenous PG Programmes (MPhil & PhD) in Basic Health Sciences at BUMDC, Commencement of

Responsibility: DG BUMDC, Registrar

Decision of the 30th ACM

6. Decision as follows:
 - a. Revised syllabi for MPhil Anatomy, MPhil Pathology and MPhil Pharmacology, as at Appendage 2009 (Page 263), approved.
 - b. Intake into PG Programmes at BUMDC shall be once in a year.
 - c. Point to remain on agenda and progress reported.

Progress Reported by BUMDC

7. As follows:
 - a. All three MPhil programmes; in Anatomy, Pathology and Pharmacology approved from HEC are running smoothly, in the 1st and 2nd semester respectively.
 - b. Cases for MPhil programmes in Biochemistry and Physiology are under process with the Ministry of National Health Services Regulations & Coordination (NHSRC). The Ministry had asked for some more information which was responded to.

Decision 31 (2009)

8. After prolonged discussion, the Council resolved that:
 - a. The Council showed satisfaction on all three MPhil programmes, in Anatomy, Pathology and Pharmacology and found running smoothly.
 - b. Cases for MPhil programmes in Biochemistry and Physiology be pursued with Govt and HEC for obtaining early NOC.
 - c. Point (a) be dropped and Point (b) to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	Registrar, DHS	Registrar
Statutory Documents affected:		

Item 2234: Bahria University Lahore Campus - Progress Report

Responsibility: DLC

Decision of the 30th ACM

9.
 - a. BULC permitted to start BS Professional Psychology wef Fall 2018 subject to Successful accreditations visits in respect of BS CS and BS IT and completion of the 4th floor.
 - b. 5% admission waiver for BBA and BS IT programmes extended to Spring 2018 intakes.
 - c. Point to remain on agenda and progress be reported.

Progress Reported by BULC

10. Academics

- a. Visit of NCEAC for the accreditation of Computer Sciences program was successfully conducted on 15th Dec.
- b. Classrooms are available for BS Professional Psychology. The programme can be started wef the Fall-18 semester. To that end, induction of HOD (Psychology) and one FM is recommended, by April. Early induction will help plan and launch the programme smoothly.

11. 5% Waiver in Admission Criteria

- a. 5% Waiver in Admission Criteria for BBA & BSIT granted for the spring 2018 admissions were availed as under:

Program	Total Class Strength	No. of Students Availed Waiver	% of Students Availing Waiver
BBA	10	1	10%
BSIT	27	8	29.6%

- b. The waiver may be continued for Fall-2018 admissions, as a number of universities and institutions exercise 45% eligibility criteria for the BBA and BSIT programmes.

12. Civil Works

- a. Construction of 4th floor by Bahria Foundation has been completed.
- b. Two classrooms have been constructed in the basement to fulfil NCEAC's infrastructural requirement as well for the BS Psychology programme.
- c. 73 kanals land has been purchased for establishment of new campus at Dream Garden Society on Defence Road. Efforts are in hand to acquire more land to make

the land shape regular. Consultant has been selected for master planning and subsequent detailed planning of Phase-1. Boundary wall is under construction.

Decision 31 (2234)

13. After prolonged discussion and overviewing the progress of BULC including development works for new campus, the Council resolved that:

- a. 5% Waiver in Admission Criteria for BBA programme approved for the Fall 2018 admissions intake.
- b. Psychology Department at BULC approved.
- c. Launch of 4 years BS (Psychology) programme at BULC approved wef Fall-2018 intake as per existing roadmap of BUIC and IPP.
- d. BS (Psychology) at BULC to be initially restricted to once a year intake.
- e. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	DLC, Dir Admission	Dean IPP, DLC
Statutory Documents affected: Prospectus		

Item 2331: Audit Documentation and Reporting in the Faculty of Management Sciences, Status of

Responsibility: Dean M&SS

Decision of the 30th ACM

14. Point to remain on agenda and progress be reported.

Progress Reported

15. Audit of the Performance Centers at the BUIC was held in March. Reporting by the Performance Centers at the Karachi campus will be initiated just after conclusion of the NBEAC visit in the first quarter of this year.

Decision 31 (2331)

16. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HODs MS	Dean M&SS
Statutory Documents affected:		

Item 2334: BBA & MBA programmes - Heuristic & Flipped Classroom Methods of Teaching & Evaluation

Responsibility: Dean M&SS

Decision of the 30th ACM

17. Point to remain on agenda and progress reported.

Progress Reported

18. Flipped Class teaching methodology is in practice in the Management Science departments at all three campuses. Certain numbers of courses have been identified for that purpose. Training of Faculty members in the use of technology in the teaching methodology will be undertaken this semester in coordination with the LDC.

Decision 31 (2334)

19. A committee to be constituted to further deliberate this issue including requirements for all three campuses and put up report in two months: The composition of the committee will be as under:

- a. Dean M&SS Head
- b. All HODs (MS)
- c. Dir LDC

20. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	Dean M&SS	Dean M&SS
Issuance of Notification	Registrar	Registrar
Statutory Documents affected:		

Item 2432: MS Supply Chain Management at BUKC - Progress

Item 2619: MS in HRM & Organizational Psychology at BUKC - Progress

Item 2620: MS in Risk Management at BUKC - Progress

Responsibility: Registrar

Decision of the 30th ACM on all three Items

21. NOC for the Programmes be followed up at the HEC, particularly for MS HRM & OP. Points to remain on agenda and progress reported.

Progress Reported

22. The MS HRM & Organizational Psychology case has been revised with HEC's latest requirements for NOC and sent to HEC on 8 Mar.

Decision 31 (2432, 2619 & 2620)

- 23. a. Case to be followed up with HEC for Item 2619.
- b. Efforts to be continued to hire relevant faculty.
- c. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	DPGP	Registrar
Statutory Documents affected:		

Item 2449: BUMDC Dental Section - Progress Report

Responsibility: DG BUMDC

Decision of the 30th ACM

- 24. PMDC be pursued for re-inspection after the new principal has taken over and new faculty members joined. Point to remain on agenda and progress reported.

Progress Reported

- 25. PMDC's observations have been made good and the Council requested for issuance of Recognition Certificate (BUMDC letter Dental/PMDC/2017/451 dated 28th Nov 2017 refers). DHS is also pursuing the case, which is now pending due to dissolution of PMDC.

Decision 31 (2449)

- 26. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	DHS & Principal Dental Section BUMDC	DG BUMDC
Statutory Documents affected:		

Item 2511: MS Management Sciences (MSMS) Programme - Progress

Responsibility: DKC

Decision of the 30th ACM

- 27. BUKC & BUIC may run MSMS and MPhil MS in parallel till the situation stabilizes or directed otherwise. Point to remain on the agenda and progress be reported.

Progress Reported

- 28. In the spring 2018 admissions, 3 students were admitted in MPhil and none in MSMS. The 3 MPhil students have been joined up with the 3rd semester of MPhil students in

a flipped roadmap, after seeking permission from the BUHO. BUKC may be permitted to continue with MPhil and discontinue MSMS since the programme has not been able to attract any student in the last two semesters.

Decision 31 (2511)

29. The Council decided that both programmes will continue and accordingly both programmes to be advertised for admission. Point dropped.

Item 2519: PhD in Management Sciences at BULC - Progress

Responsibility: Registrar

Decision of the 30th ACM

30. Progress on the case to be reported.

Progress Reported

31. Updated list of newly hired PhD faculty members has been sent to HEC. The case has been pending due to shortage of relevant faculty.

Decision 31 (2519)

32. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	DPGP	Registrar
Statutory Documents affected:		

Item 2616: MS Mathematics at BUKC - Progress

Responsibility: Registrar

Decision of the 30th ACM

33. Progress to be reported.

Progress Reported

34. HEC's NOC was received on 31 Jan 18. The programme will be launched from Fall 2018.

Decision 31 (2616)

35. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	DPGP	Registrar
Statutory Documents affected:		

Item 2643: Grooming Students, Framework for

Responsibility: Dean M&SS, Dean ES

Decision of the 30th ACM

36. a. Point to remain on agenda and progress to be reported.
 b. Dean ES to formulate policy guidelines on implementing the Washington Accord.

Progress Reported

37. As follows:
- a. Dean ES. Several sessions (seminars/workshops/grooming-sessions) are planned during Spring'18, subject to approval of LDC's proposal by FoES at all campuses. The Continual Quality Improvement (CQI) process is being presented in the ACM as separate agenda item.
 - b. Dean M&SS. Students Grooming programme has been implemented in the Management Sciences departments university-wide and reflected in the curricula. LDC is supposed to conduct workshops/training sessions. On directives of the top management, these sessions were confined to the final-semester/final-year students last year. Accordingly, these workshops/training sessions were held but only at the BUIC; no such sessions could be conducted at the BUKC and BULC.

Decision 31 (2643)

38. The Council resolved that:
- a. Islamic values be included in grooming frame work of the students and emphasis be given to make them good human beings.
 - b. Course contents of Grooming programme courses may be incorporated in all possible courses of Bahria University.
 - c. LDC is to co-ordinate on training of Graduating students for the three Campuses and issue detailed instructions.
 - d. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	LDC, Director Admission	Dean IPP, Dean M&SS Dean ES, Dir Admission
Statutory Documents affected: Prospectus		

Item 2709: MS Islamic Banking & Finance at BUIC - Progress

Responsibility: Registrar (NOC), HOD MS BUIC (MOUs)

Decisions of the 30th ACM

39. Progress on NOC and MOUs with the banks be reported.

Progress Reported

40. As follows:

- a. HOD (MS) BUIC. MOU and subsequent training of BUIC has taken place with Bank Al Falah. Draft MOU from BU was shared with Meezan Bank in Jan and their feedback is awaited.
- b. Registrar. HEC's NOC was received in Oct and the programme has been launched wef Spring 2018.

Decision 31 (2709)

41. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD(MS) BUIC	HOD(MS) BUIC
Statutory Documents affected:		

Item 2710: MS Marketing & Sales at BUIC - Progress

Responsibility: Registrar

Decisions of the 30th ACM

42. Point to remain on agenda and progress be reported.

Progress Reported

43. Since its launch in Fall 2017, the admission situation of the programme has been as follows:

- a. 13 admitted in Fall 2017 against 20 who appeared in the test.
- b. 12 admitted in this semester against 13 tested.

44. NOC from HEC received on 10 May 2017. The programme has been launched wef Fall 2017 in weekend format.

Decision 31 (2710)

45. The Council showed satisfaction on the progress and dropped the point.

Item 2712: PhD Software Engineering at BUKC - Progress

Responsibility: Registrar

Decision of the 30th ACM

46. Changes to PhD SE roadmap, listed at Appendage 2712 (page 117), approved. Progress be reported.

Progress Reported

47. NOC was received on 6 Nov and programme has been launched at the BUKC from Spring 2018. Two candidates applied and one was admitted.

Decision 31 (2712)

48. The Council showed satisfaction on the progress and dropped the point.

Action Required	Action by	Responsibility of
Implementation of the Decision	DPGP	Registrar
Statutory Documents affected:		

Item 2713: PhD Program in Environmental Sciences at BUIC - Progress

Responsibility: DIC

Decision of the 30th ACM

49. Point may remain on the agenda and progress be reported.

Progress Reported

50. The programme is now in the second semester and running fine with the original four scholars.

Decision 31 (2713)

51. The Council showed satisfaction on the progress and dropped the point.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (E&ES) BUIC	DIC
Statutory Documents affected:		

Item 2722: Doctor of Physical Therapy Programme - Progress Report

Responsibility: DG BUMDC

Decision of the 30th ACM

52. a. 1st DPT Batch (2017) shall remain on the 2011 curriculum. Subsequent batches shall be on the 2016 curriculum.
- b. TOS and Examination Rules for DPT, approved on file, ratified.
- c. Point to remain on agenda and progress be reported.

Progress Reported

53. 2nd batch of 76 students has been inducted in this semester. Different curricula for the two batches, as authorised by the Academic Council, are being successfully implemented. Semester system is also being followed.

Decision 31 (2722)

54. The Council approved the course codes of 2011 & 2016 curricula and dropped the point.

Item 2817: MBA Pharmaceutics and Health Management - Progress

Responsibility: DKC

Decision of the 30th ACM

55. ‘MBA Pharmaceutics and Health Management’ to remain on the agenda and progress be reported.

Progress Reported

56. Four students opted for MBA Pharmaceutics and Health Management. Since a class could not be formed with this short a number, they were offered to join regular MBA programme.

Decision 31 (2817)

57. Program be advertised again. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) KC	DKC
Statutory Documents affected:		

Item 2820: PhD Mathematics at BUIC - Progress

Responsibility: DIC

Decision of the 30th ACM

58. a. Progress on the programme to be reported.
- b. Department of Mathematics at BUIC pended for the time being. Programme to be run by the CS Dept.

Progress Reported

59. The programme has started this semester with three scholars.

Decision 31 (2820)

60. The Council resolved that:
 - a. Department of Mathematics to be established by Spring-2019 at BUIC.
 - b. Status of PhD programme be updated in next ACM.
 - c. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD(CS) IC	DIC
Statutory Documents affected:	Prospectus	

Item 2821: PhD in Law at BUIC - Progress

Responsibility: Registrar

Decision of the 30th ACM

61. Progress on the programme to be reported.

Progress Reported

62. NOC was received in Oct and the programme has been launched this semester. Against 6 seats, 39 applied.

Decision 31 (2821)

63. The Council showed satisfaction on the progress and dropped the point.

Item 2832: Collaboration with ABE, UK, for Joint Programs

Responsibility: HOD (MS) IC

Decision of the 30th ACM

64. Progress to be reported.

Progress Reported

65. ABE UK has for the time being suspended its affiliations in Pakistan. Collaboration will start once ABE UK decides to link itself to Pakistani Universities.

Decision 31 (2832)

66. The Council resolved that:

- a. Point dropped for collaboration with ABE UK.
- b. Efforts be made to explore the options of AACSB International Accreditation of MS Departments. For the purpose, a committee comprising of following is to be constituted:
 - (1) Dean M&SS
 - (2) All HODs MS
 - (3) DAA
 - (4) DQA
 - (5) DIO
- c. Point to remain on agenda and progress on point (b) be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	DIO	Dean M&SS
Issuance of Notification	Registrar	Registrar
Statutory Documents affected:		

Secretary's Note: Title of the Item 2832 be replaced as "International Accreditation of MS Department roadmap of BU".

Item 2834: PhD Media Studies at BUIC - Progress

Responsibility: Registrar

Decision of the 30th ACM

67. Progress to be reported.

Progress Reported

68. The programme has been launched wef this semester. Against 5 seats, 34 candidates had applied.

Decision 31 (2834)

69. The Council showed satisfaction on the progress and dropped the point.

Item 2838: MS Media Studies at BUKC - Progress

Responsibility: Registrar

Decision of the 30th ACM

70. Progress on the programme be reported.

Progress Reported

71. Program has been launched at BUKC w.e.f this semester. 18 applied and 13 were admitted.

Decision 31 (2838)

72. The Council showed satisfaction on the progress and dropped the point.

Item 3002: BS Media Studies - Review of Curriculum

Responsibility: Dean M&SS

Decision of the 30th ACM

73. Proposed changes to the BS (Media Studies) curriculum to be moved on file. Progress to be reported.

Progress Reported

74. The case was processed on file with wider scope involving multiple streams whereupon it was decided to present the case wholesomely to the Academic Council. The Sponsor has now prepared a Comparative Statement of HEC's Curriculum, BU's Existing Curriculum and the Proposed Curriculum, and is placed at Appendage 3002 (page 55), along with some other proposals, for consideration and approval of the Council.

Decision 31 (3002)

75. The Council resolved that:

- a. Revised Curriculum of BS Media Studies as placed at Appendage 3002 (page 54) approved wef Fall-2018 intake.
- b. Road Map to follow the existing Specializations of BS Media Studies.

- c. Bilingual Teaching and examinations not approved.
- d. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD(Media Studies) KC	Dean M&SS
Statutory Documents affected:	Roadmap, Curriculum, Prospectus, Unified Course Codes Book	

Item 3004: BS (SCM) at PN School of Logistics & Management (PNSLM) - Review of Curriculum

Responsibility: CO PNSL, Dean M&SS

Decision of the 30th ACM

76. Revised curriculum and roadmap of BS(SCM) at the PNSLM, placed at Appendage 3004 (page 146), approved for adoption wef next batches, with the final semester course 'Logistics and Secretariat Management' replaced by 'Research Project'. The programme shall be audited in Spring 2018.

Progress Reported

77. As follows:

- a. PNSL. Revised curriculum/roadmap is being implemented from this semester vide NHQ letter PN/NT/Dte/03/913389 dated 22 Dec 17.
- b. Dean M&SS. Audit will be held in due course of time.

Decision 31 (3004)

78. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	Dean M&SS	Dean M&SS
Statutory Documents affected:	Roadmap, Curriculum, Prospectus	

Item 3014: LLM in International and Maritime Laws - Launch Proposal

Responsibility: Registrar

Decision of the 30th ACM

79. LLM in International and Maritime Laws, as per roadmap at Appendage 3014 (page 229), approved for launch at BUIC wef Fall 2018, subject to NOCs from HEC and PBC. Progress to be reported.

Progress Reported

80. NOC has been submitted to HEC on 31st Jan.

Decision 31 (3014)

81. Case be pursued with HEC for obtaining NOC. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	DPGP	Registrar
Statutory Documents affected:		

Item 3017: MS Economics at BUIC - Launch Proposal**Item 3018: PhD Economics at BUIC - Launch Proposal**

Responsibility: Registrar

Decisions of the 30th ACM

82. MS Economics, as per roadmap at Appendage 3017 (page 264), approved for launch at BUIC wef Fall 2018, subject to NOC from the HEC. Progress to be reported.

83. PhD Economics, as per roadmap at Appendage 3018 (page 300), approved for launch at BUIC wef Fall 2018, subject to NOC from the HEC. Progress to be reported.

Progress Reported

84. NOC case for MS Economics has been submitted to HEC on 10th Jan. NOC for PhD Economics has been received and the programme will be launched wef Fall 2018.

Decision 31 (3017, 3018)

- 85. a. Point regarding launch of PhD Economics be dropped.
- b. Case be pursued with HEC for obtaining NOC for MS Economics. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	DPGP	Registrar
Statutory Documents affected:		

Item 3020: BS English at BUKC - Launch Proposal

Responsibility: DKC

Decision of the 30th ACM

86. BS English, in the Linguistics and Literature domains, as per roadmap at Appendage 3020 (page 344), approved for launch at BUKC wef Spring 2018. Progress to be reported.

Progress Reported

87. Program successfully launched this semester with 30 students. 58 had applied, 52 appeared in the test and cleared, and 30 finally registered.

Decision 31 (3020)

88. The Council showed satisfaction on the progress and dropped the point.

Item 3021: MS Data Science - Launch Proposal

Responsibility: Registrar

Decision of the 30th ACM

89. MS Data Science, as per roadmap at Appendage 3021 (page 359) with credit hours reduced to 30, approved for launch at BUIC and BUKC, wef Fall 2018, subject to NOC from the HEC. Progress to be reported.

Progress Reported

90. The case for NOC has been submitted to HEC on 23rd Feb.

Decision 31 (3021)

91. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	DPGP	Registrar
Statutory Documents affected:		

Item 3023: BS Medical Laboratory Technology - Progress

Responsibility: Principal BUMDC

Decision of the 30th ACM

92. a. ‘BS Medical Laboratory Technology’ approved for launch at BUMDC, iaw the documentation placed at Appendage 3023 (page 386) wef Spring 2018. Progress to be reported.
- b. Item 3023 retitled as “BS Medical Laboratory Technology”
- c. Case for dental technicians pended, to be re-presented at the next ACM, with clarity on the exact title of the degree. “Item 3042: Associate Degree in Allied Health Sciences for Dental Technicians” refers.

Progress Reported

93. a. ‘BS Medical Laboratory Technology’ launched this semester with 14 students.
- b. For Associate Degree in Allied Health Sciences for Dental Technicians”, Item 3042 refers. Detailed progress report is attached as appendage 3023 in change1 to agenda document of 31st ACM.

Decision 31 (3023)

94. The council resolved that:
- a. Admission criteria be incorporated in admission policy of BU for all semester based UG and graduate programme being offered at BUMDC including BS MLT. Accordingly, other statutory documents may also be updated, wherever required.
- b. Course codes as shown at appendage 3023 to MoM of 31st ACM (attached as Supplementary booklet) for MLT approved.
- c. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	DA, DHS, Principal BUMDC	DG BUMDC

Statutory Documents affected: Prospectus, Unified Course Codes Book, Admission Policy, Academic Rules

Item 3025: LLB at BUKC - Launch Proposal

Responsibility: Dean M&SS

Decision of the 30th ACM

95. A steering committee of Dean M&SSS (Committee Chair), DKC, HOD Law IC and Legal Advisor BUKC to carry out feasibility study for establishing Law Department at the BUKC and present its report in two months.

Progress Reported

96. The Committee held its meeting on 12th Dec. Report was submitted to the Registrar and processed on file in the light of all previous interactions with the PBC. It has been decided to proceed step-wise in the following sequence: seek full recognition/approval of our LLB programme at the BUIC, prepare for visit by the Pakistan Bar Council's inspection team and then seek approval for LLB at the BUKC.

Decision 31 (3025)

97. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	Dean M&SS, HOD (LAW) IC	Dean M&SS
Statutory Documents affected:		

Item 3026: PhD in International Relations - Launch Proposal

Responsibility: Registrar

Decision of the 30th ACM

98. PhD IR, as per roadmap at Appendage 3026 (page 451), approved for launch at BUIC wef Fall 2018, subject to NOC from the HEC. Progress to be reported.

Progress Reported

99. The case for NOC has been submitted to HEC on 31st Jan.

Decision 31 (3026)

100. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	DPGP	Registrar
Statutory Documents affected:		

Item 3028: IT-based Solution to reduce Submission Time of Final Examination Results

Responsibility: DE

Decision of the 30th ACM

101. A committee of DE (Committee President), Dean ES and DIT, to find an IT-based **solution** to reduce submission time of Final Exam results.

Progress Reported

102. The Committee's report is placed at Appendage 3028 (page 61). To reduce submission **time** of BU final exams result through IT based solution, along with enhanced security of results finalized and promulgated by BUHO Exams Dte, the Committee proposes that:

- a. Faculty members finalize and submit the results within the 7-day period.
- b. Depts endorse the Provisional Semester Result Notification (PSRN) within 15 days of receipt from the BUHO Exams Dte.
- c. IT Dte propose a common software for use by all the campuses and the Exam Dte for overall reduction in final examinations results submission time.
- d. IT Dte enhance security measures at CUs and Exams Dte, and attain more control on finalized results, by restricting changes, and notifying authorized changes at appropriate levels.

Decision 31 (3028)

103. After a long discussion, the Council resolved that there should be a mechanism to align the system of whole university through technology. For the purpose, a committee is to be constituted which will submit its report in one month and mandate of the committee will include:

- a. Single platform/Common software for use by all the campuses and the Exam Directorate BUHO for overall reduction in final examinations results submission time.
 - b. To make examination system fool proof and secure.
 - c. Office Automation system to be used for administrative purpose
104. The committee is to be constituted of the following:
- a. Dean ES
 - b. DE
 - c. DIT
 - d. DQA
 - e. DD Academics (BUIC, BUKC, BULC)
 - f. 1x FM

105. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	Dean ES	Dean ES
Issuance of Notification	Registrar	Registrar
Statutory Documents affected:		

Item 3033: Humanities & Natural Sciences Department at BUKC - Conversion to Humanities & Social Sciences Department

Responsibility: Registrar (Notification), DKC

Decision of the 30th ACM

106. The 'Humanities & Natural Sciences' Dept at BUKC renamed as 'Humanities & Social Sciences' Dept. Progress to be reported.

Progress Reported

107. The department has been renamed as decided. Like other departments, it is conducting programmes as well as sharing faculty. The new Dept has proposed a number of programmes in this ACM.

Decision 31 (3033)

108. Point dropped.

Item 3042: Associate Degree in Allied Health Sciences for Dental Technicians

Responsibility: DG BUMDC

Decision of the 30th ACM

109. Case for dental technicians pended, to be re-presented at the next ACM, with clarity on the exact title of the degree.

Progress Reported

110. Associate degree level program does not fall under the domain of the University, hence four year degree program is appropriate. However, present infrastructure and faculty in BUMDC are insufficient to start the program. It is recommended to drop the agenda item for now. The case will be reinitiated at a suitable time.

Decision 31 (3042)

111. Point dropped.

New Items

Item 3101: BS CS Programme - Revision of Curriculum
Item 3102: BS IT Programme - Revision of Curriculum
Item 3103: BS SE Programme - Revision of Curriculum
Item 3104: BS CE Programme - Revision of Curriculum

Sponsors: HODs CS IC, CS KC, SE KC, CE IC respectively

Referral Authority: FBOS ES

Summary of the Case

112. Curricula revision is a continuous process; the Curriculum Division of HEC undertakes the curricula revision every three years through the respective National Curriculum Revision Committees (NCRCs). HEC has promulgated the latest revised curricula for BS programmes in Computer Sciences (CS), Information Technology (IT), Software Engineering (SE) and Computer Engineering (CE). Dean ES constituted inter-campus departmental committees to review and update the respective curricula and roadmaps. Resultantly, the curricula and roadmaps have been revised/aligned with the HEC's, and are placed at Appendage 3101 (page 63) Appendage 3102 (page 70) Appendage 3103 (page 79) and Appendage 3104 (page 92) respectively, for consideration and approval by the Council.

Decision 3101, 3102, 3103 & 3104

113. The revised/aligned curricula and roadmaps of BS programmes in Computer Sciences (CS), Information Technology (IT), Software Engineering (SE) and Computer Engineering (CE) as placed at Appendage 3101 (page 64) Appendage 3102 (page 70) Appendage 3103 (page 79) and Appendage 3104 (page 85) respectively approved wef F-2018 intake. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HODs (CS, IT, SE CE) IC, LC & KC	Dean ES
Statutory Documents affected: Prospectus		

Item 3105: PhD Programmes in CE, CS, EE & SE - Revision of Curricula

Sponsor: Dean ES

Referral Authority: FBOS ES

Summary of the Case

114. The existing curricula of PhD Programmes in Computer Engineering, Computer Sciences, Electrical Engineering and Software Engineering were approved in 2012. Since then, the departments have been adding Electives to the respective Domains regularly. Dean ES constituted a committee under HOD SE IC to review the roadmaps and curricula of the PhD programs and align them with the latest requirements. The Committee's

recommendations were deliberated in the FBoS, and after minor changes, applied to the roadmaps. The Changes have been highlighted in the Annexures to Appendage 3105 (page 103) and are placed before the Council for approval.

Decision 3105

115. Revision of Curricula for PhD Programmes in CE, CS, EE & SE as placed at appendage 3105 (page 103) approved. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	Dean ES	Dean ES
Statutory Documents affected:	Prospectus	

Item 3106: BS A&F Programme - Addition “Analysis of Financial Statements” & “Behavioral Finance” as Electives

Sponsor: HOD (MS) KC

Referral Authority: FBOS M&SS

Summary of the Case

116. BS A&F has been running at the BUKC since Fall 2015, in collaboration with the ICAP and based on their curriculum and roadmap. For some reason, two electives - *Analysis of Financial Statements* and *Behavioral Finance* – were missed out. These two electives are essential to proper execution of the MOU between the BU and the ICAP and are, therefore, recommended to be included in the Electives List. Courses outlines and other details are in the working paper at Appendage 3106 (page 124).

Decision 3106

117. Addition of “Analysis of Financial Statements” & “Behavioral Finance” as an Electives as per detail placed at appendage 3106 (page 124) approved for BS (A&F) programme at BUKC and BUIC. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) KC	Dean M & SS
Statutory Documents affected:	Prospectus	

Item 3107: BBA & MBA Programmes - Addition of 3 Electives for the Finance Major/ Specialisation

Sponsor: HOD(MS) KC

Referral Authority: FBOS M&SS

Summary of the Case

118. Dynamics of financial market keep changing, laying a premium on relevant new elective courses for students of Finance specialization. Three such electives have been

identified for addition to the pool of electives for the BBA and MBA programmes which should make this knowledge area more attractive for the students:

- a. Advanced Corporate Reporting.
- b. Corporate Law; and
- c. Financial Institution Management.

119. Courses details are attached as Appendage 3107 (page 129) for consideration and approval of the Council.

Decision 3107

120. Addition of three electives to MBA and BBA Finance Specializations programmes as per appendage 3107 (page 129) approved. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) KC	Dean M & SS
Statutory Documents affected: Prospectus		

Item 3108: MBA/BBA Programme - Addition of 10 Supply Chain Electives

Sponsor: HOD (MS) KC

Referral Authority: FBOS M&SS

Summary of the Case

121. The MBA/BBA Electives List has a minimal representation from Supply Chain Management (SCM) which does not meet the market demand nor does justice to this emerging and dynamic field of SCM. Resultantly, following 10 elective courses from the SCM domain are suggested to be included in the MBA Elective List:

- a. Strategic Procurement and SCM
- b. Operations planning in SCM
- c. Detailed Scheduling and Planning (DSP) in SCM
- d. Execution and Control of Operations (ECO) in SCM
- e. Strategic Management of Resources in SCM (SMR)
- f. Master Planning of Resources (MPR) in SCM
- g. Green SCM (GSCM)
- h. Shipping in SCM
- i. Supply chain Implementation and Operations
- j. Supply chain Strategy, Design and Compliance

122. Courses outlines and other details are appended at Appendage 3108 (page 136).

Decision 3108

123. Addition of 10 electives to MBA/BBA Supply Chain programmes as per appendage 3108 (page 136) approved. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) KC	Dean M & SS
Statutory Documents affected:	Prospectus	

Item 3109: MPhil & PhD Programmes in Professional Psychology - Ratification of Revised Course Codes and Reformatting of Roadmap

Sponsor: Dean IPP

Referral Authority: FBOS PP

Summary of the Case

124. In consequence, to an academic audit, the FBOS PP, in its 30th Nov 2017 meeting, proposed reformatting the MPhil and PhD roadmaps in Professional Psychology and revision of course codes. In view of paucity of time, the revision was processed and approved on file. The revision, attached as Appendix 3109 (page 147) is now tabled for ratification. It will apply to the programmes in question at both the BUIC and the IPP.

Decision 3109

125. Approval of Revised Course Codes and Reformatting of Roadmap as per appendage 3109 (page 147) for MPhil & PhD Programmes in Professional Psychology ratified for all batches. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	Dean IPP	Dean IPP, DE
Statutory Documents affected:	Prospectus, Unified Course Codes Book	

Item 3110: MS Media Studies - Addition of 3 Electives

Sponsor: HOD (Media Studies) KC

Referral Authority: FBOS M&SS

Summary of the Case

126. The Case proposes addition of the following courses to the Electives List of the MS Media Studied programme:

- a. Advanced Development Communication.
- b. Digital Media
- c. Media Effects: advances in theory and practice

127. These electives, which are also in the HEC's list of recommended electives, have been considered important to meeting the industry's demand. Details on the electives are placed at Appendage 3110 (page 152). The case is tabled for consideration.

Decision 3110

128. After prolonged discussion, the Council made some changes in proposed electives. Finally, following three electives were approved for MS Media studies as per detail placed at appendage 3110 (page 152):

- a. Research Studies in Communication
 - b. Research Studies in Digital Media
 - c. Media Effects: advances in Theory and Research
129. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (Media Studies) KC	Dean M & SS
Statutory Documents affected: Prospectus		

Item 3111: BS English Programme - Activity Based Assessment of the 'Oral Communication & Presentation Skills' Course

Sponsor: HOD (H&SS) KC

Referral Authority: FBOS M&SS

Summary of the Case

130. BS English has recently started at the BUKC. Its roadmap covers variety of subjects imparting written and oral communication skills to the students. Amongst them, the course 'Oral Communication and Presentation Skills (ENG-201)', by its very nature, requires a predominantly oral and activity-based mode of assessment. A similar assessment regime is in place for the 'Oral Communication' course in BBA. The same may be approved for ENG-201. Case working paper is placed at Appendage 3111 (page 157).

Decision 3111

131. Approved as given in appendage 3111 (page 157). Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (H &SS) KC	Dean M & SS
Statutory Documents affected: Prospectus		

Item 3112: MS Finance Roadmap - Replacement of MSF 840 'Econometrics' with MSF 825 'Theory of Finance'

Sponsor: HOD (MS) IC

Referral Authority: FBOS M&SS

Summary of the Case

132. The case proposes replacement of the course MSF 840 'Econometrics' with MSF 825 'Theory of Finance', as a core course in the roadmap of MS Finance, on the grounds that no MS Finance degree is of any value without knowledge about the theories of Finance. Currently, 'Theory of Finance' is offered as an elective. Working paper is placed at Appendage 3112 (page 159).

Decision 3112

133. Case referred back to FBOS for further deliberation. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) IC	Dean M & SS
Statutory Documents affected:		

Item 3113: BBA Program - Introduction of Optional Final Year Project (FYP)

Sponsor: HOD (MS) IC

Referral Authority: FBOS M&SS

Summary of the Case

134. BBA roadmap does not include FYP. The case considers the FYP essential to train the students in applying the theoretical knowledge gained during the BBA programme on to corporate problems. A BBA graduate so equipped would also increase his/her employability chances. To that end, the case recommends addition of FYP in the BBA roadmap, with the following provisos:

- a. For students on the old BBA roadmap, the 3-CR FYP be considered equivalent to the Specialization VI course.
- b. For students on the new BBA roadmap, 3-CR FYP be designated as an Optional Course/University Elective.
- c. Maximum number of students to one project be restricted to 3.

135. Working paper on the subject is placed at Appendage 3113 (page 160).

Decision 3113

136. Inclusion of 3 credit hour Project in BBA Final Semester programme as an Elective course approved in the Old road map as an option to Specialization VI course and in the new Road map as a University Elective.

137. Maximum three students can be enrolled for one BBA project.

138. Honorarium for the Faculty Members per project will be as under:
- For Faculty – Rs. 8,000/-
 - For Each Examiner – Rs. 1,000/-
139. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) IC, KC and LC	Dean M&SS
Statutory Documents affected: FHB, Prospectus		

Item 3114: MS Marketing & Sales - Inclusion of 'Digital Marketing' & 'Marketing Planning' Courses as Electives

Sponsor: HOD(MS) IC

Referral Authority: FBOS M&SS

Summary of the Case

140. The case proposes inclusion of electives *Digital Marketing* (MKT 689) and *Marketing Planning* (MKT-696) based on the following rationale:

Digital Marketing

- With the unfolding of modern technologies and preponderance of Digital Marketing (DM), businesses are doing all that they can to match up with the pace.
- Internationally, 72% marketers believe that traditional marketing is no longer sufficient and Digital Marketing will make their company revenue to be increased by 30% by the end of 2017.
- DM is grown exponentially in Pakistan in the last couple of years. It is imperative that this latest business trend be introduced at this advanced level.
- Students should be made to learn and practice, the intricacies and tools necessary to develop technology to manage DM.

Marketing Planning

- Marketing Planning helps determine how a business can optimally compete in market places and results in a marketing strategy that can enhance sales for the business producing it.
- After MS in Marketing and Sales, our students should be able to exercise the best marketing practices and provide consultancy to existing businesses.
- Would help towards qualification from the Chartered Institute of Marketing (CIM) which has worldwide recognition as a center of excellence.

141. Working paper is placed at Appendix 3114 (page 161).

Decision 3114

142. Inclusion of 'Digital Marketing' & 'Marketing Planning' Courses as Electives to MS Marketing & Sales approved. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) IC	Dean M&SS
Statutory Documents affected: Prospectus		

Item 3115: MSPM Program - Inclusion of MSP 629 'Project in Controlled Environment' (PRINCE2) & MSP 630 'Agile Project Management' as Electives

Sponsor: HOD (MS) IC

Referral Authority: FBOS M&SS

Summary of the Case

143. The case proposes inclusion of two electives – *Project in Controlled Environment (PRINCE2)* (MSP 629) and *Agile Project Management* (MSP 630) – in the roadmap of MSPM programme, based on the following background/rationale:

- a. PRINCE2
 - i. Project Management Institute (PMI)-USA and PRINCE2-UK provide guidance and certifications in Project Management. Until now, the two institutes were considered to be advocating different practices and terminologies. Recently, however, PMI has included some aspects of PRINCE2 in the latest edition its PMBOK.
 - ii. Countries in Middle East prefer professionals who have knowledge of both the schools of thought in project management.
- b. AGILE
 - i. Since its inception in 2001, the AGILE methodology of Software Development has made inroads in the industry and the project management domain.
 - ii. Recognizing its growing importance, the Project Management Institute (PMI), the flag-bearers in the domain, have made extensive references to Agile in the latest edition of their reference/guide book, the PMBOK.
 - iii. The subject will now form part of syllabus for the PMI's PMP Certification Exam.
 - iv. PMI has also introduced a 168-page Agile Practice guide as a supplement to the PMBOK.
 - v. Since our MSPM programme is based on the PMI philosophy, it has become imperative to introduce a course on Agile, albeit an Elective.

144. This in view, PRINCE2 and AGILE are proposed as electives to the MSPM curriculum. Working paper is placed at Appendage 3115 (page 166).

Decision 3115

145. Inclusion of MSP 629 ‘Project in Controlled Environment’ (PRINCE2) & MSP 630 ‘Agile Project Management’ as Electives in MSPM Program approved. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) IC	Dean M&SS
Statutory Documents affected: Prospectus		

Item 3116: BBA Program - Inclusion of 3-CR Chinese Language Elective

Sponsor: HOD (MS) IC

Referral Authority: FBOS M&SS

Summary of the Case

146. Highlighting the importance of learning the Chinese language in CPEC environment, the case proposes:

- a. A 3-CR Chinese language Elective for the BBA batches on the 2016 Roadmap.
- b. The same course in lieu of Specialization VI for the BBA batches on the pre-2016 roadmap.

147. Working paper is placed at Appendage 3116 (page 171).

Decision 3116

148. Inclusion of 3-CR Chinese Language as University Elective in BBA Program approved. Point to remain on agenda and progress reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) IC, KC, LC	Dean M&SS, DE
Statutory Documents affected: Unified Course Codes Book, Prospectus		

Item 3117: Chinese Language (Certificate and Diploma) - Launch Proposal

Sponsor: HOD (H&SS) KC

Referral Authority: FBOS M&SS

Summary of the Case

149. This case, very similar to the previous, builds the argument on increased marketing requirements emerging out of the Chinese business activities in Pakistan. The proposal envisages both a one-semester course, as in the previous case, and a 2-semester diploma programme. Requirements for running the course/programme include three PFMs (2 PhD and 1 MPhil/MS) and one VFM along with infrastructure. Feasibility Study, programme

roadmap and the syllabi are placed at Appendage 3117 (page 174). The course/programme will be run by the newly formed Department of Humanities and Social Sciences at Karachi Campus.

Decision 3117

150. Launch of Chinese Language (Certificate and Diploma) at BUKC wef F-18 approved. Point to remain on agenda and progress reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (H&SS) KC	DKC, Dir LDC
Statutory Documents affected:		

Item 3118: OBE Implementation Framework in Engineering Departments

Sponsor: Dean ES

Referral Authority: FBOS ES

Summary of the Case

151. Engineering Departments at BU are implementing Outcome Based Education (OBE) in their undergraduate programs since Fall 2016. The progress of OBE implementation was presented to BU management in a meeting chaired by the Rector. The Faculty of ES was asked to devise and present the Implementation Framework (IF) in the next ACM. This has been done and is placed at Appendage 3118 (page 181) for consideration and approval of the Council. The IF comprises:

- a. A proposed Continual Quality Improvement (CQI) regime based on tripartite-cycles to update PEOs, PLOs and CLOs at periodic intervals (While CQI is an integral part of the OBE, it requires its own IF).
- b. Assessment Process for the PEOs, PLOs and CLOs.
- c. Process for Analysis of Assessment Results of PEOs, PLOs and CLOs.
- d. Process for Updating and Establishing PEOs, PLOs and CLOs.
- e. Process for Reviewing the PEOs, PLOs and CLOs.
- f. Clearing/Passing PLOs and CLOs in order to attain Graduate Status for the Engineering Department

152. The next step is implementation of the Framework. This involved defining initial Programme Educational Objectives (PEOs), Programme Learning Outcomes (PLOs) and Course Learning Outcomes (CLOs) and correlating them with the University Vision and Mission, Departmental Vision and Program Mission. This too has been done, and the next four agenda items highlight the revised PEOs, PLOs and the CLOs in respect of each Dept of the ES Faculty.

Decision 3118

153. OBE Implementation Framework in Engineering Departments approved as presented. Detailed working paper is placed at appendage 3118 (page 181). Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD's EE, CE and SE	Dean ES, DAA
Statutory Documents affected:	Academic Rules	

Item 3119: BEE Programme - Updated PEOs and PLOs**Item 3120: BCE Programme - Updated PEOs and PLOs****Item 3121: BSE Programme - Updated PEOs and PLOs**

Sponsors: HODs EE IC, CE IC, SE IC respectively

Referral Authority: FBOS ES

Summary of the Case

154. With reference to the previous item, implementation of OBE involved defining initial Programme Educational Objectives (PEOs), Programme Learning Outcomes (PLOs) and Course Learning Outcomes (CLOs) and correlating them with the University Vision and Mission, Departmental Vision and Program Mission. The Faculty of Engineering Sciences has achieved that in the three Bachelor level programmes - BEE, BCE, BSE. The revised Departmental Vision, Programme Mission and the PEOs and PLOs in respect of the three programmes, have been enunciated at Appendages 3119 (page 184), 3120 (page 187) and 3121 (page 190) respectively, and are tabled for approval by the Council.

Decision 3119, 3120 & 3121

155. All three items as mentioned above with detail placed at Appendages 3119 (page 184), 3120 (page 187) and 3121 (page 190) for BEE, BCE and BSE programme respectively approved alongwith university vision, mission, department's vision and programme's mission for BUIC and BUKC. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD's EE, CE and SE	Dean ES
Statutory Documents affected:	Prospectuses of respective programmes	

Item 3122: BS Sociology - Launch Proposal

Sponsor: HOD(H&SS) IC

Referral Authority: FBOS M&SS

Summary of the Case

156. The case proposes launch of a BS programme in Sociology, based on the following rationale:

- a. Sociology offers a wide breadth of subject matter.

- b. Sociology, as a discipline, is being taught nationally at all levels - Intermediate, Bachelors, Masters and Doctoral – with significant enrollments.
- c. Sociologists have a good career market - many Civil Servants, Academicians, Social welfare Officers, Criminologists, Population Officers, Community Mobilizers, Planners, Field Workers, Academicians, Researchers, Counsellors and so on are Sociologists.
- d. IIU, AAU & QAU offering the programme in the twin cities.
- e. Moreover, the program will not only bring revenue to the university but also a source of marketing of the institution as it will provide a substantive portion of such students to professional segment of the society.

157. Programme Feasibility Study, Roadmap, Curriculum and other details are placed at Appendage 3122 (page 193).

Decision 3122

158. After a long discussion, the Council resolved that programme need further working prior to start; pended the case and directed to resubmit it during next ACM.

159. Point to remain on agenda and progress reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (H &SS) IC	DIC
Statutory Documents affected:		

Item 3123: BS Economics - Launch Proposal

Sponsor: HOD (H&SS) KC

Referral Authority: FBOS M&SS

Summary of the Case

160. The case proposes launch of BS Economics at BUKC; it is already running with some success at the BUIC. ‘Marketing Requirements’ has been cited as the rationale for launching the programme. The programme will require three PFM (1 PhD and 2 MPhil/MS) and one VFM along with infrastructure. Feasibility Study, programme roadmap and the syllabi are placed at Appendage 3123 (page 197).

161. At the BUIC, BS Economics is being run under the auspices of the Department of Management Sciences. However, its rightful place is Department of Humanities and Social Sciences which is exactly as proposed by the BUKC. Since, there needs to be intra-faculty harmonization of programmes, courses, syllabi and roadmaps, the Council, taking this case as an opportunity, may consider removing the said anomaly. The counter-argument that the programme needs to reside inside the Management Sciences Dept since the teaching faculty hails from that Dept is equally valid, or invalid, in both the campuses.

Decision 3123

162. Launch of BS Economics at BUKC (H&SS Department) approved wef Fall 2018. Approved road map is placed at appendage 3123 (page 197).

163. Point to remain on agenda and progress reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD(H&SS) BUKC	DKC, DE
Statutory Documents affected:	Unified Course Codes Book, Prospectus	

Item 3124: BS Maritime Business & Management - Launch Proposal**Item 3125: MS Maritime Affairs - Launch Proposal****Item 3126: MS Maritime Trade and Logistics - Launch Proposal**

Sponsor: HOD (H&SS) KC

Referral Authority: FBOS M&SS

Summary of the Case

164. The newly formed Department of Humanities and Social Sciences at Karachi Campus has proposed launch of the following three programmes in the maritime domain, wef Fall 2018:

- a. BS Maritime Business and Management.
- b. MS Maritime Affairs.
- c. MS Maritime Trade and Logistics.

165. A common rationale has been given for all the three programmes, that is, "it is logical to move ahead in launching these programmes in view of the marketing requirements emerging out of CPEC and related projects." All the programmes will require an additional 3 PFMs 1 PhD & 2 MS/MPhil for BS and 2 PhD & 1 MS/MPhil for MS) and one VFM along with infrastructure. Feasibilities (New Programme Proposals), Roadmaps and Syllabi are placed at Appendage 3124 (page 233), Appendage 3125 (page 233) and Appendage 3126 (page 259) respectively. The two MS programmes will require HEC's approval for launch.

Decision 3124, 3125 & 3126

166. The Council resolved that:

- a. Launch of BS Maritime Business & Management approved as per roadmap placed at appendage 3124 (page 233) wef Fall- 2018.
- b. Launch of MS Maritime Affairs approved as per roadmap placed at appendage 3125 (page 233) wef spring-2019 subject to NOC from HEC.
- d. Launch of MS Maritime Trade and Logistics approved as per roadmap placed at appendage 3126 (page 259) wef spring-2019 subject to NOC from HEC.

167. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (H&SS) KC	DKC, Dean M&SS
Statutory Documents affected:	Unified Course Codes Book, Prospectus	

Item 3127: MS Peace, Conflict & Development Studies - Launch Proposal

Sponsor: HOD (H&SS) BUIC

Referral Authority: FBOS M&SS

Summary of the Case

168. The case proposes of launch of MS in Peace, Conflict and Development Studied based on the following premise:

- a. BU already offers a BS level programme in Development Studies; MS would be a logical progression.
- b. Donor agencies, NGO, think tanks, International missions, etc, many of which are based at Islamabad, are in continuous need of trained human resource in the field of development Studies.
- c. Programme will add diversity to the University's Academic Portfolio.
- d. PIDE and Iqra are already running this programme, with demand exceeding supply.

169. The sponsoring department has one PFM PhD in Peace and Conflict, and another will be needed. Case working paper is placed at Appendage 3127 (page 270).

Decision 3127

170. a. Launch of MS Peace, Conflict & Development Studies approved as per roadmap placed at appendage 3127 (page 270) subject to NOC from HEC wef spring-2019.

171. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (H&SS) IC	Registrar, DIC
Statutory Documents affected:	Unified Course Codes Book	

Item 3128: Diploma in Services Law at BULC -Launch Proposal

Sponsor: HOD (MS) LC

Referral Authority: FBOS M&SS

Summary of the Case

172. The case proposes of launch of a diploma programme in Services Law based on the following premise:

- a. Likely to gain popularity, being a professional programme of technical nature.
- b. BULC will be first to launch among other institutions in vicinity of law.
- c. Other programs such as Diploma in taxation, banking, labor, environmental, international trade law etc. will be launched at the later stage.

173. Other programs such as Diploma in taxation, banking, labor, environmental, international trade law etc. will be launched at the later stage. Working paper is placed at Appendage 3128 (page 281).

Decision 3128

174. The Council did not approve the Diploma programme. Point dropped.

Item 3129: MBA Programme at BULC - Introduction of 'Project Management' as Specialisation

Sponsors: HOD(MS) LC

Referral Authority: FBOS M&SS

Summary of the Case

175. Currently, three specialisations are available to the MBA students of BULC - Finance, Marketing and HR. The case seeks introduction of a fourth specialisation in 'Project Management', based on the following grounds:

- a. Companies are transitioning from 'functional' to 'projectised'.
- b. Projects are an ongoing activity in organisations.
- c. MS Project Management has been a success story.
- d. CPEC will offer career opportunities to the MBA graduates majoring in Project Management.

176. The case proposes the same Specialisation in MS Management Sciences, later if and when launched.

177. To specialize in Project Management, a student will select 4 electives (3 CR each) from the following list:

Sr.	Course Code	Course Title
1.	MSP 603	Project Human Resource & Communication Mgt.
2	MDP 604	Project Planning, Scheduling, and Time Mgt
3	MSP 605	Project Risk Mgt
4	MSP 606	Project Quality Mgt
5	MSP 631	PMO CBT (8 Weeks)
6	MSP 626	Project Supply Chain Mgt
7	MSP 623	NGO Mgt
8	MSP 636	Advanced Skills in Project Mgt. Professionals

178. Case working paper is placed at Appendage 3129 (page 288).

Decision 3129

179. The Council approved 8 x new electives to be added in Project Management Specialization as per case working paper at appendage 3129 (page 288). Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) LC	DLC, DE
Statutory Documents affected: Prospectus, Unified Course Codes Book		

Item 3130: MS Management Sciences at BULC - Launch Proposal

Sponsor: HOD (MS) LC

Referral Authority: FBOS M&SS

Summary of the Case

180. The case proposes launch of an MS programme in Management Sciences at the BULC on the following basis:

- a. MS Management Sciences will act as a nursery for PhD in Management Sciences which is an approved programme.
- b. MS Management Sciences necessary for purposeful running of PhD Management Sciences.
- c. In the other MS programme which the Campus is running with success – MSPM – only 10% opt for research work. MS Management Sciences will fill that research gap.

181. New Programme Proposal is placed at Appendage 3130 (page 289).

Decision 3130

182. The Council approved to launch MS Management Sciences at BULC as per BUIC roadmap subject to NOC from HEC wef spring-2019.

183. Point to remain on agenda and progress reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) LC	Registrar, DLC
Statutory Documents affected:		

Item 3131: Trimester MBA Programmes at BUKC - Conversion to Bi-Semester

Sponsor: HOD (MS) KC

Referral Authority: FBOS M&SS

Summary of the Case

184. In a recent communication, HEC has taken a serious note of universities running three semesters annually and offering academic programs in all the three semesters. HEC has directed to stop this practice forthwith and use the summer session only for repeat courses.

185. Some MBA weekend programmes at the BUKC are in the Trimester format. In compliance with the HEC directive, these programmes are being converted into the Bi-Semester format wef Fall 2018. To that end, the affected roadmaps have been revised on the following lines:

- a. Weekend programmes will now run on 3 days – Fri, Sat & Sun – instead of 2 – Sat and Sun.
- b. Students will study 5 courses per semester instead of 4.
- c. The programmes will be offered in Fall and Spring semesters. Summer session will only be used for repeat courses as per academic rules.

186. Working paper and revised roadmaps are placed at Appendix 3131 (page 292) for approval of the Council.

Decision 3131

187. The Council approved that Trimester MBA Programmes at BUKC be Converted to Bi-Semester from Fall-2018 intake. Point to remain on agenda and progress reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) KC	DAA, Dean M&SS
Statutory Documents affected: Prospectus, AR-2016		

Item 3132: UG Programmes in Engineering & Computer Science - Duration of Final Exam

Sponsor: Dean ES

Referral Authority: FBOS ES

Summary of the Case

188. In UG Programmes in Engineering & Computer Science, the weightage and duration of the Midterm and Final Exams are:

<u>Exam</u>	<u>Weightage</u>	<u>Duration</u>
Mid	20 marks/%	1.5 hr
Final	50 marks/%	2.0 hr

189. Given the weightage of marks, the duration of Final should proportionally be 2.5 times that of the Mid. This disparity is leading to undue pressures on both the faculty members and the students. 50 marks warrant many more questions than for 20 but an examiner is constrained by time. Likewise, if examiner does justice with the marks, the students are unable to finish the paper. The result is unrealistically large number of marks per question.

190. The current arrangement also clashes with the Outcome Based Education (OBE), that has been adopted in the BU Engineering Programs, in which distribution and duration of the exams is key aspect for academic evaluation of the program.

191. To address these anomalies, the Case proposes increasing the duration of Final Exam to 2½ hrs for all UG programmes - BSCS, BSIT, BCE, BEE & BSE - in the Engineering & Computer Sciences departments, wef Fall'2018. Working paper is placed at Appendage 3132 (page 295).

Decision 3132

192. The Council approved the increase in the duration of Final Exam to 2½ hrs for all UG programmes (BSCS, BSIT, BCE, BEE & BSE) in the Engineering & Computer Sciences departments wef Spring-2018. Point to remain on the agenda and progress to be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	HODs CS, CE, EE, SE	DE,DIC, DLC & DKC
Statutory Documents affected: Examinations Policy		

Item 3133: Visiting Courses for PFM - Increase from One to Two

Sponsor: HOD (MS) IC

Referral Authority: FBOS M&SS

Summary of the Case

193. Currently, the PFM can teach one visiting course. The case proposes increasing the number to two but only for the weekend programmes, of which 7 are running at BUIC with over 700 students. The working paper is placed at Appendix 3133 (page 296). The Council may consider the case after hearing rationale for the change from the Sponsor.

Decision 3133

194. The Council decided to maintain the status quo. Point dropped.

Item 3134: MBA Program - Honorarium for Supervising 1st Thesis

Sponsor: HOD (MS) IC

Referral Authority: FBOS M&SS

Summary of the Case

195. ACM Decision 1816.c (May 2012) denied supervisory honorarium on the first thesis, in the following words:

"The Council decided that no financial remuneration to be paid to permanent faculty members for supervising the first MBA thesis and Rs. 4000/- to be paid for supervising each thesis thereafter."

196. Subsequently, *MBA Thesis/Project Rules* were enacted as a new statutory document, and duly approved by the Council vide Decision 2318 (Oct 2016). These rules carried no restriction on 1st-Thesis honorarium; extract follows:

*Quote***15. Remunerations**

Function	Remuneration		Time of Payment
Thesis/ Project Supervisor	PhD	Rs. 6000	To be paid in two installments one each at the time of submission of half-semester progress report
	Phil/MS/MBA	Rs. 5000	
Thesis/Project Evaluation by two-member Panel	Rs. 1000 per member per thesis		To be paid upon submission of result
Thesis/Project Coordinator	Remission of one course from the normal teaching load		-----

Unquote

197. BUKC shifted to the *MBA Thesis/Project Rules*, and started availing 1st-Thesis honorarium. However, BUIC continued to follow the earlier ACM decision. The *MBA Thesis/*

Project Rules superseded all previous rules, instructions and decisions on the subject. However, this was not said so in the promulgation order for the new document. Now this issue has been highlighted. The Council may remove the anomaly by renegeing the entire ACM Decision 1816. Working paper is placed at Appendage 3134 (page 297).

Decision 3134

198. The Council resolved that MBA Project/Thesis Rules-2016 may be implemented at all the campuses. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (MS) IC and KC	Dean M&SS
Statutory Documents affected:	MBA Thesis Rules	

Item 3135: Management Sciences Programmes - Bridging the Gap in Revised & Previous Roadmaps for Students Repeating Courses, with Equivalent or Substitute Courses

Sponsor: HOD (MS) KC

Referral Authority: FBOS M&SS

Summary of the Case

199. Roadmaps Gap – between Revised & Previous Roadmaps – is a real life problem faced by students who make one of the last few batches on a previous roadmap and have to Repeat a course, or Makeup a course after freezing a semester. The University also finds it difficult in making small classes for such students. The problem can be addressed through the system of “Equivalent” or “Substitute” courses. 18th ACM (May 2012) had identified a number of these courses for virtually all the disciplines. There is a need to add courses to the Management Sciences list which currently is short. Accordingly, a number of Equivalent & Substitute courses have been identified in the Working Paper at Appendage 3135 (page 298) for consideration and approval of the Council.

Decision 3135

200. After discussion, the council decided:

- a. All equivalent courses mentioned at appendage 3135 (page 298) approved.
- b. All substitute courses proposed at appendage 3135 (page 298) have not been approved and referred to FBOS for further deliberation.

201. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD's MS	Dean M&SS
Statutory Documents affected:	Prospectus	

Item 3136: MBA Thesis - Students Earning 'C' Grade or Less may Repeat the Thesis

Sponsor: HOD (MS) KC

Referral Authority: FBOS M&SS

Summary of the Case

202. 'C' or less grade in MBA thesis decreases the overall CGPA substantially because the thesis is equivalent to two 3-CR courses. A lower grade in a Course entitles a student to Repeat and Improve; the scope of this rule may be widened to include Thesis. This step will also help decrease the dropout rate. If approved, the rule will be added to the MBA Thesis Rules. Working paper is attached as Appendix 3136 (page 300).

Decision 3136

203. The sponsor had requested to withdraw the item which was acceded to. Point dropped.

Item 3137: Common Examination Paper for Multiple Sections taught by Different Teachers - Rule be Reviewed

Sponsor: HOD (MS) KC

Referral Authority: FBOS M&SS

Summary of the Case

204. The 24th ACM (May 2015) had made the following decision:

"there shall be common question paper for all the sections of the same batch of the same programme wef Fall 2015. This measure shall start intra-Campus, then extend inter-Campus."

205. Five semesters since this rule, it can be said with some degree of confidence that Common Question Papers reflect the lowest academic rigor level required for the course. Some teachers complete course outlines and want to take the students to the required level of course understanding. Their efforts contrast with the teachers who are unable to complete the outlines and cannot, therefore, examine their students in what they did not teach. Resultantly, the Common Question Paper, which is by consensus, is compliant with the Low rather than the High. The entire batch then suffers.

206. Seized with the problem, the Faculty of Management Sciences constituted a high-level committee of PhD FMs to suggest a solution. The Committee's recommendations were:

- a. Single paper system be revisited and modified to system it effective.
- b. Each FM teaching the same course to submit a question paper to HOD who, in consultation with the concerned Cluster Head, will select one and handover to the Examination Department.
- c. Paper be moderated inter-campus.

207. Working paper is placed at Appendix 3137 (page 301).

Decision 3137

208. After prolonged discussion, the Council resolved that in depth study should be carried out prior taking its decision. The Council referred the matter to be taken up by the Dean's Committee.

209. HOD MS KC to suggest the changes required in Common Examination Paper policy to the Secretary of the Dean's Committee.

210. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	DIR ORIC , HOD (MS) KC	DIR ORIC
Statutory Documents affected:		

Item 3138: Business School at BUKC - Creation from Existing MS Dept

Sponsor: HOD (MS) KC

Referral Authority: FBOS M&SS

Summary of the Case

211. The case seeks establishment of a Business School at the BUKC given the following facts on ground:

- a. With 2,600 students in its fold, Management Sciences Dept BUKC is about the size of a moderate size university in its right. MS Dept BUIC has 3,000 students and will have its own Business School by the year-end, and rightly so.
- b. A 'business school' is key to success of Management Sciences programmes. SDBS(LUMS), CBM(IoBM), KUBS(KU), SBL, NUSTBS(NUST), etc are a few to name. Besides, NBEAC uses the term 'business school' instead of Department of Management Sciences", in all its documentation and correspondence.
- c. The scope of 'Management Sciences' is expanding. In BU itself, disciplines like Project Management, Supply Chain Management, Engineering Management, Risk Management, Marketing and Sales, etc have made inroads into the Dept of Management Sciences, to the extent that the Dept is bursting at seams at both the campuses.
- d. A business school does not remain confined to business education. It offers diversified programs in the allied subjects, such as accounting, administration, strategy, economics, entrepreneurship, finance, banking, insurance, human resource management, management science, management information systems, international business, logistics, marketing, organizational psychology, organizational behavior, public relations, research methods and real estate among others, with greater administrative and financial autonomy.

- e. In today's competitive academic world, school's concept is attractive and suitable for development of universities
 - f. BU Strategic Plan (under Goal 1, Objective 4, Action 3) warrants establishment of Business Schools at the BUIC and BUKC by 2020, which is round the corner.
212. The case proposes converting the Dept of Management Sciences at BUKC into a business school. There will be financial and HE aspects of the proposal which the Sponsor will work out later, along with concept clearance and feasibility study. Working paper is placed at Appendix 3138 (page 302).

Decision 3138

213. The Council resolved that a Committee may be constituted to further deliberate the establishment of Business School's at BUIC and BUKC. The committee is to include:
- a. Dean M&SS
 - b. HODs MS of BUIC and BUKC.
 - c. DD Academics BUIC and BUKC
 - d. Manager Accounts BUIC and BUKC
 - e. Manager Accounts BUHO
214. Point to remain on agenda and progress be reported.

Action Required	Action by	Responsibility of
Implementation of the Decision	Dean M&SS	Dean M&SS
Issuance of Notification	Registrar	Registrar
Statutory Documents affected:		

Item 3139: Amendments in Pakistan Bar Council Legal Education Rules 2015, Information, Implication and Way Forward

Sponsor: HOD (LAW) IC

Referral Authority: FBOS M&SS

Summary of the Case

215. Initially there were three sets of Rules on the subject of legal education i.e. the "Pakistan Bar Council Legal Education Rules, 1978", the "Affiliation of Law Colleges Rules" and the "Pakistan Bar Council (Recognition of Universities) Rules, 2005". However, all three set of rules subsequently were reviewed and consolidated in one set of uniformed Rules i.e., Pakistan Bar Council Legal Education Rules 2015 as amended from time to time. Recently, Pakistan Bar Council has amended/revised its Rules by way of bringing about its amendments in its Rules 4, 5, 8, 10, 12, 13, 13A (Addition), 15, 16, 21, 25, 33 and 39.

216. The amendments in the rules have been introduced to further strengthen the regulations of Pakistan Bar Council on institutes imparting legal education. However, at the same time certain aspects are improved and made flexible. Since BU Department of Law is already in full compliance with the Pakistan Bar Council Legal Education Rules 2015, the

subject amendments may also be deliberated upon for information, implication and for further way forward/course of action in the ACM. The amended provisions of the Rules are attached as Appendage 3139 (page 303).

Decision 3139

217. Amendments in Pakistan Bar Council Legal Education Rules 2015 as attached at appendage 3139 (page 303) approved. All students admitted in LLB and LLM wef Fall-2018, be charged Rs. 1,000/- & Rs. 2,000/- respectively from each student to be paid to PBC as registration fee. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (LAW) IC	DIC, Dir Finance
Statutory Documents affected: Academic Rules		

Item 3140: Inclusion of New Subjects in the List of Electives of MS Programmes

Sponsor: HOD (MS) BUIC & Director IO

Referral Authority: FBOS M&SS

Summary of the Case

218. Bahria University, signed an agreement for exchange of students, under Erasmus Exchange programme with Altinbas University, Turkey. Seven students of Bahria University were sent to this university on exchange programme to study for a semester in Spring 2018. Under this exchange programme, all expenses of the students are being covered by Altinbas University, Turkey, from Erasmus funding (Approx Rs.3.5Million).

219. Based on the recent correspondence with Altinbas University, the continuity of Erasmus Exchange programme is highly dependent on 100% transferability of the subjects, which students study at Altinbas University. Achieving 100% transferability of exchange students is very difficult keeping in view that universities follow slightly different road maps. Turkish universities also acknowledge this difficulty and therefore have extended the list of their electives over period of time to allow transferability of subjects, which their students study in other universities.

220. Keeping same in view, it is recommended that BU shall also extend its list of electives, based on the subject's students study at Altinbas University on Erasmus Exchange Programme. This is expected to help BU in following way:

- a. Updating of list of Elective of Bahria University, at par with international universities.
- b. Increase in probability of 100% transferability of subjects to allow continuation of Erasmus Exchange agreement with Altinbas University to allow BU students attain international scholarships for study abroad.

221. Based on the subjects being currently undertaken by the exchange students, who are mostly from the Management Sciences department, a list of electives is mentioned at

Appendage 3140 (Page 306) for inclusion in the road maps of BBA/MBA and MS(PM) programme.

Decision 3140

222. Inclusion of new subjects in the list of electives of MS Programmes as placed at appendage 3140 (page 306) approved. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD's MS	Dean M&SS, Dir IO
Statutory Documents affected:	Prospectus	

Item 3141: Approval of Curriculum, Course Code, Road Map, Academic Examination Rules BS (Nursing) Four Years Semester based program at Pakistan Navy Nursing College (PNNC) - PNS SHIFA Karachi

Sponsor: Principal BUM&DC

Referral Authority: FBOS HS

Summary of the Case

223. BS Nursing has been commenced at PNNC. Its road map and curriculum is placed for ratification/approval of the Council. Detail of the same is placed at Appendage 3141 (attached as supplementary booklet).

Decision 3141

224. After prolonged discussion, the Council resolved that:

- a. BS Nursing 4 Years program based on HEC/Pakistan Nursing Council 2011 Curriculum, Course Code, Road Map, Examination Rules of BS Nursing Four Years Semester based program at Pakistan Navy Nursing College (PNNC) PNS SHIFA Karachi as placed at appendage 3141 (attached as supplementary booklet). approved from 2018 Intake.
- b. Examinations based on semester system from 2018 Intake to be conducted by PNNC.
- c. Dean HS is to monitor Academic and Examination activities of PNNC.
- d. BS Nursing 4 Years program based on HEC/Pakistan Nursing Council Curriculum 2011, Course Code, Road Map, Examination Rules of BS Nursing Four Years programme for the batches of 2014 to 2017 (four batches) based on hybrid system approved.
- e. Annual Examinations conducted by Bahria University for the Four batches of BS Nursing 2014 to 2017 approved.
- f. Deficient courses of the first batch of BS Nursing admitted in 2014 in PNNC, to complete the BS Nursing programme as per HEC Curriculum 2011 by taking extra courses to be conducted by PNNC.

- g. Committee to be formed to see the potential of expanding admission to civilian students in BS Nursing programme.
- h. The Committee is to study the potential and having additional classrooms in PNNC to accommodate intake of more than 25 students.
 - i. DG BUMDC Head
 - ii. Dean HS
 - iii. OIC PNNC
 - iv. DHS
 - v. DKC

Action Required	Action by	Responsibility of
Implementation of the Decision	OIC/Principal DHS, Dean HS	DG BUMDC, DAA, DE, DA
Issuance of Notification	Registrar	Registrar
Statutory Documents affected: AR-2016, Prospectus, Examination Rules, Unified Course Codes Book, SHB, Examinations Policy		

Item 3142: Award of distinction in Professional Examinations - MBBS and BDS Programs

Sponsor: Principal BUM&DC

Referral Authority: FBOS HS

Summary of the Case

225. 5th FBOS meeting decided that in accordance with PMDC Rules and Regulations, distinctions will be awarded to students who secure 80% or above marks in the subject and subsequently amendment in Academic Rules 9.6 may be approved. Detail of the same is placed at Appendix 3142 (Page 339).

Decision 3142

226. The Council resolved that:

- a. Award of distinction to the students who secure 80% or above marks in the subjects of Professional Examinations of MBBS and BDS Programs approved.
- b. Addition of article 9.6.3 in BUAR 2016 approved as under:
 (9.6.3 **Certificate of Distinction to MBBS & BDS Students.** Students obtaining 80% and above marks in a specific subject may be awarded with distinction in the subject).
- c. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	Dean HS	DG BUMDC, DE
Statutory Documents affected: BUAR 2016, SHB, Prospectus		

Item 3143: Smoking and consumption of Alcohol & Drugs in BU by Students - Amendment in Statutory documents/SOPs

Sponsor: Registrar

Referral Authority: File

Summary of the Case

227. It is proposed that the existing clause 14. 4 of AR 2016 under the heading "Penalties" may be re-numbered as 14.4.1 and a new clause as 14.4.2 may be added as under:

14.4.2 A student guilty of an act of smoking in the premises of Bahria University/Constituent Units or while attending offsite instructions like sports, cultural tours or survey camps shall be liable to the penalties as under:

Table No.12: Penalties on Act of Smoking

Occasion	Penalty
1 st occasion of offence on act of smoking	Fine of Rs.5000/- alongwith warning letter with copy to parents from Director Campus.
2 nd or onward occasion of offence (s)	Fine of Rs.10,000/- alongwith warning letter (s) with copy to parents from DG Campus on each offence.

14.4.3 A student guilty of an act of possession/consumption/usage/supplying of intoxication drugs/Alcoholic drinks in premises of CU and or entering CU or events of BU being intoxicated and or during official/informal offsite events of the University shall be liable to expulsion from the CU.

Decision 3143

228. The Council resolved that:

- a. Amendment in Statutory documents/SOPs regarding Smoking and consumption of Alcohol & Drugs in BU by Students as enumerated above approved.
- b. Existing clause 14. 4 of AR 2016 under the heading "Penalties" may be re-numbered as 14.4.1 and a new clause as 14.4.2 and 14.4.3 may be added as listed above.
- c. SHB may be amended accordingly. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	Directors/Principals of all CUs	DGs of all CUs

Statutory Documents affected: BUAR 2016, SHB, SOP

Item 3144: BS Geo Physics & BS Environmental Sciences Roadmap - Revision of Curriculum

Sponsor: HOD (E&ES) BUKC

Referral Authority: FBOS ES

Summary of the Case

229. Revised Curriculum of BS Geo-Physics and BS Environmental Sciences is submitted for approval.

Decision 3144

230. Revision of Curriculum for BS Geo Physics & BS Environmental Sciences Roadmap approved as placed at appendage 3144 (page 340). Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	HOD (E&ES) IC & KC	HOD (E&ES) IC & KC, DE
Statutory Documents affected:	Unified Course Codes Book, Prospectus	

Item 3145: Commencement of Psychology Department at BULC

Sponsor: Dean IPP

Referral Authority: File

Summary of the Case

231. Detail report for establishment of Professional Psychology Department at BULC is presented for discussion/approval.

Decision 3145

232. Point has already been catered in Item 2234, Bahria University Lahore Campus - Progress Report. Point dropped from this position.

Item 3146: SOP for Students' Exchange with Sapienza University of Rome, Italy

Sponsor: DIO

Referral Authority: File

Summary of the Case

233. In line with the Strategic Plan of Bahria University; a new agreement for exchange of students has been approved by the Competent Authority.

234. According to the exchange agreement, Bahria University can send students on exchange basis to Sapienza University of Rome. There is no tuition fee that is to be paid by the student to Sapienza University of Rome. The students will only have to bear their travel and living expenses in Italy.

235. Bahria University already has similar agreement with Yasar University (Turkey), York St. John University (UK), AIMST University (Malaysia), Izmir University of Economics (Turkey), Altinbas University (Turkey) & Yeditepe University (Turkey) with the SOPs for selection and credit transfer process, approved by the ACM.

236. Keeping in view the practice followed for the other six universities, an SOP was prepared on the similar lines defining the students' selection and credit transfer mechanism under the exchange programme. The same has been approved by the Competent Authority. Detail of the same is placed at Appendage 3146 (page 347).

Decision 3146

237. SOP for Students' Exchange with Sapienza University of Rome, Italy as placed at appendage 3146 (Page 347) ratified/approved. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	DIO	DIO
Statutory Documents affected: SOPs-Students Exchange Program		

Item 3147: Inclusion of New Grading System of BU in SOPs for Exchange of Students

Sponsor: DIO

Referral Authority: File

Summary of the Case

238. Bahria University presently has following SOP's for exchange of students with partner Universities:

- a. SOP for Exchange of Students with Yasar University, Turkey
- b. SOP for Exchange of Students with Altinbas University, Turkey
- c. SOP for Exchange of Students with Izmir University of Economics, Turkey
- d. SOP for Exchange of Students with Yeditepe University, Turkey
- e. SOP for Exchange of Students with York St John University, UK
- f. SOP for Exchange of Students with AIMST, Malaysia

239. As all above universities have their own grading systems, therefore the SOPs contain grade mapping that have been approved by the Academic Council. This grade mapping is applicable to all exchange students of Bahria University who transfer their credit hours on return from the exchange programme from any of the above universities.

240. Keeping in view that Bahria University has recently updated its grading system for new batches (Spring 2018), a new grade mapping system is required for the students from new batches.

241. The grade mapping system, developed based on the new grading system of Bahria University, for all above universities (enclosed) has been approved by the Competent Authority for inclusion in existing SOPs approved by the ACM. Detail of the same is placed at Appendage 3147 (page 351).

Decision 3147

242. Inclusion of new grading system of BU in SOPs for exchange of students as placed at appendage 3147 (page 351) ratified/approved. Point dropped.

Action Required	Action by	Responsibility of
Implementation of the Decision	DIO	DIO
Statutory Documents affected: SOPs-Students Exchange Program		

Closing the Meeting

243. The Secretary drew the attention of the House to the following timeline for follow-up actions and the next ACM:

1 st Progress Report on the Action Items of the 31 st ACM:	2 nd July 2018
2 nd Progress Report on the Action Items of the 31 st ACM	3 rd September 2018
Dead line for Agenda Items for the 32 nd ACM:	3 rd September 2018
Schedule of 32 nd ACM:	2 nd & 3 rd October 2018

244. The Chair thanked the house for participation in the proceeding and expressed his satisfaction that all decision made during the ACM would be beneficial. He further elaborated that, our moto would be to produce best product ethically as well as professionally for that we all have to work together and do our duties religiously for Rizk-e Hilal. Wishing them well, the Chair brought the meeting to a close at about 20:15 hrs on 18 April 2018.

21st May 2018

Dr. Muhammad Ali Saeed
Secy to the Council

Appendage 3002

**Comparative Statement of the
HEC Curriculum, BU Existing Curriculum and Proposed Curriculum**

		HEC's Curriculum for Mass Communication/ Media Studies	BU'S Existing Curriculum	Proposed Curriculum
Compulsory Courses		9 Courses 25 Credit Hours	10 Courses 28 Credit Hours	SAME AS HEC
General Courses Chosen from other Departments		8 Courses (4+4optional) 24 Credit Hours	10 Courses 30 Credit Hours	SAME AS HEC
Discipline Specific Foundation Courses		10 Courses 30 Credit Hours	15 Courses 45 Credit Hour	11Courses 33 Credit Hours
Major Courses including Research paper/ Research Report/ Final Project		14 Courses 42 Credit Hours	7 Courses 21 Credit Hours	SAME AS HEC
Specialization		4 Courses 12 Credit Hours	4 Courses 12 Credit Hours	SAME AS HEC
Total Credit Hours		130- 136	132 Credit Hours	136 Credit Hours

COMPULSORY COURSES

S.No	Course Code	HEC RECOMMENDED COURSES	Credit Hours	Proposed
1	ENG 103	Functional English (I)	3CH	SAME AS HEC
2	ENG 104	Writing and Presentation Skills (English II)	3CH	SAME AS HEC
3	ENG 105	Communication Skills (English III)	3CH	SAME AS HEC
4	MED 201	Journalistic Language (Urdu and English)	3CH	SAME AS HEC
5	PAK 101	Pakistan Studies	3CH	SAME AS HEC
6	ISL 101	Islamic Studies/ Ethics	3CH	SAME AS HEC
7	MAT 105	Mathematics	3CH	SAME AS HEC
8	MAT 205	Statistics	3CH	SAME AS HEC
9	MED 101	Computer Skills for Mass Communication	3CH	SAME AS HEC
		Total Credit Hours 25		25

General Core Courses

S.No	Course Code	HEC RECOMMENDED COURSES	PROPOSED COURSES	
1		Sociology*	3CH	SAME AS HEC 3CH
2		Political Science*	3CH	SAME AS HEC 3CH
3		Economics*	3CH	SAME AS HEC 3CH
4		Social Psychology*	3CH	SAME AS HEC 3CH
		Courses from other disciplines of Social Sciences	Courses from other disciplines of Social Sciences	
5		Option 1	3CH	Elective 1 3CH
6		Optional 2	3CH	Elective 2 3CH

7		Optional 3	3CH	Elective 3	3CH
8		Optional 4	3CH	Elective 4	3CH
		Total Credit Hours	24		24

*course codes for these courses to be developed by the H&SS department.

List of Electives from Other Disciplines of Social Sciences

(To opt 4 courses out of 10)

S.No	Course Code	Course Title	Credit Hrs.
1	IRS 323	Comparative Political System	3
2	IRS 410	Conflict and Conflict Resolution	3
3	BES 102	Creative Writing	3
4	HSS 110	Introduction to Development Studies	3
5	DST 411	Development Project Monitoring and Evaluation	3
6	IRS 314	Diplomacy	3
7	MED 202	Functional Urdu	3
8	ANT 324	Gender and Society	3
9	HSS 102	Philosophy	3
10	HSS 401	Statistical Analysis of Social Data	3
11	HSS 115	International Relations	3

Foundation Specific Core Courses

S.No	Course Code	HEC RECOMMENDED COURSES	PROPOSED COURSES
1	MED 115	Introduction to Mass Communication 3CH	SAME AS HEC 3CH
2	MED 203	Introduction to Broadcast Media 3CH	SAME AS HEC 3CH
3	MED 204	Introduction to Advertising & Public Relations 3CH	SAME AS HEC 3CH
4	MED 206	Current Affairs*	SAME AS HEC 3CH
5	MED 208	Introduction to <u>Social</u> Media 3CH	Introduction to <u>Digital</u> Media** 3CH
6	MED 210	News Writing and Reporting (Bi-lingual) 3CH	SAME AS HEC 3CH
7	MED 103	Photography 3CH	SAME AS HEC 3CH
8	MED 307	Script Writing & Editing(Bi-Lingual) 3CH	SAME AS HEC 3CH
		Electives (To be selected from the list of elective for Foundation Courses)	Electives (To be selected from the list of elective for Foundation Courses)
9		Elective 1 3CH	Elective 1 3CH
10		Elective 2 3CH	Elective 2 3CH
11		Elective 3 3CH	Elective 3 3CH
		Total Credit Hours 30	33

Electives for Foundation Courses

(To select 3 out of 11 Courses)

S.No	Course Code	Course Title	Credit Hrs.
1	MED 501	Media and Society	3
2	MED 502	Mass Media in SAARC	3

3	MED 503	Cinematography	3
4	MED 504	Graphic Design	3
5	MED 505	Community Media	3
6	MED 506	Introduction to Film Studies	3
7	MED 507	Gender and Media	3
8	MED 508	Media and Politics	3
9	MED 509	Introduction to Media Production	3
10	MED 510	Media and Globalization	3
11	MED 511	Media and Human Rights	3
12	MED 512	Health Communication	3

Major Core Courses Media Studies (Recommended by HEC)

S. No	Course Code	HEC RECOMMENDED COURSES	PROPOSED COURSES
1	MED 301	Sub-Editing and Page Designing 3CH	SAME AS HEC
2	MED 302	Feature and Column Writing 3CH	SAME AS HEC
3	MED 303	Mass Communication Theory 3CH	SAME AS HEC
4	MED 304	Research Methods 3CH	SAME AS HEC
5	MED 306	Online Journalism 3CH	SAME AS HEC
6	MED 307	Photo Journalism* 3CH	SAME AS HEC
7	MED 402	Research Report/Final Project/Research Paper 3CH	SAME AS HEC
8	MED 403	Media Laws and Ethics 3CH	SAME AS HEC
9	MED 405	Development Support Communication 3CH	SAME AS HEC
10		Elective 1	SAME AS HEC
11		Elective 2	SAME AS HEC
12		Elective 3	SAME AS HEC
13		Elective 4	SAME AS HEC
14		Elective 5	SAME AS HEC

- To make this course more attractive for the prospective students applying for the program.

Electives for Major
(To select 5 courses out of 10)

S.No	Course Code	Course Title
1	MED 513	Elements of Advertising 3CH
2	MED 514	Video Editing 3CH
3	MED 515	World Cinema 3CH
4	MED 516	Media Management and Marketing 3CH
5	MED 517	2D Animation 3CH
6	MED 518	Principles of Public Relations 3CH
7	MED 519	Musicology 3CH
8	MED 520	Media, Culture and Society 3CH
9	MED 521	Sound Design 3CH

**Discipline Specific Major Elective Courses towards Specialization
(12 CH)**

Fields of Specialization

- Journalism (Print & Electronic)
- Film & TV

- 3. Animation
- 4. Advertising
- 5. Public Relations
- 6. Media Management

Electives of Specialization

1. Journalism (JSM)

S.NO	Course Code	Course Title	
1	JSM 601	Community Journalism	3CH
2	JSM 603	Data Journalism	3CH
3	JSM 604	Long- Form Journalism	3CH
4	JSM 605	Magazine Production/ Magazine Program Production	3CH
5	JSM 606	Multimedia Journalism	3CH
6	JSM 607	Newspaper Production	3CH
7	JSM 608	Peace Journalism	3CH
8	JSM 609	Television Journalism	3CH
9	JSM 610	News Writing and Production	3CH

2. Film & Television (FTM)

S.NO	Course Code	Course Title	
1	FTM 611	Advanced Cinematography	3CH
2	FTM 612	Art Direction	3CH
3	FTM 613	Documentary Production	3CH
4	FTM 614	Film Direction	3CH
5	FTM 615	Motion Graphics & Compositing	3CH
6	FTM 616	Music Video Production	3CH
7	FTM 617	Product Development	3CH
8	FTM 618	Storyboarding	3CH

3. Animation (ANM)

S.No	Course Code	Course Title	
1	ANM 619	Character Modeling	3CH
2	ANM 620	3D Modeling	3CH
3	ANM 621	3d Lighting/ Texturing/ Rendering	3CH
4	ANM 622	Character Animation	3CH
5	ANM 623	Motion Graphic/ Compositing	3CH
6	ANM 624	Advanced Free Hand Drawing	3CH
7	ANM 625	Digital Illustrations	3CH
8	ANM 626	3D Animation	3CH
9	ANM 627	3D Character Animation	3CH
10	ANM 628	2D/3D Effects/ Rendering	3CH
11	ANM 629	Virtual Reality	3CH

4. Advertising (ADM)

S.NO	Course Code	Course Title	
1	ADM 630	Media Planning and Buying	3CH
2	ADM 631	Campaign Designing	3CH
3	ADM 632	Market Research	3CH

4	ADM 633	TVC Production	3CH
5	ADM 634	Copy Writing	3CH
6	ADM 635	Advertising Strategy and Planning	3CH
7	ADM 636	Advanced Free Hand Drawing	3CH
8	ADM 637	2D/3D Animation	3CH
9	ADM 638	Brand Management	3CH
10	ADM 639	Digital Advertising	3CH
11	ADM 640	Copy and Layout Designing	3CH

5. Public Relations (PRM)

S.No	Course Code	Course Title	
1	PRM 641	Crisis Communication and Management	3CH
2	PRM 642	Event Management	3CH
3	PRM 643	Media Management and Relations	3CH
4	PRM 644	Persuasive Writing	3CH
5	PRM 645	PR Campaign Designing	3CH
6	PRM 646	Digital Public Relations	3CH
7	PRM 647	International Public Relations	3CH
8	PRM 648	Intercultural Communication	3CH

6. Media Management (MMM)

S.No	Course Code	Course Title	
1	MMM 649	Media Management and Marketing	3CH
2	MMM 650	Product Development	3CH
3	MMM 651	Integrated Marketing Communication	3CH
4	MMM 652	Management	3CH
5	MMM 653	Human Resource Management	3CH
6	BCM 204	Business Communication Skills	3CH

Proposed Scheme / Roadmap of BS Media Studies

Semester 1

S.No	Course Code	Course Title	Credit Hrs.
1	ENG 105	Functional English	3
2	PAK 101	Pakistan Studies	2
3	HSS 115	International Relations	3
4	MED 115	Introduction to Mass Communication	3
5	MED 101	Computer Skills for Mass Communication	3
6	MED 306	Photography	3

Semester 2

S.No	Course Code	Course Title	Credit Hrs.
1		Writing and Presentation Skills*	3
2	ISL 101	Islamic Studies	2
3	MAT 105	Mathematics	3
4		Sociology*	3
5		Elective Foundation	3
6		Elective Foundation	3

*course codes for these courses to be developed by the H&SS department.

Semester 3

S.No	Course Code	Course Title	Credit Hrs.
1	MAT 205	Statistics	3
2		Communication Skills*	3
3		Political Science*	3
4		Social Psychology*	3
5	MED 201	Journalistic Language (English and Urdu)	3
6	MED 203	Introduction to Broadcast Media	3

*course codes for these courses to be developed by the H&SS department.

Semester 4

S.No	Course Code	Course Title	Credit Hrs.
1	MED 202	Functional Urdu	3
2	MED 204	Introduction to Advertising and Public Relations	3
3	MED 206	Current Affairs	3
4	MED 208	Introduction to Digital Media	3
5	MED 210	News Writing and Reporting	3
6	HSS 102	Introduction to Philosophy	3

Semester 5

S.No	Course Code	Course Title	Credit Hrs.
1	MED 301	Sub-Editing and Page Designing	3
2	MED 303	Mass Communication Theory	3
3	MED 305	Script Writing and Editing	3
4	MED 513	Elements of Advertising	3
5		Elective (Major)	3
6		Elective (Major)	3

Semester 6

S.No	Course Code	Course Title	Credit Hrs.
1	MED 302	Feature, Colum and Editorial Writing	3
2	MED 304	Research Methods	3
3	MED 307	Photo Journalism	3
4		Elective (Major)	3
5		Elective (Major)	3
6		Elective (Major)	3

Semester 7

S.No	Course Code	Course Title	Credit Hrs.
1	MED 306	Online Journalism	3
2	MED 403	Media Ethics and Laws	3
3		Economics*	3
4	HSS 401	Statistical Analysis of Social data	3
5		Specialization Course 1	3
6		Specialization Course 2	3

*course codes for these courses to be developed by the H&SS department.

Semester 8

S.No	Course Code	Course Title	Credit Hrs.
	MED 402	Research Report/ Final Project/ Research Article	3
	MED405	Development Support Communication	3
		Specialization Course 3	3
		Specialization Course 4	3

Analyses of Proposed Curricula of BS Media Studies

The 4 years Bachelor of Media Studies programme has been enhanced from 132 credit hours to 136 credit hours covering 46 courses.

Recommendations:

- 1- The total credit hours of BS Program may be increased from **132 to 136** credit hours.
- 2- It is recommended that medium of instruction for Media Studies may be **bilingual** where needed and students may please be allowed to attempt papers in both (Urdu/English) where needed.
- 3- The number of general courses may be reduced from **10 to 8**.
- 4- The number of foundation courses may be reduced from **14 to 11**.
- 5- The number of courses included in major may be increased from **7 to 14**.
- 6- All six streams may please be added into specializations.

Appendage 3028

Report on

IT-based Solution to reduce Submission Time of Final Examination Results

1. During 30th ACM (Item 3028) Director Karachi Campus tabled a proposal to extend result submission period of final examinations from currently enforced 3 days to 7 days. After detailed discussion, the point was not approved. However, a committee comprising the DE, Dean ES and DIT was formed to look into an IT-based solution to reduce submission time of final examinations results.
2. The committee deliberated on the issue and discussed in detail step-wise result processing activities. The following was deduced in the same:
 - a. According to clause 1.8 (c) and 1.9 (c) of BU Examinations Policy, final exams results are to be submitted along with answer books to DD Exams of respective campuses within 5 days of the conduct of examinations; after discussing the result with respective HODs and before showing the marked answer books to the students. Upon receipt of complete result from campuses (i.e. the last Award List), Exams Dte compiles the final result within 7 working days, and uploads it on CMS Portal through IT Dte.
 - b. Respective faculty members enter the result of their respective programme in respective CMS, take the print out of electronically submitted result, sign the print out and submit it to the Exams Dept of respective campus. The Exams Dept then gets the Award lists of all the programmes signed by respective HoDs and submit the same to BUHO Exams Dte for result finalization and promulgation. It has however, been observed that some faculty members do not follow the timelines for result submission, probably due to lack of awareness regarding result submission procedure or implications of not meeting the timelines. Incomplete result submission by the campuses consequently causes delays in compilation and declaration of final results by BUHO Exams Dte. For example, final result of Fall 2017 semester was required to be forwarded by the campuses to the Exams Dte by 22 Jan 2018. However, results were being received from the campuses even on 27 Jan 2017. As such, overall time taken in final results compilation can be reduced if Award Lists are submitted by all faculty members within the timeline given to the campuses.
 - c. Another aspect that may be improving upon timelines of results finalization is use of separate software systems by the campuses and BUHO Exams Dte. While the campuses submit electronics results in the CMS, the BUHO Exams Dte converts them into its own oracle based database prior finalization and promulgation. Reduction in final exams results submission time through an IT based solution may be attained if these two separate software systems are merged into/ replaced by a common system adopted in all BU campuses as well as BUHO Exams Dte.
 - d. During the discussion, the point regarding possibility of changing a student's grades by any functionary at the CMS or Exams Dte database terminal/ station (having access to incorporate changes in the result) was also raised. It was,

however, noted that the semester result is sent to campuses after finalization by the Exams Dte vide PSRN (Provisional Semester Result Notification) for comparison with the submitted result and confirmation of correctness by the campuses. In case of any difference from the result finalized by the examiner(s), the campus should indicate the anomaly. If this methodology is followed at campus level, chances of changing of grades/ results at the Exams Dte are very remote.

3. Based on the above stated, following is proposed to reduce submission time of BU final exams result through IT based solution; along with enhanced security of results finalized and promulgated by BUHO Exams Dte:

- a. Faculty members of all campuses may be advised to follow the 7 days timeline given by BUHO to finalize and submit the results, while CUs may ensure strict compliance of the same.
- b. Endorsement of PSRN within 15 days after receipt from BUHO Exams Dte may be made mandatory for each CU, post verification from respective department.
- c. BUHO IT Dte may propose a common software for use by all the campuses and the Exam Dte for overall reduction in final examinations results submission time.
- d. Enhanced security measures may be implemented by IT Dte at campuses and Exams Dte to attain more control on finalized results, through restrictions on any changes, and notification of authorized changes at appropriate levels.

Appendage 3101**Revision of BS Computer Science - Road Map****Semester 1:**

Pre-requisite	Course code	Course Title	Lec	Lab	CR	CR/Sem
None	GSC 110	Applied Calculus and Analytical Geometry	3	0	3	16
None	CSC 110	Introduction to Information & Communication Technology	2	0	2	
None	CSL 110	Introduction to Information & Communication Technology Lab	0	1	1	
None	ENG 105	Functional English	3	0	3	
None	CSC 113	Computer Programming	3	0	3	
None	CSL 113	Computer Programming Lab	0	1	1	
None	GSC 114	Applied Physics	2	0	2	
None	GSL 114	Applied Physics Lab	0	1	1	

Semester 2:

Pre-	Course code	Course Title	Lec	Lab	CR	CR/Sem
		University Elective –I	3	0	3	17
ENG 105	HSS 120	Communication Skills	3	0	3	
CSC 113	CSC 210	Object Oriented Programming	3	0	3	
CSC 113	CSL 210	Object Oriented Programming	0	1	1	
GSC 113	CEN 120	Digital Logic Design	3	0	3	
GSCL 113	CEL 120	Digital Logic Design Lab	0	1	1	
None	GSC 221	Discrete Mathematics	3	0	3	

Semester 3:

Pre-requisite	Course code	Course Title	Lec	Lab	CR	CR/Sem
None	GSC 122	Probability and Statistics	3	0	3	17
GSC 110	GSC 211	Multivariable Calculus	3	0	3	
CEN 120	CEN 324	Computer Organization& Assembly Language	3	0	3	
CEN 120	CEL 324	Computer Organization& Assembly Language Lab	0	1	1	
CSC 113	CSC 221	Data Structures and Algorithms	3	0	3	
CSC 113	CSL 221	Data Structures and Algorithms Lab	0	1	1	
None	CSC 307	Professional Practices	3	0	3	

Semester 4:

Pre-requisite	Course	Course Title	Lec	Lab	CR	CR/Sem
		University Elective – II	3	0	3	
None	CSC 220	Database Management Systems	3	0	3	
None	CSL 220	Database Management Systems Lab	0	1	1	
None	CEN 222	Data Communication and Networking	3	0	3	
None	CEL 222	Data Communication and Networking Lab	0	1	1	
NONE	CSC 315	Theory of Automata	3	0	3	
GSC 110	GSC 210	Differential Equations	3	0	3	

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Semester 5:

Pre-requisite	Course	Course Title	Lec	Lab	CR	CR/Sem
CSC 221	CSC 320	Operating Systems	3	0	3	
CSC 221	CSL 320	Operating Systems Lab	0	1	1	
None	SEN 220	Software Engineering	3	0	3	
CSC 315	CSC 323	Compiler Construction	2	0	2	
CSC 315	CSL 323	Compiler Construction Lab	0	1	1	
CSC 221	CSC 321	Design and Analysis of Algorithms	3	0	3	
None	GSC 121	Linear Algebra	3	0	3	
None	ISL 101	Islamic Studies / Ethics	2	0	2	

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Semester 6:

Pre-requisite	Course	Course Title	Lec	Lab	CR	CR/Sem
CSC 210	CSC 325	Artificial Intelligence	3	0	3	
CSC 210	CSL 325	Artificial Intelligence Lab	0	1	1	
GSC 210	GSC 320	Numerical Analysis	3	0	3	
HSS 120	HSS 320	Technical Writing & presentation skills	3	0	3	
		Elective 1 (3+0 or 2+1)	-	-	3	
		Elective 2 (3+0 or 2+1)	-	-	3	

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Summer:

Pre-	Course code	Course Title	Lec	Lab	CR	CR/Sem
		Internship				

Semester 7:

Pre-	Course code	Course Title	Lec	Lab	CR	CR/Sem
NONE	ESC 498	Project – I	0	3	3	17
CSC 320	CEN 455	Parallel & Distributed	3	0	3	
None	PAK 101	Pakistan Studies	2	0	2	
		University Elective – III	3	0	3	
		Elective 3 (3+0 or 2+1)	-	-	3	
		Elective 4 (3+0 or 2+1)	-	-	3	

Semester 8:

Pre-requisite	Course	Course Title	Lec	Lab	CR	CR/Sem
NONE	ESC 499	Project – II	0	3	3	15
CEN 222	CSC 407	Information Security	3	0	3	
		University Elective – IV	3	0	3	
		Elective 5 (3+0 or 2+1)	-	-	3	
		Elective 6 (3+0 or 2+1)	-	-	3	
		Total Credit Hours				133

Computing Core Courses (39 credit hours)

Pre requisite	Course Code	Course Title	Lec	Lab	CR
None	CSC 113	Computer Programming	3	1	4
CSC 113	CSC 210	Object Oriented Programming	3	1	4
CSC 113	CSC 221	Data Structure & Algorithms	3	1	4
None	GSC 221	Discrete Mathematics	3	0	3
CSC 221	CSC 320	Operating Systems	3	1	4
None	CSC 220	Database Management Systems	3	1	4
None	SEN 220	Software Engineering	3	0	3
None	CEN 222	Data Communication and Networking	3	1	4
CEN 222	CSC 407	Information Security	3	0	3
None	ESC 498	Final Year Project	0	6	6

General Education Courses (19 credit hours)

Pre requisite	Course Code	Course Title	Lec	Lab	CR
None	ENG 105	Functional English	3	0	3
ENG 105	HSS 120	Communication Skills	3	0	3
HSS 120	HSS 320	Technical Writing & presentation skills	3	0	3
None	CSC 307	Professional Practices	3	0	3

None	CSC 110	Introduction to Information & Communication Technology	2	1	3
None	PAK 101	Pakistan Studies	2	0	2
None	ISL 101	Islamic Studies	2	0	2

Mathematics and Science Foundation Courses (12 credit hours)

Pre requisite	Course Code	Course Title	Lec	Lab	CR
None	GSC 110	Applied Calculus & Analytical Geometry	3	0	3
None	GSC 122	Probability & Statistics	3	0	3
None	GSC 121	Linear Algebra	3	0	3
None	GSC 114	Applied Physics	2	1	3

University Electives (12 credit hours)

Pre requisite	Course Code	Course Title	Lec	Lab	CR
Foreign Language Elective					
None	HSS 459	Foreign Language	3	0	3
Management Science Electives					
None	MGT 111	Principles of Management	3	0	3
None	MKT 110	Principles of Marketing	3	0	3
None	FIN 201	Fundamentals of Finance	3	0	3
None	MGT 242	Organizational Theory & Behavior	3	0	3
Social Science Electives					
None	HSS 107	Introduction to Psychology	3	0	3
None	HSS 202	Introduction to Sociology	3	0	3
None	HSS 115	Introduction to Media Studies	3	0	3
None	BES 103	Critical Thinking	3	0	3
Economics Electives					
None	HSS 410	Entrepreneurship	3	0	3
None	HSS 411	Engineering economics and management	3	0	3
None	ESCO 520	Economics	3	0	3

Computer Science Core Courses (24 credit hours)

Pre requisite	Course Code	Course Title	Lec	Lab	CR
CSC 315	CSC 323	Compiler Construction	2	1	3
CEN 120	CEN 324	Computer Organization and Assembly Language	3	1	4
GSC 113	CEN 120	Digital Logic Design	3	1	4
CSC 221	CSC 321	Design and Analysis of Algorithms	3	0	3
CSC 320	CEN 455	Parallel & Distributed Computing	3	0	3
CSC 210	CSC 325	Artificial Intelligence	3	1	4

None	CSC 315	Theory of Automata	3	0	3
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Computer Science Support Courses (09 credit hours)

Pre requisite	Course Code	Course Title	Lec	Lab	CR
GSC 110	GSC 210	Differential Equations	3	0	3
GSC 110	GSC 211	Multivariable Calculus	3	0	3
GSC 210	GSC 320	Numerical Analysis	3	0	3

Computer Science List of Electives (18 Credit hours)

Pre requisite	Course code	Course Title	Lec	Lab	CR
CSC 220	CSC 468	Advanced Databases	2	0	2
CSC 220	CSL 468	Advanced Databases Lab	0	1	1
CSC 321	CSC 521	Advanced Design and Analysis of Algorithm	3	0	3
CSC 220	CSC 488	Big Data Analytics	2	0	2
CSC 220	CSL 488	Big Data Analytics Lab	0	1	1
CSC 210	CSC 459	Client Server Programming	2	0	2
CSC 210	CSL 459	Client Server Programming Lab	0	1	1
CSC 210	CSC 444	Computer Graphics	2	0	2
CSC 210	CSL 444	Computer Graphics Lab	0	1	1
SEN 310	CSC 484	Content Management	2	0	2
SEN 310	CSL 484	Content Management Lab	0	1	1
CEN 222	CEN 451	Data Encryption and Security	3	0	3
CSC 220	CSC 452	Data Mining	3	0	3
CSC 220	CSC 454	Data Warehousing	3	0	3
CSC 210	CEN 444	Digital Image Processing	2	0	2
CSC 210	CEL 444	Digital Image Processing Lab	0	1	1
EEN 313	EEN 325	Digital Signal Processing	2	0	2
EEN 313	EEL 325	Digital Signal Processing Lab	0	1	1
CSC 313	CSC 319	Game Development and Design	2	0	2
CSC 313	CSL 319	Game Development and Design Lab	0	1	1
CSC 221	CSC 486	Geographical Information System	2	0	2
CSC 221	CSC 486	Geographical Information System Lab	0	1	1
SEN 220	SEN 320	Human Computer Interaction	2	0	2
SEN 220	SEL 320	Human Computer Interaction Lab	0	1	1
CSC 325	CSC 466	Introduction to Biometrics	2	0	2
CSC 325	CSL 466	Introduction to Biometrics Lab	0	1	1
CSC 220	CSC 342	Introduction to Cloud Computing	3	0	3
CSC 220	CSC 487	Introduction to Data Science	2	0	2
CSC 220	CSL 487	Introduction to Data Science Lab	0	1	1
CSC 325	SEN 455	Knowledge Based Management System	3	0	3
SEN 213	CSC 458	Management Information System	3	0	3

CEN 221	CEN 321	Microprocessor & Interfacing	2	0	2
CEN 221	CEL 321	Microprocessor & Interfacing Lab	0	1	1
CSC 210	CSC 341	Mobile Application Development	2	0	2
CSC 210	CSL 341	Mobile Application Development Lab	1	0	1
CSC 444	SEN 493	Multimedia Systems	2	0	2
CSC 444	SEL 493	Multimedia Systems Lab	0	1	1
CSC 325	CSC 441	Natural Language Processing	3	0	3
CSC 325	CSC 449	Neural Networks& Fuzzy Logic	3	0	3
NONE	GSC 445	Operations Research	3	0	3
CSC 320	CEN 453	Real Time System	3	0	3
CSC 325	CEN 458	Robotics	2	0	2
CSC 325	CEL 458	Robotics Lab	0	1	1
SEN 310	SEN 422	Semantic Computing	3	0	3
SEN 310	SEN 421	Semantic Web	3	0	3
GSC 210	EEN 313	Signals and Systems	2	0	2
GSC 210	EEL 313	Signals and Systems Lab	0	1	1
GSC 121	CEN 450	Simulation and Modeling	2	0	2
GSC 121	CEL 450	Simulation and Modeling Lab	0	1	1
SEN 220	SEN 457	Software Design and Architecture	2	0	2
SEN 220	SEL 457	Software Design and Architecture Lab	0	1	1
SEN 220	SEN 458	Software Requirement Engineering	3	0	3
SEN 220	SEN 410	Software Project Management	3	0	3
SEN 220	SEN 420	Software Quality Assurance	3	0	3
SEN 220	SEN 447	Software Testing	3	0	3
CSC 323	CSC 451	Theory of Programming Languages	3	0	3
SEN 320	SEN 456	Usability Engineering	3	0	3
CEN 222	CSC 489	Ubiquitous Computing	3	0	3
CSC 210	CSC 313	Visual Programming	2	0	2
CSC 210	CSL 313	Visual Programming Lab	0	1	1
CSC 113	SEN 310	Web Engineering	2	0	2
CSC 113	SEL 310	Web Engineering Lab	0	1	1

Course Description**Course Title:** Applied Physics**Course Code:** GSC 113**Pre Requisite:** None

Content: Electric force and its applications and related problems, conservation of charge, charge quantization, Electric fields due to point charge and lines of force. Ring of charge, Disk of charge, A point charge in an electric field, Dipole in a n electric field, The flux of vector field, The flux of electric field, Gauss' Law, Application of Gauss' Law, Spherically symmetric charge distribution, A charge isolated conductor, Electric potential energy, Electric potentials, Calculating the potential from the field and related problem Potential due to point and continuous charge distribution, Potential due to dipole, equipotential surfaces, Calculating the field from the potential ,Electric current, Current density,

Resistance, Resistivity and conductivity, Ohm's law and its applications, The Hall effect, The magnetic force on a current, The Biot Savart law, Line of B, Two parallel conductors, Amperes' s Law, Solenoid, Toroids, Faraday's experiments, Faraday's Law of Induction, Lenz's law, Motional emf, Induced electric field, Induced electric fields, The basic equation of electromagnetism, Induced Magnetic field, The displacement current, Reflection and Refraction of light waves, Total internal reflection, Two source interference, Double Slit interference, related problems, Interference from thin films, Diffraction and the wave theory, related problems, Single Slit Diffraction, related problems, Polarization of electromagnetic waves, Polarizing sheets, related problems.

Books:

Fundamentals of Physics (Extended), 10th edition, Resnick and Walker
Narciso Garcia, Arthur Damask, Steven Schwarz., "Physics for Computer Science Students", Springer Verlag, 1998

Appendage 3102**Revision of BS Information Technology roadmap****Eligibility Criteria for admission in BS Information Technology Program**

The minimum requirements for admission in a BSIT is at least 50% marks in Intermediate (HSSC) examination with Mathematics or equivalent qualification with Mathematics certified by IBCC.

BS Information Technology - Road Map**Semester 1**

Pre-requisite	Course Code	Course Title	Lec	Lab	CR	CR/Sem
None	CSC 110	Introduction to Information & Communication Technology	2	0	2	16
None	CSL 110	Introduction to Information & Communication Technology Lab	0	1	1	
None	CSC 113	Computer Programming	3	0	3	
None	CSL 113	Computer Programming Lab	0	1	1	
None	ENG 105	Functional English	3	0	3	
None	GSC 110	Applied Calculus & Analytical Geometry	3	0	3	
None	GSC 114	Applied Physics	2	0	2	
None	GSL 114	Applied Physics Lab	0	1	1	

Semester 2

Pre-requisite	Course Code	Course Title	Lec	Lab	CR	CR/Sem
CSC 113	CSC 210	Object Oriented Programming	3	0	3	16
CSC 113	CSL 210	Object Oriented Programming Lab	0	1	1	
ENG 105	HSS 120	Communication Skills	3	0	3	
None	GSC 221	Discrete Mathematics	3	0	3	
		University Elective – I	3	0	3	
GSC 114	CEN 122	Digital Design	2	0	2	
GSC 114	CEL 122	Digital Design Lab	0	1	1	

Semester 3

Pre-requisite	Course Code	Course Title	Lec	Lab	CR	CR/Sem
CSC 113	CSC 221	Data Structures & Algorithms	3	0	3	17
CSC 113	CSL 221	Data Structure & Algorithms Lab	0	1	1	
None	CEN 222	Data Communication and Networking	3	0	3	
None	CEL 222	Data Communication and Networking	0	1	1	

None	CSC 307	Professional Practices	3	0	3	
None	GSC 121	Linear Algebra	3	0	3	
None	GSC 122	Probability & Statistics	3	0	3	

Semester 4

Pre-requisite	Course Code	Course Title	Lec	Lab	CR	CR/Sem
CSC 221	CSC 320	Operating Systems	3	0	3	17
CSC 221	CSL 320	Operating Systems Lab	0	1	1	
None	CSC 407	Information Security	3	0	3	
None	CSC 220	Database Management Systems	3	0	3	
None	CSL 220	Database Management Systems Lab	0	1	1	
None	SEN 220	Software Engineering	3	0	3	
		University Elective – II	3	0	3	

Semester 5

Pre-requisite	Course Code	Course Title	Lec	Lab	CR	CR/Sem
SEN 220	ITC 311	IT Project Management	3	0	3	16
CEN 222	ITC 312	System and Network Administration	3	0	3	
CEN 222	ITL 312	System and Network Administration Lab	0	1	1	
None	ITC 226	Web Systems & Technologies	2	0	2	
None	ITL 226	Web Systems & Technologies	0	1	1	
SEN 220	SEN 458	Software Requirement Engineering	3	0	3	
		University Elective – III	3	0	3	

Semester 6

Pre-requisite	Course Code	Course Title	Lec	Lab	CR	CR/Sem
CSC 220	ITC 321	Enterprise Systems	3	0	3	18
None	ITC 324	IT Infrastructure	3	0	3	
HSS 120	HSS 320	Technical Writing & presentation skills	3	0	3	
		University Elective – IV	3	0	3	
		Elective 1 (3+0 or 2+1)	-	-	3	
		Elective 2 (3+0 or 2+1)	-	-	3	

Summer:

Pre-requisite	Course code	Course Title	Lec	Lab	CR	CR/Sem
		Internship	0	0	0	0

Semester 7

Pre-requisite	Course Code	Course Title	Lec	Lab	CR	CR/Sem
CEN 222	ITC 411	Cyber Security	3	0	3	
None	PAK 101	Pakistan Studies	2	0	2	

CSC 220	ITC 424	Database Administration and Management	3	0	3	18
CSC 220	ITC 424	Database Administration and Management Lab		1	1	
None	ESC 498	Project – I	0	3	3	
		Elective 3 (3+0 or 2+1)	-	-	3	
		Elective 4 (3+0 or 2+1)	-	-	3	

Semester 8

Pre-requisite	Course Code	Course Title	Lec	Lab	CR	CR/Sem
None	ESC 499	Project II	0	3	3	15
CSC 320	ITC 422	Virtual Systems and Services	3	0	3	
CSC 320	ITL 422	Virtual Systems and Services Lab	0	1	1	
None	ISL 101	Islamic Studies	2	0	2	
		Elective 5 (3+0 or 2+1)	-	-	3	
		Elective 6 (3+0 or 2+1)	-	-	3	

Total Credit Hours: 133**Computing Core Courses (39 credit hours)**

Pre requisite	Course Code	Course Title	Lec	Lab	CR
None	CSC 113	Computer Programming	3	1	4
CSC 113	CSC 210	Object Oriented Programming	3	1	4
CSC 113	CSC 221	Data Structure & Algorithms	3	1	4
None	GSC 221	Discrete Mathematics	3	0	3
CSC 221	CSC 320	Operating Systems	3	1	4
None	CSC 220	Database Management Systems	3	1	4
None	SEN 220	Software Engineering	3	0	3
None	EEN 434	Computer Networks	3	1	4
EEN 434	CSC 407	Information Security	3	0	3
None	ESC 498	Final Year Project	0	6	6

General Education Courses (19 credit hours)

Pre requisite	Course Code	Course Title	Lec	Lab	CR
None	ENG 105	Functional English	3	0	3
ENG 105	HSS 120	Communication Skills	3	0	3
HSS 120	HSS 320	Technical Writing & presentation skills	3	0	3
None	CSC 307	Professional Practices	3	0	3
None	CSC 110	Introduction to Information & Communication Technology	2	1	3

None	PAK 101	Pakistan Studies	2	0	2
None	ISL 101	Islamic Studies / Ethics	2	0	2

Mathematics and Science Foundation Courses (12 credit hours)

Pre requisite	Course Code	Course Title	Lec	Lab	CR
None	GSC 110	Applied Calculus & Analytical Geometry	3	0	3
None	GSC 122	Probability & Statistics	3	0	3
None	GSC 121	Linear Algebra	3	0	3
None	GSC 114	Applied Physics	2	1	3

University Electives (12 credit hours)

Pre requisite	Course Code	Course Title	Lec	Lab	CR
Foreign Language Elective					
None	HSS 459	Foreign Language	3	0	3
Management Science Electives					
None	MGT 111	Principles of Management	3	0	3
None	MKT 110	Principles of Marketing	3	0	3
None	FIN 201	Fundamentals of Finance	3	0	3
None	MGT 242	Organizational Theory & Behavior	3	0	3
Social Science Electives					
None	HSS 107	Introduction to Psychology	3	0	3
None	HSS 202	Introduction to Sociology	3	0	3
None	HSS 115	Introduction to Media Studies	3	0	3
None	BES 103	Critical Thinking	3	0	3
Economics Electives					
None	HSS 410	Entrepreneurship	3	0	3
None	HSS 411	Engineering economics and management	3	0	3
None	ESCO 520	Economics	3	0	3

IT Core Courses (24 credit hours)

Pre requisite	Course Code	Course Title	Lec	Lab	CR
CEN 222	ITC 411	Cyber Security	3	0	3
CSC 220	ITC 424	Database Administration and Management	3	1	4
SEN 220	ITC 311	Information Technology Project Management	3	0	3
None	ITC 324	Information Technology Infrastructure	3	0	3
CEN 222	ITC 312	System and Network Administration	3	1	4
CSC 320	ITC 422	Virtual Systems and Services	3	1	4

None	ITC 226	Web System and Technologies	2	1	3

IT Support Courses (09 credit hours)

Pre requisite	Course Code	Course Title	Lec	Lab	CR
CSC 220	ITC 321	Enterprise Systems	3	0	3
GSC 114	CEN 122	Digital Design	2	1	3
SEN 220	SEN 458	Software Requirement Engineering	3	0	3

List of Information Technology Elective Courses (18 credit hours)

Pre requisite	Course code	Course Title	Lec	Lab	CR
CSC 210	CSC 313	Visual Programming	2	0	2
CSC 210	CSCL 313	Visual Programming Lab	0	1	1
ITC 226	ITB 471	E Commerce	3	0	3
ITC 311	ITC 525	Business Processing Re engineering	3	0	3
ITC 321	ITC 457	Knowledge Management System & Technologies	3	0	3
CSC 220	CSC 487	Introduction to Data Science	2	0	2
CSC 220	CSL 487	Introduction to Data Science Lab	0	1	1
CSC 220	CSC 452	Data Mining	3	0	3
CSC 220	CSC 454	Data Warehousing	3	0	3
CSC 210	CSC 411	Artificial Intelligence	2	0	2
CSC 210	CSL 411	Artificial Intelligence lab	0	1	1
SEN 310	SEN 421	Semantic Web	3	0	3
CSC 310	CSC 456	Distributed Computing	2	0	2
CSC 310	CSL 456	Distributed Computing Lab	0	1	1
CSC 221	CSC 486	Geographical Information System	2	0	2
CSC 221	CSC 486	Geographical Information System Lab	0	1	1
CSC 210	CSC 342	Parallel Programming	2	0	2
CSC 210	CSL 342	Parallel Programming lab	0	1	1
SEN 220	SEN 411	Software Testing	3	0	3
CSC 210	CSC 459	Client Server Programming	2	0	2
CSC 210	CSL 459	Client Server Programming Lab	0	1	1
CSC 210	CEN 444	Digital Image Processing	2	0	2
CSC 210	CEL 444	Digital Image Processing Lab	0	1	1
CSC 210	CSC 444	Computer Graphics	2	0	2
CSC 210	CSL 444	Computer Graphics Lab	0	1	1
CSC 220	CSC 468	Advanced Databases	2	0	2
CSC 220	CSL 468	Advanced Databases Lab	0	1	1
SEN 320	SEN 456	Usability Engineering	3	0	3
CSC 210	CSC 341	Mobile Application Development	2	0	2
CSC 210	CSL 341	Mobile Application Development Lab	1	0	1
CSC 220	CSC 426	Business Intelligence and Analytic	3	0	3
ITC 321	SEN 427	Information Systems Auditing and Assurance	3	0	3

SEN 220	SEN 428	Service Oriented Architecture	3	0	3
SEN 220	SEN 420	Software Quality Assurance	3	0	3
CEN 122	CEN 323	Computer Organization & Assembly Language	2	0	2
CEN 122	CEL 323	Computer Organization & Assembly Language	0	1	1

Course Description**Course Title:** Applied Physics**Course Code:** GSC 113**Pre Requisite: None**

Content: Electric force and its applications and related problems, conservation of charge, charge quantization, Electric fields due to point charge and lines of force. Ring of charge, Disk of charge, A point charge in an electric field, Dipole in a n electric field, The flux of vector field, The flux of electric field, Gauss' Law, Application of Gauss' Law, Spherically symmetric charge distribution, A charge isolated conductor, Electric potential energy, Electric potentials, Calculating the potential from the field and related problem Potential due to point and continuous charge distribution, Potential due to dipole, equipotential surfaces, Calculating the field from the potential , Electric current, Current density, Resistance, Resistivity and conductivity, Ohm's law and its applications, The Hall effect, The magnetic force on a current, The Biot Savart law, Line of B, Two parallel conductors, Amperes' s Law, Solenoid, Toroids, Faraday's experiments, Faraday's Law of Induction, Lenz's law, Motional emf, Induced electric field, Induced electric fields, The basic equation of electromagnetism, Induced Magnetic field, The displacement current, Reflection and Refraction of light waves, Total internal reflection, Two source interference, Double Slit interference, related problems, Interference from thin films, Diffraction and the wave theory, related problems, Single Slit Diffraction, related problems, Polarization of electromagnetic waves, Polarizing sheets, related problems.

Books:

- Fundamentals of Physics Extended, 10th Edition Wiley, 2015
- Narciso Garcia, Arthur Damask, Steven Schwarz., "Physics for Computer Science Students", Springer Verlag, 1998
- Physics for Scientists and Engineers, Technology Update, 9th Edition, 2015

Course Title: Enterprise Systems**Course Code:** ITC 321**Pre Requisite: Database Management System**

Content: Fundamentals of an Enterprise and Industries artifacts. Introduction to Enterprise Resource Planning (ERP). ERP Implementation life cycle methodologies and strategy. Business processes, architecture, User Interface Designs and their modeling. ERP Security, workflows, data integration, applications migration and data migration. Study of business modules Human Resource, Procurement, Sales and Distribution, Material Management, and Manufacturing. Concepts and tools of designing and implementing an ERP system. Emerging trends in ERP and special topics such as Supply Chain Management (SCM), Customer Relationship Management (CRM), Business Intelligence (BI).

Books:

- Design of Enterprise Systems: Theory, Architecture, and Methods By Ronald E. Giachetti CRC Press, 2016, ISBN 1439882894
- Handbook of Research in Enterprise Systems SAGE by Sanjay Kumar, Publications India, 2011, ISBN 8132107616

Course Title: Information Technology Project Management

Course Code: ITC 311

Pre Requisite: Software Engineering

Content: Introduction to Project Management. The Project Management and Information Technology Context. The Project Management Process Groups. Project Integration Management. Project Scope Management. Project Time Management. Project Cost Management. Project Quality Management. Project Human Resource Management. Project Communications Management. Project Risk Management. Project Procurement Management. Project Management Tools

Books:

Information Technology Project Management: Providing Measurable Organizational Value by Jack T. Marchewka, 5th Edition, Wiley, 2016.

Information Technology Project Management by Kathy Schwalbe, 6th Edition, 2010, ISBN 10: 1111221758

Course Title: Information Technology Infrastructure

Course Code: ITC 324

Pre Requisite: None

Content: Definition of IT Infrastructure, Non functional Attributes, Availability Concepts, Sources of Unavailability, Availability Patterns. Performance. Security Concepts. Data centres. Servers: Availability, Performance, Security. Networking: Building Blocks, Availability, Performance, Security. Storage: Availability, Performance, Security. Virtualization: Availability, Performance, Security. Operating Systems: Building Blocks, Implementing Various OSs, OS availability, OS Performance, OS Security. End User Devises: Building Blocks, Device Availability, Performance, Security. IT Infrastructure Management. Service Delivery Processes. Service Support Processes. Ethics, Trends, organizational and technical issues related to IT infrastructure.

Books:

- IT Infrastructure Architecture Infrastructure Building Blocks and Concepts, Third Edition by Sjaak Laan, 2011, ISBN 1291250794
- IT Architect: Foundation in the Art of Infrastructure Design: A Practical Guide for It Architects, John Yani Arrasjid, 2016

Course Title: Cyber Security

Course Code: ITC 411

Pre Requisite: Data Communication and Networking

Content: Basic security concepts, Information security terminology, Malware classifications, Types of malware. Server side web applications attacks. Cross site scripting, SQL Injection, Cross site request forgery, Planning and policy, Network protocols and service models. Transport layer security, Network layer security, Wireless security, Cloud & IoT security.

Books:

- Cybersecurity for Beginners by Raef Meeuwisse, 2nd Edition, 2017
- Cybersecurity and Cyberwar: What Everyone Needs to Know, by P.W. Singer and Allan Friedman, Oxford University Press, 2014
- Cyber Security and IT Infrastructure Protection by John R. Vacca, Elsevier, 2013

Course Title: Virtual Systems and Service

Course Code: ITC 422

Pre Requisite: Operating Systems

Content: This course will investigate the current state of virtualization in computing systems. Virtualization at both the hardware and software levels will be examined, with emphasis on the hypervisor configurations of systems such as Vmware, Zen and Hyper V. The features and limitations of virtual environments will be considered, along with several case studies used to demonstrate the configuration and management of such systems. Para virtualized software components will be analyzed and their pros and cons discussed. Processor and peripheral support for virtualization will also be examined, with a focus on emerging hardware features and the future of virtualization.

Books:

- Virtualization Essentials by Matthew Portnoy, 2nd Edition, Sybex Publisher, 2016
- Virtual Machines: Versatile Platforms for Systems and Processes, by Jim Smith and Ravi Nair, Morgan Kaufmann Series, 2005

Course Title: **Database Administration and Management**

Course Code: **ITC 327**

Pre Requisite:

Content: Introduction to advance data models such as object relational, object oriented. File organizations concepts, Transactional processing and Concurrency control techniques, Recovery techniques, Query processing and optimization, Database Programming, Integrity and security, Database Administration, Physical database design and tuning, Distributed database systems, Emerging research trends in database systems.

Books:

- Database Administration: The Complete Guide to DBA Practices and Procedures, by Craig S. Mullins, 2nd Edition, 2012
- Modern Database Management by Jeff Hoffer, Venkataraman Ramesh and Heikki Topi, 12th Edition, 2015

Appendage 3103

BS SE Program - Revision of Curriculum

1. Background to the Case

Revision of curriculum is a continuous process. The Curriculum Division of HEC undertakes the revision of curricula after every three years through respective National Curriculum Revision Committees (NCRCs). The revised curricula of BS (Software Engineering) has been issued by HEC. Dean (ES) constituted an inter-campus committee to review and update the BSE roadmap. Committee comprised of the following members:

1. Dr. Awais Majeed - HoD, SE-IC Chair
2. Dr. Sohaib Ahmed - HoD, SE-KC
3. Dr. Shahid Nazir Bhatti - AsP, SE-IC
4. Dr. Osama Rehman - Sr. AP, SE-KC
5. Dr. Raja M. Suleman - Sr. AP, SE-IC

After, due consideration and deliberation the committee has revised the roadmap of BSE program offered at BU in accordance with HEC guidelines. Most significant changes include:

1. Alignment of roadmap (semester wise course offering) as per HEC guidelines
2. Addition of courses in computing and software engineering core courses.
3. Addition of courses in Software Engineering electives
4. Addition and enhancement of lab component in Software Engineering electives as per PEC's observations in the recent re-accreditation visit of BSE program at BUKC.

2. Financial Effect Nil

3. Recommendations

It is recommended that revised roadmap of BSE program attached Annex A may be considered for implementation from Fall 2018 intake.

Annex A

Curriculum - Bachelor of Software Engineering
(Applicable from Fall 2018 Intake)

Curriculum Revision History

#	Revisions	ACM Approval Date
1	Major Revision of BSE roadmap/curriculum as per HEC's 2013 curriculum. Curriculum is applicable from Fall 2016 intake.	25 th ACM (Oct 2015)
2	Adjustment of Electives (pre-requisites, adjustment of elective courses semester offering and shifting of courses to different elective categories) Changes applicable from Fall 2017	28 th ACM (April 2017)
3	Revision in Domain Electives (addition of new domain of Data Science and adjustment of courses) Changes applicable from Fall 2017	30 th ACM (Oct 2017)
4	Revision of Roadmap in line with HEC's New Curriculum Guidelines (2017) and observations of PEC in recent re-accreditation visits. Most significant changes include: <ol style="list-style-type: none"> 1. Alignment of roadmap (semester wise course offering) as per HEC guidelines 2. Addition of courses in computing and software engineering core courses. 3. Addition of courses in Software Engineering electives 4. Addition and enhancement of lab component in Software Engineering electives as per PEC's observations. 5. Removal of courses from SE core courses 	31 st ACM (April 2018)

Department of Software Engineering

Bachelor of Software Engineering Program

Vision Statement of the Department

Department of Software Engineering aims to be recognized as a leader in Software Engineering education and research through excellence in modern education and targeted research in emerging areas of Software Engineering.

Program Mission - Bachelor of Software Engineering

The mission of Bachelor of Software Engineering program is to prepare technically strong Software Engineers who can contribute effectively towards the nation, society and the world at large through effective problem solving skills, application of engineering knowledge, leadership and healthy lifelong learning attitude.

Program Educational Objectives

Software Engineering department aims to deliver a strong and coherent Software Engineering program for the development of skilled Software Engineers. The curriculum is inline with PEC and HEC regulations to equip students with latest skills for industry and research activities. Software Engineering graduates should achieve the following educational objectives:

PEO-1: Graduates should demonstrate competence in applying Software Engineering knowledge & practices in various phases of software/system development life cycle in their respective professional career.

PEO-2: Graduates should demonstrate an ability to work as a member and/or leader in a team with a strong sense of societal context, professional ethics and effective communication skills in professional practice.

PEO-3: Graduates should demonstrate sustained learning by pursuing life-long learning through graduate studies, professional development or managerial/leadership skills.

Program Learning Outcomes

PLO 1: Engineering Knowledge: An ability to apply knowledge of computer science, software engineering fundamentals and an engineering specialization to the solution of complex software engineering problems.

PLO 2: Problem Analysis: An ability to identify, formulate, research literature and analyze complex software engineering problems reaching substantiated conclusions using software engineering principles, natural sciences and engineering sciences.

PLO 3: Design/Development of Solutions: An ability to design solutions for complex software engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PLO 4: Investigation: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis, and interpretation of experimental data, and synthesis of information to derive valid conclusions.

PLO 5: Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO 6: The Engineer and Society: An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

PLO 7: Environment and Sustainability: An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

PLO 8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PLO 9: Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.

PLO 10: Communication: An ability to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PLO 11: Project Management: An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

PLO 12: Lifelong Learning: An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

Eligibility Criteria

FSc Pre-Engineering/FSc with Math, Physics and Computer Science or equivalent with minimum 60% marks.

Scheme of Studies	
Duration	4 Years
Number of Semesters	8
Number of weeks per semester	18 (16 for teaching and 2 for exams.)
Total number of credit hours	134
Non-Engineering Courses (Minimum)	40
Engineering Courses (Maximum)	94

Curriculum Alignment with National Qualifications Framework (Recommended Scheme of Studies by PEC)

Domain	Knowledge Area	Total Courses	Total Credits	% Overall Cr Hrs
Non-Engineering	Mathematics & Science Foundation Core (Maths/Science)	4	12	29.85%
	General Education Core (Humanities)	6	16	
	General Education Electives (Humanities & Management Sciences)	4	12	
	Sub Total	14	40	
Engineering	Computing Core Courses	11	39	70.15%
	Software Engineering Core Courses	8	24	
	Software Engineering Elective Courses	5	15	
	Final Year Project	2	6	
	Supporting Electives (Interdisciplinary Courses)	3	10	
	Sub Total	29	94	
Grand Total		43	134	100%

Semester Wise Breakdown of Courses

1st Year - SEMESTER 1						
#	Pre-Req	Course Code	Course Title Total	Credit Hours	Theory	Lab
1	None	CSC 110	Computing Fundamentals	2	2	0
2	None	CSC 113	Computer Programming	4	3	1

3	None	GSC 110	Applied Calculus & Analytical Geometry	3	3	0
4	None	ENG 105	Functional English	3	3	0
5	None	GSC 114	Applied Physics	3	2	1
			Semester Credit Hrs	16	13	3

1st Year - SEMESTER 2						
#	Pre-Req	Course Code	Course Title Total	Credit Hours	Theory	Lab
1	-	GSC 221	Discrete Mathematics	3	3	0
2	CSC 113	CSC 210	Object Oriented Programming	4	3	1
3	-	SEN 120	Introduction to Software Engineering	3	3	0
4	ENG 105	HSS 120	Communication Skills	3	3	0
5	-	ISL 101	Islamic Studies/Ethics	2	2	0
6	-	CEN 122	Digital Design	3	2	1
			Semester Credit Hrs	18	16	2

2nd Year - SEMESTER 3						
#	Pre-Req	Course Code	Course Title Total	Credit Hours	Theory	Lab
1	CSC 210	CSC 221	Data Structures & Algorithms	4	3	1
2	SEN 120	SEN 211	Software Requirement Engineering	3	3	0
3	None	SEN 212	Human Computer Interaction	3	3	0
4	None	GSC 121	Linear Algebra	3	3	0
5	CEN 122	CEN 221	Supporting Elective - I	4	3	1
			Semester Credit Hrs	17	15	2

2nd Year - SEMESTER 4						
	Pre-Req	Course Code	Course Title Total	Credit Hours	Theory	Lab
1	CSC 221	CSC 320	Operating Systems	4	3	1
2	None	GSC 122	Probability & Statistics	3	3	0
3	CSC 113	CSC 220	Database Management Systems	4	3	1
4	SEN 211	SEN 221	Software Design & Architecture	3	2	1

5			University Elective I	3	3	0
			Semester Credit Hrs	17	14	3

3rd Year - SEMESTER 5						
#	Pre-Req	Course Code	Course Title Total	Credit Hours	Theory	Lab
1	None	HSS 320	Technical Writing & Presentation Skills	3	3	0
2	None	CEN 222	Data Communication & Networking	4	3	1
3	SEN 221	SEN 311	Software Construction	3	2	1
4			University Elective II	3	3	0
5			SE Elective I	3	-	-
6	None	PAK 101	Pakistan Studies	2	2	0
			Semester Credit Hrs	18	15	3

3rd Year - SEMESTER 6						
	Pre-Req	Course Code	Course Title Total	Credit Hours	Theory	Lab
1	CSC 113	SEN 310	Web Engineering	3	2	1
2	SEN 120	SEN 321	Software Quality Engineering	3	3	0
3		CSC 407	Information Security	3	3	0
4			SE Elective II	3	-	-
5			SE Elective III	3	-	-
6			Supporting Elective II	3	-	-
			Semester Credit Hrs	18		

SUMMER						
	Pre-Req	Course Code	Course Title Total	Credit Hours	Theory	Lab
	-	-	Summer Internship	-	-	-

4th Year - SEMESTER 7						
#	Pre-Req	Course Code	Course Title Total	Credit Hours	Theory	Lab
1		ESC 498	Project I	3	0	3
2	SEN 120	SEN 410	Software Project Management	3	3	0
3	None	HSS 422	Engineering Ethics	3	3	0
4	SEN 311	SEN 411	Software Re-Engineering	3	3	0
5			SE Elective IV	3	-	-
			Semester Credit Hrs	15		

4th Year - SEMESTER 8						
#	Pre-Req	Course Code	Course Title Total	Credit Hours	Theory	Lab
1		ESC 499	Project II	3	0	3
2			SE Elective V	3	-	-
3			University Elective III	3	-	-
4			University Elective IV	3	-	-
5			Supporting Elective III	3	-	-
			Semester Credit Hrs	15		
			Total Credit Hours	134		

Software Engineering Supporting Elective

This category of courses is equips students with knowledge related to supporting aspects of Software Engineering ranging from mathematics, natural sciences and engineering. Students are required to take 3 courses to cover this domain.

SE SUPPORTING ELECTIVE COURSES					
Pre-Req	Course Code	Course Title Total	Credit Hours	Theory	Lab
GSC 110	GSC 210	Differential Equations	3	3	0
GSC 110	GSC 220	Complex Variables and Transforms	3	3	0
GSC 110	GSC 320	Numerical Analysis	3	3	0
GSC 122	GSC 445	Operations Research	3	3	0
GSC 122	CEN 450	Simulation and Modeling	3	2	1
GSC 114	GSC 446	Physics-II (Mechanics)	3	3	0
GSC 122	GSC 440	Stochastic Processes	3	3	0
SEN 120	SEN 449	Business Process Automation	3	3	0
CSC 320	CEN 449	System Programming	3	2	1
GSC 110	SEN 323	Formal Methods in Software Engineering	3	3	0
None	CSC 448	Introduction to Bio-Informatics	3	3	0
	CEN 463	Robotics	3	2	1
SEN 321	SEN 429	Fault Tolerant Systems	3	0	0
CSC 320	CEN 453	Real Time Systems	3	3	0
None	CSC 448	Introduction to Bio-Informatics	3	3	0
None	CSC 315	Theory of Automata	3	3	0
CSC 221	CSC 321	Design and Analysis of Algorithms	3	3	0
CSC 315	CSC 323	Compiler Construction	3	2	1
CEN 122	CEN 221	Computer Architecture & Organization	4	3	1
CSC 320	CEN 321	Microprocessors & Interfacing	4	3	1
GSC 113	EEN 210	Basic Electronics	4	3	1
GSC 110	CSC 453	Information Theory	3	3	0

Elective Software Engineering Courses -15 Credit Hours

This category comprises of courses that provide in depth knowledge relevant to the areas of Software Engineering and applied computing domains. Students have to take five courses from this category with at least 2 courses comprising of lab components.

SOFTWARE ENGINEERING ELECTIVE COURSES					
Pre-Req	Course Code	Course Title Total	Credit Hours	Theory	Lab
CSC 113	CSC 313	Visual Programming	3	2	1
None	SEN 448	Software Applications For Mobile Devices	3	2	1
CSC 113	CSC 445	Principles of Programming Languages	3	3	0
CSC 210	SEN 328	Game Application Development	3	2	1
SEN-310	SEN 424	Semantic Web	3	2	1
None	SEN 324	Software Metrics & Estimation	3	3	0
SEN-210	SEN 440	Software Engineering Economics	3	3	0
CSC-113	SEN 441	Mathematical Tools For Software Engineering	3	3	0
None	SEN 450	Design Pattern	3	3	0
None	SEN 452	Agile Development	3	3	0
SEN 320	SEN 456	Usability Engineering	3	3	0
None	CSC 411	Artificial Intelligence	3	2	1
	SEN 443	Introduction to Soft Computing	3	2	1
GSC 122	CSC 441	Natural Language Processing	3	3	0
	SEN 331	Scientific Computing	3	3	0
None	SEN 330	Agent Based Computing	3	3	0
None	SEN 459	Mobile and Pervasive Computing	3	3	0
None	SEN 325	Cloud Computing	3	3	0
CSC 210	CSC 456	Distributed Computing	3	2	1
None	CEN 451	Data Encryption & Security	3	3	0
None	SEN 460	IoT Application Development	3	2	1
CSC 220	CSC 460	Data Mining	3	2	1
CSC 220	CSC 454	Data Warehousing	3	3	0
	CSC 487	Introduction to Data Science	3	3	0
None	SEN 332	Big Data Analytics	3	3	0
SEN 120	CSC 458	Management Information Systems	3	3	0
CSC 220	SEN 326	Advanced Database Management Systems	3	2	1

None	SEN 455	Knowledge Based Management Systems	3	3	0
None	SEN 453	Information System Audit	3	3	0
CSC 220	SEN 327	Distributed Database Systems	3	3	0
None	CSC 444	Computer Graphics	3	2	1
	SEN 329	Digital Animation	3	3	0
None	SEN 493	Multimedia Systems	3	3	0
GSC 121	CEN 445	Digital Image Processing	3	2	1
CEN 445	CSC 464	Computer Vision	3	3	0

University Electives

This category consists of cross domain courses ranging from social sciences, management sciences, finance and economy. Student shall take 4 courses from this category to complete 12 credits of University Elective courses.

UNIVERSITY ELECTIVE COURSES					
Pre Req	Course Code	Course Title	Total Credit Hours	Theory	Lab
Languages					
None	HSS 452	English Literature	3	3	0
None	HSS 459	Foreign Language (Arabic, French, etc)	3	3	0
Finance & Economy					
None	ECO 457	Economics	3	3	0
None	HSS 461	Accounting & Finance	3	3	0
Management Sciences					
None	MGT 111	Principles of Management	3	3	0
None	HSS 453	Human Resource Management	3	3	0
None	HSS 456	Organizational Behavior	3	3	0
None	HSS 421	Entrepreneurship & Leadership	3	3	0
Social Sciences					
None	HSS 202	Introduction to Sociology	3	3	0
None	HSS 111	Introduction to International Relations	3	3	0
None	HSS 115	Introduction to Media Studies	3	3	0
None	HSS 201	Introduction to Anthropology	3	3	0
None	PSY 101	Introduction to Psychology	3	3	0

Course Outlines of Newly Added Courses

Course Title: Applied Physics

Course Code: GSC 114

Credit Hours: (2+1)

Course Description:

This course provide introduction about basic ideas/concepts of physical sciences which would help them in better understanding of the applications of these sciences in Engineering and technology. Salient topics include Electricity & Magnetism, Electronics, Engineering Mechanics and Modern Physics.

Recommended Books/Reading Materials:

1. Krane Resnick Halliday, "Physics", Volume 1&2, 5Th Ed, Wiley 2007.

Course Title: Digital Design

Course Code: CEN 122

Credit Hours: (2+1)

Course Description:

This Course is an introductory course in Digital Logic Design. Principles and concepts of a digital system are taught to lay the foundation to all other computer hardware courses. Covered Topics would include Introduction to Digital Systems, Boolean Algebra and Logic Gates, Combinational Logic and MSI Circuits, Sequential Logic Circuits, Memories and Programmable Logic Devices (PLDs).

Recommended Books/Reading Materials:

1. M. Morris Mano & Michael D. Ciletti, "Digital Design: With an Introduction to the Verilog HDL, VHDL, and SystemVerilog" 6th Edition, Pearson 2017.

Course Title: Software Re-Engineering

Course Code: SEN 411

Credit Hours: (3+0)

Course Description:

Salient topics include the terminology and the processes pertaining to software evolution, fundamental re-engineering techniques to modernize legacy systems including source code analysis, architecture recovery, and code restructuring, software refactoring strategies, migration to Object Oriented platforms, quality issues in re-engineering processes, migration to network-centric environments, and software integration, reverse engineering, program comprehension, source code transformation and refactoring strategies, software maintenance and re-engineering economics.

Recommended Books/Reading Materials:

1. Chris Birchall, "Re-engineering Legacy Software", Manning Publications, 2016.
2. Priyadarshi Tripathy and Kshirasaga Naik, "Software Evolution and Maintenance: A Practitioner's Approach", Wiley, 2014.

Course Title: Fault Tolerant Systems

Course Code: SEN 429

Credit Hours: (3+0)

Course Description:

A system availability and reliability is dependent on its fault tolerance. This course specifically focuses on how software & system reliability can be enhanced by implementing techniques for fault detection, recovery and prevention. Important topics include important concepts of faults, errors and failures, tactics to implement fault tolerance through various design patterns, extensive coverage of fault detection patterns, error recovery patterns, error mitigation patterns and fault treatment patterns.

Recommended Books/Reading Materials:

1. Robert S. Hanmer, "Patterns for Fault Tolerant Software" John Wiley & Sons, 2007.

Course Title: Stochastic Processes

Course Code: GSC 440

Credit Hours: (3+0)

Course Description:

Discrete Markov chains, classification of states, first passage and recurrence times, absorption problems, stationary and limiting distributions. Chapman-Kolmogorov equations, Long run behavior of Markov chains, Absorption probabilities and expected times to absorption, Statistical aspects of Markov chains, The mover-stayer model, Application of a Markov chain and mover-stayer model to modeling repayment behavior of bank loans' grantees. Markov Processes in continuous time: Poisson processes, birth-death processes. Poisson process The Kolmogorov differential equations, Limiting behavior of continuous time Markov chains The Q matrix, forward and backward differential equations, imbedded Markov Chain, stationary distribution. renewal theory, Brownian Motion and its generalizations, Discrete time martingales, Conditional expectation, Definition of a martingale and examples, Optional stopping theorem, Stochastic calculus.

Recommended Books/Reading Materials:

1. Durrett, Richard, "Essentials of stochastic processes", Springer Science & Business Media, 2nd Ed, 2012.
2. Sheldon M. Ross, "Introduction to Probability Models", 11th Ed, Academic Press 2014.
3. G.F. Lawler, "Introduction to Stochastic Processes", 2nd Ed, Chapman and Hall, 2006.

Course Title: IoT Application Development

Course Code: SEN 460

Credit Hours: (2+1)

Course Description:

This course focuses on application development for IoTs. The salient topics included are introduction to embedded systems, Major hardware components of IoT, IoT operating systems, programming languages, Software architecture for IoT, Python for Raspberry Pi,

Node JS, Mircoservices for IoTs, Cloud services and cloud integration, Data Analytics, hardware interfacing,

Recommended Books/Reading Materials:

1. Peter Waher, "Learning Internet of Things", Packt Publishing, 2015.
2. Perry Lea "Internet of Things for Architects: Architecting IoT solutions by implementing sensors, communication infrastructure, edge computing, analytics, and security", Packt Publishing, 2018.

Appendage 3104

Revised curriculum - Bachelor of Computer Engineering (BCE)

1. Background to the Case

In the last PEC accreditation visit on 23rd May, 2017 at BUKC, the PEC team highlighted its concerns regarding the alignment of BCE roadmap with HEC. In the light of the need to update the roadmap along with the curriculum for the Computer Engineering (CE) program at Bahria University (both Islamabad and Karachi campuses); Dean Engineering Sciences constituted a committee to execute this task.

- Dr. Sohaib Ahmed – Chair
- Dr. Osama Rehman
- Dr. Shehzad Hassan
- Engr. Ali Ahmed
- Mr. Abu Bakar Yamin
- Mr. Ammar Ajmal
- Mrs. Bushra Sabir

After having a series of meetings between the two departments (IC, KC), the committee recommended the revised roadmap inline with HEC / PEC guidelines.

The revised roadmap along with the outlines of courses added / replaced is attached at annexure-9:

2. Establishment/HR effect if any

None

3. Financial Effect

Nil

4. Recommendations

It is recommended that revised roadmap of BCE program attached at Annexure-3104 may be approved with implementation from Fall 2018 intake.

Proposed Roadmap (BCE)

Domain	Knowledge Area	Total Courses	Total Credits	% Overall Cr Hr
Non-Engineering	Humanities	7	19	30.4%
	Management Sciences	2	6	
	Natural Sciences	5	16	
	Sub Total	14	41	

Engineering	Computing	3	10	69.6%
	Engineering Foundation	10	33	
	Computer Engg. Core (Breadth)	7	27	
	Computer Engg. Depth Electives	4	12	
	Inter-Disciplinary Engineering Breadth (Electives)	2	6	
	Senior Design Project	2	6	
	Internship (Summer)	0	0	
	Sub Total	28	94	

Semester No. 1					
S. No.	Course Code	Pre-Req	Course Title	Lec	Lab
1	GSC 110	None	Applied Calculus & Analytical Geometry	3	0
2	ISL 101 /HSS 116	None	Islamic Studies / Ethics	2	0
3	CSC 110	None	Computing Fundamentals	2	1
4	GSC 113	None	Applied Physics	3	1
5	ENG 105	None	Functional English	3	0
6	EEL 112	None	Workshop Practices	0	1
Total Semester Credit Hrs			16	13	3
Grand Total				42	135
				100%	

Semester No. 2					
S. No.	Course Code	Pre-Req	Course Title	Lec	Lab
1	GSC 211	GSC 110	Multivariable Calculus	3	0
2	CEN 121	GSC 113	Circuit Analysis	3	1
3	CSC 113	None	Computer Programming	3	1
4	HSS 120	None	Communication Skills	3	0
5	CEN 120	None	Digital Logic Design	3	1
Total Semester Credit Hrs			18	15	3

Semester No. 3					
S. No.	Course Code	Pre-Req	Course Title	Lec	Lab
1	GSC 221	None	Discrete Mathematics	3	0

2	EEN 224	GSC 113	Electronic Devices and Circuits	3	1
3	CSC 210	CSC 113	Object Oriented Programming	3	1
4	PAK 101	None	Pakistan Studies	2	0
5	GSC 210	GSC 110	Differential Equations	3	0
6	EEL 121	None	Engineering Drawing & CAD	0	1
	Total Semester Credit Hrs			17	14
					3

Semester No. 4					
S. No.	Course Code	Pre-Req	Course Title	Lec	Lab
1	GSC 121	None	Linear Algebra	3	0
2	CSC 221	CSC 210	Data Structures and Algorithms	3	1
3			GE/Management Elective-1	3	0
4	EEN 313	GSC 220	Signals & Systems	3	1
5	CEN 221	CEN 120	Computer Architecture and Organization	3	1
	Total Semester Credit Hrs			18	15
					3

Semester No. 5					
S. No.	Course Code	Pre-Req	Course Title	Lec	Lab
1	EEN 226	None	Probability Methods in Engineering	3	0
2	CEN 321	CEN 221	Microprocessors and Interfacing	3	1
3	CEN 222	None	Data Communication & Networking	3	1
4	CSC 220	CSC 210	Database Management Systems	3	1
5	HSS 320	None	Technical Writing and Presentation Skills	3	0
	Total Semester Credit Hrs			18	15
					3

Semester No. 6					
S. No.	Course Code	Pre-Req	Course Title	Lec	Lab
1	EEN 325	EEN 313	Digital Signal Processing	3	1
2	SEN 220	CSC 221	Software Engineering	3	0
3	CSC 320	CEN 221	Operating Systems	3	1
4			CE-Depth Elective -I	2	1

5	CEN 442	CEN 221	Digital System Design	3	1
	Total Semester Credit Hrs			18	14
Semester No. 7					
S. No.	Course Code	Pre-Req	Course Title	Lec	Lab
1			IDEE Elective-I	2	1
2	HSS 422	None	Engineering Ethics	3	0
3			CE Depth Elective-II	3	0
4			CE Depth Elective-III	2	1
5	ESC 498		Project -1	0	3
	Total Semester Credit Hrs			15	10
					5

Semester No. 8					
S. No.	Course Code	Pre-Req	Course Title	Lec	Lab
1			GE/Management Elective-II	3	0
2			IDEE Elective-II	3	0
3			CE Depth Elective –IV	2	1
			GE/Social Science Elective	3	0
5	ESC 499		Project-2	0	3
	Total Semester Credit Hrs			15	11
					4

Total Credit Hours = 135

CE Depth Elective Courses					
S. No.	Course Code	Pre-Req	Course Title	Lec	Lab
1	SEN 448	None	Software Applications for Mobile Devices	2	1
2	CSC 411	None	Artificial Intelligence	2	1
3	CEN 470	CEN 222	Wireless and Mobile Networks	2	1
4	CEN 445	EEN 313	Digital Image Processing	2	1
5	CSC 457	None	Data Mining and Warehousing	2	1
6	CEN 456	CSC 320	Parallel & Distributed Computing	2	1
7	CEN 439	CEN 321	Embedded System Design	2	1
8	CEN 446	CEN 120	FPGA Based System Design	2	1

9	CEN 457	CEN 120	VLSI Design	2	1
10	CEN 459	CSC 320	Real Time Systems	2	1
11	GSC 320	GSC 210	Numerical Analysis	3	0
12	SEN 410	SEN 220	Software Project Management	3	0
13	SEN 420	None	Software Quality Assurance	3	0
14	CEN 451	None	Data Encryption and Security	3	0

IDEE COURSES					
S. No.	Course Code	Pre-Req	Course Title	Lec	Lab
1	CEN 468	CEN 222	Introduction to Communication Systems	2	1
2	CEN 438	CEN 120	Fault Tolerant Systems	2	1
3	CEN 463	EEN 313	Robotics	2	1
4	CEN 449	CSC 320	System Programming	2	1
5	CSC 444	None	Computer graphics	2	1
6	SEN 493	None	Multimedia Systems	2	1
7	CSC 449	CSC 411	Neural Networks and Fuzzy Logic	3	0
8	CSC 321	CSC 221	Design Analysis of Algorithms	3	0
9	EEN 466	None	Introduction to Nanotechnology	3	0
10	EEN 467	EEN 313	Control Engineering	3	0
11	SEN 320	None	Human Computer Interaction	3	0
12	SEN 452	None	Cloud Computing	3	0
13	SEN 332	None	Big Data Analytics	3	0
14	ENV 105	None	Introduction to Environmental Sciences	3	0
5	ENV 425	None	Occupational Health and Safety	3	0

List of General Electives					
Pre-Req	Course Code	Course Title	Total Credit Hours	Theory	Lab
None	HSS 202	Introduction to Sociology	3	3	0
None	PSY 101	Introduction to Psychology	3	3	0
None	HSS 111	Introduction to International Relations	3	3	0
None	HSS 459	Foreign Language (Arabic, French etc.)	3	3	0
None	MGT 111	Principles of Management	3	3	0
None	HSS 453	Human Resource Management	3	3	0
None	HSS 411	Engineering Economics & Mgmt.	3	3	0
None	HSS 461	Accounting & Finance	3	3	0
None	HSS 456	Organizational Behavior	3	3	0
None	HSS 115	Introduction to Media Studies	3	3	0
None	HSS 201	Introduction to Anthropology	3	3	0
None	HSS 421	Entrepreneurship & Leadership	3	3	0

Course Title: **WORKSHOP PRACTICES**

Course Code: **EEL 112**

Credit Hours: **0 (Theory) + 1 (Lab)**

Prerequisites None

Objectives: To develop practical skills in the use of workshop tools and equipment.

Lab Work Outline:

Hands on practice on these related concepts:

Introduction to various technical facilities in the workshop including mechanical and electrical equipment. Concepts in electrical safety, safety regulations, earthing concepts, electric shocks and treatment. Use of tools used by electricians, wiring regulations, types of cables and electric accessories including switches, plugs, circuit breakers, fuses etc., symbols for electrical wiring schematics e.g. switches, lamps, sockets etc., drawing and practice in simple house wiring and testing methods, wiring schemes of two-way and three-way circuits and ringing circuits, voltage and current measurements. Electric soldering and soldering tools; soldering methods and skills, PCB designing, transferring a circuit to PCB, etching, drilling and soldering component on PCB testing.

Recommended Books

1. Choudhury, "Elements of Workshop Technology", Vol. 1, MPP.
2. Chapman, "Workshop Technology", Part-I,II,III, CBS.

Course Title: APPLIED CALCULUS AND ANALYTICAL GEOMETRY

Course Code: GSC 110

Credit Hours: 3 (Theory) + 0 (Lab)

Prerequisites None

Objective

Teach the concepts of calculus and analytic geometry and the applications of these concepts to the solution of engineering problems.

Course Outline

Complex Numbers, DeMoivre's Theorem and its Applications, Simple Cartesian Curves, Functions and Graphs, Symmetrical Properties, Curve Tracing, Limit and Continuity, Differentiation of Functions. Derivative as Slope of Tangent to a Curve and as Rate of Change, Application to Tangent and Normal, Linearization, Maxima/Minima and Point of Inflection, Taylor and Maclaurin Expansions and their convergence. Integral as Anti-derivative, Indefinite Integration of Simple Functions, Methods of Integration: Integration by Substitution, by Parts, and by Partial Fractions, Definite Integral as Limit of a Sum, Application to Area, Arc Length, Volume and Surface of Revolution.

Recommended Books

1. George B. Thomas and Ross L. Finney, "Calculus and Analytic Geometry," Addison-Wesley, Latest Edition
2. George F. Simmons, "Calculus with Analytic Geometry," Latest Edition, McGraw-Hill,
3. Gerald B. Folland, "Advanced Calculus," Latest Edition, Prentice Hall
4. Monty J. Strauss, Gerald L. Bradley and Karl J. Smith, "Calculus", Latest Edition, Prentice Hall

Course Title: MULTIVARIABLE CALCULUS

Course Code: GSC 211

Credit Hours: 3 (Theory) + 0 (Lab)

Prerequisites Calculus and Analytical Geometry

Objective

The goals are to develop the skills to have ground knowledge of multivariate calculus and appreciation for their further Engineering courses.

Course Outline:

Functions of Several Variables and Partial Differentiation. Multiple Integrals, spherical, cylindrical coordinates, vector fields, gradients, line and surface integrals. Green's and Stoke's Theorem.

Recommended Books

1. "Multivariable Calculus: Early Transcendentals", (Stewart's Calculus Series), Latest Edition.
2. Swokowski, Olinick and Pence, "Calculus and Analytical Geometry", Latest Edition, Thomson Learning EMEA, Ltd.

3. William Briggs, Lyle Cochran, Bernard Gillett, "Multivariable Calculus" 2010, Pearson Education.
4. Howard Anton, Albert Herr, "Multivariable Calculus", Latest Edition, John Wiley.

Course Title:	CIRCUIT ANALYSIS
Course Code:	CEN 121
Credit Hours	3 (Theory) + 1 (Lab)
Pre-requisites	Applied Physics (GSC-113)

Objectives

To introduce transient and steady state analysis of DC and AC circuits

ESSENTIAL TOPICS TO BE COVERED

- Elementary Transient Analysis
- Sinusoidal State Analysis
- Exponential Excitation and the Transformed Network

Course Outline:

Differential and integral forms of circuit equations, consideration of initial conditions, analysis of first and second order circuits, network response to sinusoidal driving functions, concept of phasors, power consideration and complex power. Series and parallel RC, RL and RLC circuits. AC fundamentals; nodal analysis, loop analysis, linearity and superposition, source transformation, circuit theorems

Lab Work Outline:

Hands on practice on related concepts covered in theory.

Recommended Books:

1. Electric circuits by James W Nilsson & Susan A Riedel, 8th Edition, Addison-Wesley, or Latest Edition.
2. S. Franco, "Electric Circuits Fundamentals", Oxford University Press, Latest Edition
3. W. Hayt, J. Kemmerly and S. Durbin, "Engineering Circuit Analysis", McGraw-Hill, 8th Edition, 2011,

Course Title:	ELECTRONIC DEVICES AND CIRCUITS
Course Code:	EEN 224
Credit Hours	3 (Theory) + 1 (Lab)
Pre-requisites	Applied Physics (GSC 113)

Objectives:

To introduce large signal analysis and design of diode circuits and transistor based amplifiers.

ESSENTIAL TOPICS TO BE COVERED

- Diode circuit analysis and applications
- Biasing of BJT amplifier.

- Biasing of FET amplifier.
- Modeling of amplifiers.
- Operational amplifier application.

Course Outline:

PN junction diodes, Forward and reverse characteristics of diode, Ideal diode, Practical diode, Equivalent circuits of diode, current equation of diode, diode as a switch. Schottky diode, Zener diode, Tunnel diode, Varactor diode. LED, Laser diode and their applications. Bipolar junction transistor Operation (NPN and PNP), DC circuit analysis, Load line BJT biasing, bias stability. Design and analysis of common emitter, common base and common collector amplifiers. FET biasing, design of common source, common drain and common gate amplifiers. Hybrid parameters, ac gain and frequency analysis of single/multi stage amplifiers. Classes of amplifiers, power amplifiers, differential amplifiers, operational amplifiers and applications.

Lab Work Outline:

Hands on practice on related concepts covered in theory.

Recommendation Books:

1. Robert Boylestad and Louis Nashelsky, "Electronic Devices and Circuit Theory" , Prentice Hall, 11th Edition or Latest Edition
2. Thomas L. Floyd, "Electronic Devices", Latest Edition
3. V.K. Mehta "Principles of Electronics ", Latest Edition
4. Malvino "Electronic Principles", Latest Edition

Course Title: **ENGINEERING DRAWING & CAD**

Course Code: **EEL 121**

Credit Hours: **0 (Theory) + 1 (Lab)**

Prerequisites None

Objective:

To equip the students with the basic knowledge and skills of engineering drawing and its application in practical scenarios. The students will also be introduced to a CAD package.

Course Outline:

Types of lines and usage, dimensioning, lettering, orthographic first angle projection, sheet planning, orthographic third angle projection, introduction to computer aided drawing, isometric projection, sectional drawing and assembly drawing. Drawing sheets will be prepared on drawing board as well as CAD package.

Recommended Books:

1. Shawna Lockhart, "Tutorial Guide to AutoCAD", Prentice Hall.
2. A. C. Parkinson, "First Year Engineering Drawing".

Course Title:	PROBABILITY METHODS IN ENGINEERING
Course Code:	EEN 226
Credit Hours:	3 (Theory) +0 (Lab)
Prerequisites:	Applied Calculus and Analytical Geometry (GSC-110)

Objective: To introduce the basic concepts and engineering applications of probability and statistics.

Course Outline:

Set theory, basic concepts of probability, conditional probability, independent events, Baye's Theorem, discrete and continuous random variables, distributions and density functions, probability distributions (binomial, Poisson, hyper geometric, normal, uniform and exponential), mean, variance, standard deviations, moments and moment generating functions, linear regression and curve fitting, limits theorems and applications.

Recommended Books:

1. A. Leon-Garcia, "Probability and Random Processes For Electrical Engineering", Pearson Education, 2nd Edition, 1994.
2. Sheldon Ross, "A First Course in Probability", Pearson Education, 6th Edition, 2002.

Course Title:	WIRELESS AND MOBILE NETWORKS
Course Code:	CEN 470
Credit Hours	2 (Theory) + 1 (Lab)
Pre-requisites	Data Communication and Networking (CEN 222)

COURSE DESCRIPTION

Introduction to Wireless Communication, Wired vs. Wireless Communication, Electromagnetic Spectrum, Design Challenges, Wireless Transmission, Evolution of Wireless Networks , 1G Cellular Networks, 2G Cellular Networks, 2.5G Cellular Networks, 3G Cellular Networks, Limitation of 3G, 4G Objectives, Issues, QoS, Security, Multimedia Services and Applications, Tariff management, WLANS(IEEE802.11), WiMAX (IEEE802.16), Wireless PAN(IEEE802.15)), Fundamentals of Cellular Concepts(Cellular Concept, AMPS Architecture, Frequency Reuse, Locating co-channel cells, Channel Assignment Strategies, Handoff Strategies, Prioritizing Handoff, Practical Handoff Considerations, Co-channel Interference and Capacity, Adjacent Channel Interference and Capacity, Channel Planning for Wireless System, Trunking and Grade of Service, Measuring Traffic Intensity, Trunked Systems, Erlang Charts, Improving Coverage and Capacity, Cell Splitting, Sectoring, Repeaters for Range Extension, Microcell Zone Concept), Analog Mobile Phone System (Introduction, Architecture, System Overview, Call Handling, Air Interface, Supervisory Signals, N-AMPS), GSM Specifications, Identifiers in GSM Network, Call Routing in GSM, GPRS, EDGE, CDMA One / IS-95, Mobile Wireless CDMA Design Considerations, Walsh Codes, IS-95 Reverse Link, EDGE, WCDMA / UMTS, Logical Channels in WCDMA, Spreading and Scrambling, Transport and Physical Channels, Signaling, Physical Layer Procedures, Compressed Mode Measurements, Handover Measurements, WCDMA , CDMA 2000 Mobile Ad Hoc, 802.11 Security, WEP Protocol, EDCF, HCF, Mobile IP, Introduction to Wireless Mesh Networks,

Characteristics, MANET, WSN, High Rate WPAN , ZigBee, WiMax/IEEE 802.16, OFDM, OFDMA, 4G Overview, Issues, Mobility Management, Handoff types, QoS Considerations

RECOMMENDED BOOKS

1. Jochen Schiller, "Mobile Communications", Pearson Education, 2004 or Latest Edition.

REFERENCES

1. Handbook of Wireless Networks and Mobile Computing, Edited by Ivan Stojmenovic, John Wiley & Sons, Inc., 2002 or Latest Edition.
2. Aftab Ahmad , "Wireless and Mobile Data Networks", John Wiley & Sons, 2005 or Latest Edition.
3. W. Stallings, "Wireless Communications and Networks", Prentice Hall, 2002 or Latest Edition.
4. K. Pahlavan& P Krishnamurthy, "Principles of Wireless Networks", Prentice Hall, 2002 or Latest Ed.
5. K. Daniel Wong, "Wireless Internet Telecommunications", Artech House, Inc 2005, or Latest Edition.
6. Yi-Bang Lin, "Wireless and Mobile Network Architectures", John Wiley & Sons, 2001 or Latest Ed.

Course Title: SOFTWARE QUALITY ASSURANCE

Course Code: SEN 420

Credit Hours 3 (Theory) + 0 (Lab)

Pre-requisite None

Objectives

Develop a good quality assurance plan and standards for large, small and fast-track projects and Understanding of how to use quality management tools effectively.

Course Outline

Introduction to software quality assurance, Fundamentals of software quality assurance practice, Software quality control processes, Software quality verification, Software quality measurement, Supporting tools for software quality control, The SEI Capability Maturity Model for Software, ISO 9000 for Software, Software Testing Techniques, Software Testing Strategies, Formal Methods, Software quality certification, Deploying a quality system.

Recommended Books

1. Jerry ZeyuGao, H. S. Jacob Tsao, and Ye Wu, Testing and Quality Assurance for Component-Based Software, Artech House Publishers, 2003 or Latest Edition.
2. Frank P. Ginac, Customer Oriented Software Quality Assurance, Prentice Hall PTR; Latest Edition

Appendage 3105

Revised Curriculums of PhD Programs (CE, CS, EE, SE)

Background to the Case

1. The existing PhD curriculums of PhD programs in Engineering Sciences (CE, CS, EE, SE) were approved in 2012.
2. The departments added elective course regularly in their respective domains.
3. Dean - Engineering Sciences constituted the following committee to review the roadmaps of the PhD programs to align with the latest requirements:
 - a. Dr. Awais Majeed, SE – BUIC – Chair
 - b. Dr. Imran Siddiqi, CS – BUIC
 - c. Dr. Muhammad Aamir, EE – BUIC
 - d. Dr. Naveed Qaim Khani, EE – BUKC
 - e. Dr. Osama Rehman, C&SE – BUKC
 - f. Dr. Syed Safdar Ali Rizvi, CS – BUKC
 - g. Dr. Asim Qureshi, CS – BUL C
4. The recommendations of the committee were deliberated in detail in the FBoS and the roadmap is recommended after minor changes for the approval of ACM.

Financial Effect

Nil

Recommendations:

The revised PhD curriculums of PhD-CE, PhD-CS, PhD-EE, PhD-SE are recommended for approval. (Attached as Annexure A,B,C,D respectively)

Annex A

PhD Computer Engineering

PhD Program (Department of Computer Engineering)

Introduction:

The Doctor of Philosophy (PhD) program in Computer Engineering prepares graduates for industrial or academic research in the fields of Communication, Embedded System, and relevant domains. PhD Computer Engineering program focuses on producing skilled researchers who can contribute by creation of new knowledge and propose solutions to challenges faced by the practitioners and researchers of the discipline.

Program Mission

To produce highly skilled scholars with practical and analytical domain knowledge possessing independent & collaborative research expertise in the domain of Computer Engineering.

Objectives

The objectives of PhD program in Computer Engineering are:

1. To produce domain experts with cutting-edge research potential to fill the gap between academia and industry
2. To develop research scholars with exceptional technical writing and result demonstration skills
3. To equip scholars with imperative knowledge, modern tools and techniques to make significant contribution in the field of Computer Engineering by conducting quality research independently or in collaboration.

Program Learning Outcomes

PhD scholars who successfully complete their PhD in Computer Engineering will be able to:

- PLO 1:** Design and conduct research that is grounded in theory, practice and further extends the existing research in the field.
- PLO 2:** Produce quality research that have a positive impact toward the welfare and betterment of society.
- PLO 3:** Communicate effectively both in oral and written formats to a diverse audience.
- PLO 4:** Collaborate with the peers in the domain of Computer Engineering to integrate diverse perspectives.

Program Structure

The PhD program consists of 18 credit hours of course work and 36 credit hours of research work. Coursework should be completed in the first two semesters. After successful completion of coursework, a PhD scholar is required to appear in the comprehensive examination. After passing comprehensive examination PhD scholar can register in the research phase by registering THS 900 PhD Thesis course. The first milestone in research phase is to prepare and submit a research Proposal under the guidance of a supervisor. The scholar appears before a panel of examiners to defend the research proposal. After successful defense, the scholar needs to carry out his/her research and complete total 36 credits of research. The scholar will present the research finding in the form of a written thesis, which shall be evaluated as per HEC and BU rules. For further details about rules governing PhD programs refer to PhD Rules Handbook.

Semester wise breakdown of the program is as follows.

SEMESTER I		
Course code	Subject	Credits
	Course Work (Student shall study 3 courses)	9
	Total credits for 1 st semester	9

SEMESTER II		
Course code	Subject	Credits
	Course Work (Student shall study 3 courses)	9

	Total credits for 2 nd semester	9
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SEMESTER III		
Course code	Subject	Credits
	Comprehensive exam	0
THS 900	PhD Thesis	9
	Total credits for 3 rd semester	9

SEMESTER IV		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 4 th semester	9

SEMESTER V		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 5 th semester	9

SEMESTER VI		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 6 th semester	9
	Total credit for the program	54

PhD Coursework

1. A PhD scholar shall select 6 courses in consultation and approval of supervisor/advisory committee from the following list of courses.
2. Scholar can choose minimum of 3 courses from Category-1 courses and maximum of 3 courses from Category-2 courses. Scholar shall also be able to enroll all 7XX/+ courses from MS Computer Engineering program as Category-1 courses.
3. Relevant 7XX/+ courses of MS/PhD programs in Electrical Engineering, Software engineering, Computer Science, Data Science and Information Security will be inclusive in category-1 or 2 based on subject area. Supervisor/Advisory committee will decide about the relevance of such courses for each scholar.
4. It is mandatory to study ESC 701 Research Methodology, if the scholar has not studied this or equivalent course in MS program. .

Sr. No	Course Code	Title of Course	Credit Hour
Category-1 Computer Engineering Courses			
1.	CEN 707	Advanced Distributed Systems	3
2.	CEN 708	Advanced System Modelling and Simulation	3
3.	CEN 720	Advanced Computer Architecture	3

4.	CEN 740	Advanced Embedded Systems	3
5.	CEN 741	ASIC Design Methodology	3
6.	CEN 742	Advanced Digital System Design	3
7.	CEN 745	Advanced Digital Image Processing	3
8.	CEN 721	Advance Microprocessor Systems	3
9.	CEN 752	Advance VLSI System Design	3
10.	CEN 754	MOS VLSI Circuit Design	3
11.	CEN 753	Design of Real Time Embedded System Design	3
12.	CEN 755	Parallel Processing Computer Systems	3
13.	CSC 711	Advanced Artificial Intelligence	3
14.	CSC 704	Advanced Cryptography	3
15.	CSC 720	Advanced Operating Systems	3
16.	CSC 750	Advanced Neural Networks	3
17.	CSC 751	Pattern Recognition	3
18.	CSC 758	Parallel Processing	3
19.	CSC 764	Computer Vision	3
20.	CSC 765	Bio Medical Image Analysis	3
21.	CSC 781	Cloud Computing	3
22.	CSC 719	Machine learning	3
23.	EEN 824	On-Chip Interconnection Networks	3
24.	EEN 725	Advanced Digital Signal Processing	3
25.	EEN 728	Real Time DSP Design and Applications	3
26.	EET 716	Advanced Topics in Wireless Networking and Communications	3
27.	EET 762	Communication Networks Arch & Protocols	3
28.	EET 702	Advanced Network Security	3
29.	EET 725	Advanced Routing and Switching	3
30.	EET 726	Advanced Internet Technologies	3
31.	EET 755	Wireless Communication Techniques	3
32.	EET 850	Wireless Sensor Networks	3
33.	EET 851	Mobile and ad-hoc Networks	3
34.	EET 757	Mobile Computing	3
35.	EET 710	Advanced Computer Networks	3
36.	EET 726	Advanced Internet Technologies	3
37.	EET 702	Advanced Network Security	3

Sr. No	Course Code	Title of Course	Credit Hour
Category 2 Allied Courses			
1	EET 706	Advance Optical Fiber Networks	3
2	EET 711	Advanced Digital Communications	3
3	EET 769	Mobile. Vehicular Ad Hoc Networks	3

4	GSC 700	Advanced Engineering Mathematics	3
5	CSC 746	Advanced Data Mining	3
6	CSC 744	Advanced Computer Graphics	3
7	CSC 760	Advanced Data Warehousing	3
8	EET 766	RF System Engineering and Design	3
9	SEN 754	Advanced Web Computing System and Application	3
10	EET 727	Cognitive Cooperative Networks	3
11	EEP 771	Low Power System Design	3
12	EET 723	Optimization Techniques	3
13	EET 713	Advanced Network Design	3
14	EEN 740	Embedded System Design for Telecommunications	3
15	EET 756	Telecommunication Switching Systems	3
16	SEN 720	Advanced Human Computer Interaction	3
17	SEN 811	Data Ware Housing and Mining	3
18	SEN 762	Advanced Big Data Analytics	3
19	SEN 814	Ubiquitous Computing and Interaction	3
20	CSC 753	Distributed Databases	3
21	SEN 817	Middleware For Networked and Distributed Systems	3
22	CSC 741	Advanced Natural Language Processing	3
23	CEN 708	Advanced System Modeling and Simulation	3
24	CSC 753	Power Aware Computing	3
25	SEN 755	Service Oriented Computing	3
26	SEN 720	Advanced Human Computer Interaction	3
27	ESC 703	Advanced Qualitative Research Methods	3
28	ESC 704	Advanced Quantitative Research Methods	3
29	ESC-705	Critical Review of Literature	3
30	ESC 701*	Research Methodology	3

*It is mandatory to study ESC 701 Research Methodology, if the scholar has not studied this or equivalent course in MS program.

PhD Computer Science Program

Eligibility Criteria

18 year of education in Computer Science or relevant discipline from an HEC recognized university with a minimum CGPA of 3.00/4.00 (semester system) or 60% marks (annual system).

GAT (Computer Science)/GRE (Computer Science) with minimum 60% marks, or University Based Subject Test passed with minimum 70% marks.

Program Mission

The mission of the PhD Computer Science program is to prepare individuals to work as independent computing researchers who can take an interdisciplinary approach to solve basic and applied research problems. Students graduating with this degree are prepared for careers as university educators, research scientists or specialized professionals within the field of computing.

Program Objectives

The key objectives of the PhD (CS) program include the following:

1. To prepare scholars to have an understanding of the processes of research which will enable them to independently make original, creative and useful research contributions.
2. To prepare scholars to effectively convey technical contributions through written and oral communication.
3. To enable scholars to carry out research independently as well as in teams.
4. To acquaint scholars with and enable them apply professional code of ethics in research endeavors.

Program Learning Outcomes

Students graduating from the PhD (CS) program are expected to:

1. Critically analyze relevant works and demonstrate creativity and innovation by generating new ideas.
2. Apply the theoretical knowledge and concepts to find answers to research questions.
3. Carry out skilled research, identify, comprehend and synthesize relevant literature, select appropriate techniques and tools to solve the research problem, analyze data produced by experiments and research and, draw meaningful conclusion from the realized results.
4. Demonstrate comprehensive in depth knowledge of the theory, methods and algorithmic principles in the relevant area of study.
5. Demonstrate leadership qualities through research and other scholarly assignments.
6. Be able to convey research contributions, ideas and arguments in a clear and organized form through technical reports and research publications at reputed publication forums.

Program Structure

The PhD program consists of 18 credit hours of course work and 36 credit hours of research work. Coursework should be completed in the first two semesters. After successful completion of coursework, a PhD scholar is required to appear in the comprehensive

examination. After passing comprehensive examination PhD scholar can register in the research phase by registering THS 900 PhD Thesis course. The first milestone in research phase is to prepare and submit a research Proposal under the guidance of a supervisor. The scholar appears before a panel of examiners to defend the research proposal. After successful defense, the scholar needs to carry out his/her research and complete total 36 credits of research. The scholar will present the research finding in the form of a written thesis, which shall be evaluated as per HEC and BU rules. For further details about rules governing PhD programs refer to PhD Rules Handbook.

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	Course Work (Student shall study 3 courses)	9
	Total credits for 1 st semester	9

SEMESTER II		
Course code	Subject	Credits
	Course Work (Student shall study 3 courses)	9
	Total credits for 2 nd semester	9

SEMESTER III		
Course code	Subject	Credits
	Comprehensive exam	0
THS 900	PhD Thesis	9
	Total credits for 3 rd semester	9

SEMESTER IV		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 4 th semester	9

SEMESTER V		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 5 th semester	9

SEMESTER VI		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 6 th semester	9
	Total credit for the program	54

PhD Computer Science Coursework

1. A PhD scholar will select 6 courses in consultation and approval of supervisor/advisory committee from the following list of courses.
2. Scholar can choose minimum of 3 courses from Category 1 courses and maximum of 3 courses from Category 2 courses. Scholar will also be able to take all 700+ courses from MS Computer Science as Category 1 courses.
3. 700+ courses of relevant MS/PhD programs (Software Engineering, Telecom and networks, Information Security, Data Science etc) will be inclusive in category 1 or 2 based on subject area of research. Supervisor/Advisory committee will decide about the relevance of such courses for each scholar.
4. It is mandatory to study ESC 701 Research Methodology, if the scholar has not studied this or equivalent course in MS program.

Category – I Computer Science Courses			
S#	Course Code	Title of Course	Cr. Hrs.
Artificial Intelligence			
1.	CSC 711	Advanced Artificial Intelligence	3
2.	CSC 719	Machine Learning	3
3.	CSC 741	Advanced Natural Language Processing	3
4.	CEN 745	Advanced Digital Image Processing	3
5.	CSC 750	Advanced Neural Networks	3
6.	CSC 751	Pattern Recognition	3
7.	CSC 764	Computer Vision	3
8.	CSC 765	Bio Medical Image Analysis	3
9.	CSC 750	Intelligent Tutoring Systems	3
10.	CSC 715	Intelligent Agents	3
11.	CSC 744	Advanced Computer Graphics	3
Data Science			
12.	DSC 701	Big Data Analytics	3
13.	DSC 702	Machine Learning and Data Analysis	3
14.	DSC 703	Data Visualization	3
15.	DSC 704	Distributed Data Engineering	3
16.	DSC 705	Deep Learning and Data Analysis	3
17.	DSC 706	Unstructured Data Processing	3
18.	CSC 746	Advanced Data Mining	3
19.	CSC 747	Text Mining	3
Networks & Security			
20.	EET 710	Advanced Computer Networks	3
21.	EET 702	Advanced Network Security	3
22.	EET 713	Advanced Network Design	3
23.	EET 716	Advanced Topics in Wireless Networking and Communications	3

24.	EET 718	Network Performance Evaluation	3
25.	EET 761	Network Protocols and Standards	3
26.	EET 705	Broadband Technologies and Components	3
27.	EET 726	Advanced Internet Technologies	3
28.	EET 850	Wireless Sensor Networks	3
29.	EET 851	Mobile and Ad hoc Networks	3
30.	ISC 721	Advanced Cryptography and Cryptanalysis	3
31.	ISC 731	Information Security Management	3
32.	ISC 733	Information Hiding	3
33.	ISC 734	Wireless Network Security	3
34.	ISC 735	Cloud Computing Security	3
35.	ISC 736	Cyber Warfare	3
36.	ISC 737	Computer and Network Forensics	3
37.	ISC 738	Ethical Hacking	3
38.	ISC 739	Cyber Crimes and Laws	3
39.	ISC 740	Quantum Cryptography	3
40.	ISC 741	Algebraic Cryptanalysis	3
41.	ISC 742	Intrusion Detection and Prevention	3
42.	ISC 743	Penetration Testing and Vulnerability Analysis	3

Databases & Web Systems

43.	CSC 720	Advanced Operating Systems	3
44.	CSC 758	Parallel Processing	3
45.	CEN 707	Advanced Distributed Systems	3
46.	CSC 752	Advanced DBMS	3
47.	CSC 753	Distributed Databases	3
48.	CSC 754	Object Oriented Databases	3
49.	CSC 755	Web based DBMS	3
50.	CSC 756	Multimedia Databases	3
51.	CSC 760	Advanced Data Warehousing	3
52.	CSC 781	Cloud Computing	3
53.	SEN 761	Semantic Web	3
54.	SEN 764	Ontology Engineering	3
55.	CSC 757	IP Multimedia System	3
56.	SEN 754	Advanced Web Computing System and Application	3

Category – II Cross Domain Courses

1	GSC 700	Advanced Engineering Mathematics	3
2	CEN 720	Advanced Computer Architecture	3
3	CEN 708	Advanced System Modeling and Simulation	3
4	SEN 720	Advanced Human Computer Interaction	3
5	SEN 756	Advanced Usability Engineering	3
6	SEN 723	Formal Methods and Specifications	3

7	SEN 751	Human Aspects in Software Engineering	3
8	SEN 753	Power Aware Computing	3
9	SEN 755	Service Oriented Computing	3
10	SEN 756	Advanced Usability Engineering	3
11	SEN 758	Component based Software Engineering	3
12	SEN 759	Software Re-Engineering	3
13	SEN 760	Complex Adaptive Systems	3
14	SEN 763	Advanced Software Engineering	3
15	SEN 812	Agile Methods	3
16	SEN 813	Advanced Software Requirements Engineering	3
17	SEN 814	Ubiquitous Computing and Interaction	3
18	SEN 815	Verification and Validation	3
19	SEN 816	Information Retrieval	3
20	SEN 817	Middleware For Networked and Distributed Systems	3
21	EET 703	DSP Application in Telecommunication	3
22	EET 706	Advanced Optical Fiber Networks	3
23	EET 707	Telecommunications Business Environment	3
24	EET 751	Antenna and Microwave Engineering	3
25	EET 756	Telecommunication Switching Systems	3
26	EET 765	Radio Frequency Engineering	3
27	ESC 703	Advanced Qualitative Research Methods	3
28	ESC 704	Advanced Quantitative Research Methods	3
29	ESC 705	Critical Review of Literature	3
30	ESC 701	Research Methodology	3

Annex C**PhD Electrical Engineering****Introduction:**

The Doctor of Philosophy (PhD) program in Electrical Engineering prepares graduates for industrial or academic research in the fields of Communication, Embedded System, Control, and Power System Engineering. PhD Electrical Engineering program focuses on producing skilled researchers who can contribute by creation of new knowledge and propose solutions to challenges faced by the practitioners and researchers of the discipline.

Program Mission:

The PhD in Electrical Engineering strives to provide an environment, which is conducive to create new knowledge, for independent or collaborative research, and to produce highly skilled professional and academicians.

Program Educational Objectives

The objectives of PhD (Electrical Engineering) program are

1. To equip scholars with necessary knowledge relevant tools and techniques to make significant contribution in the field of study by conducting quality research independently or in collaboration.
2. To prepare scholars to effectively disseminate result in the form of written and oral presentation
3. To produce skilled professionals who can take up the challenges associated with the advancement of science and technology in industry or in academia.

Program Learning Outcomes

PhD scholars who successfully complete their PhD in Electrical Engineering will be able to:

PLO 1: Perform advance research that is grounded in theory, practice and further extends the existing research in the field

PLO 2: Produce quality research that have a positive impact toward the welfare and betterment of society

PLO 3: Communicate effectively both in oral and written formats to a diverse audience.

PLO 4: Collaborate with the peers in the domain of Electrical Engineering to integrate diverse perspectives

Program structure:

The PhD program consists of 18 credit hours of course work and 36 credit hours of research work. Coursework should be completed in the first two semesters. After successful completion of coursework, a PhD scholar is required to appear in the comprehensive examination. After passing comprehensive examination PhD scholar can register in the research phase by registering THS 900 PhD Thesis course. The first milestone in research phase is to prepare and submit a research Proposal under the guidance of a supervisor. The scholar appears before a panel of examiners to defend the research proposal. After successful defense, the scholar needs to carry out his/her research and complete total 36 credits of research. The scholar will present the research finding in the form of a written thesis, which shall be evaluated as per HEC and BU rules. For further details about rules governing PhD programs refer to PhD Rules Handbook.

Semester wise breakdown of the program is as follows.

SEMESTER I		
Course code	Subject	Credits
	Course Work (Student shall study 3 courses)	9
	Total credits for 1 st semester	9
SEMESTER II		
Course code	Subject	Credits
	Course Work (Student shall study 3 courses)	9
	Total credits for 2 nd semester	9
SEMESTER III		
Course code	Subject	Credits
	Comprehensive exam	0
THS 900	PhD Thesis	9

	Total credits for 3 rd semester	9
SEMESTER IV		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 4 th semester	9
SEMESTER V		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 5 th semester	9
SEMESTER VI		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 6 th semester	9
Total credit for PhD program		54

Core Courses

Student shall register at least 3 courses from the list of Electrical Engineering courses. EE courses offered in MS programs at Bahria University with course code **7XX** shall be considered as part of Electrical Engineering courses for PhD (EE). Student can take 700+ courses from MS CS/EE/SE/Data Science and IS programs. Supervisor/Advisory committee will decide about the relevance of such courses for each scholar.

S#	Course Code	Title of Course	Cr. Hrs.
1	EET 762	Communication Networks Arch & Protocols	3
2	EET 766	RF System Engineering and Design	3
3	EET 750	Antennas Theory , Design and Applications	3
4	EET 755	Wireless Communication Techniques	3
5	EET 756	Telecommunication Switching Systems	3
6	EET 706	Advanced Optical Fiber Networks	3
7	ET 725	Advanced Routing and Switching	3
8	EET 726	Advanced Internet Technologies	3
9	EET 723	Optimization Techniques	3
10	EET 713	Advanced Network Design	3
11	EET 757	Mobile Computing	3
12	EET 702	Advanced Network Security	3
13	EET 850	Wireless Sensor Networks	3
14	EET 851	Mobile and ad-hoc Networks	3
15	EET 727	Cognitive Cooperative Networks	3
16	EET 711	Advanced Digital Communications	3
17	EET 768	Cognitive and Software Defined Radio	3
18	EEN 725	Advanced Digital Signal Processing	3
19	EEN 824	On-Chip Interconnection Networks	3
20	EEN 740	Embedded System Design for Telecommunications	3
21	EEN 825	Optimal sampled - Data Control Systems	3

22	EEN 826	Networked Dynamic Systems	3
23	EEN 725	Advanced Digital Signal Processing	3
24	EEN 728	Real Time DSP Design and Applications	3
25	EEN712	Advanced Digital Communication Systems	3
26	EEN 827	Modern Control Theory	3
27	EEN 828	Advanced Nonlinear Control Systems	3
28	EEP 770	Power Management in Wired and Wireless Systems	3
29	EEP716	Advanced Power Electronics	3
30	EEP 771	Low Power System Design	3
31	EEP 772	Power Awareness in Distributed Systems	3
32	EEP 773	Power System Stability and Dynamics	3
33	EEP 774	Power System Transients	3
34	EEP 775	HVDC and Flexible AC Transmission	3
35	EEP 776	Rural Electrification and Distributed Generation	3
36	EEP 777	Artificial Intelligence Techniques in Power Systems	3
37	EEP 778	Power System Deregulation	3
38	EEP 757	Non-conventional Energy System	3
39	EEP 723	Thermal and Nuclear Power Generation	3
40	EEP714	Advance d Topics in Renewable Energy	3
41	EEP 719	Advanced Topics in Power System Engineering	3
42	EEP720	Computer Methods in Power System	3
43	SEN 723	Formal Methods and Specifications	3
44	SEN 753	Power Aware Computing	3
45	SEN 755	Service Oriented Computing	3
46	CEN 707	Advanced Distributed Systems	3
47	CEN 708	Advanced System Modeling and Simulation	3
48	CEN 745	Advanced Digital Image Processing	3
49	CEN 720	Advanced Computer Architecture	3
50	CEN 740	Advanced Embedded System	3
51	CEN 741	ASIC Design Methodology	3
52	CEN 742	Advanced Digital System Design	3
53	CEN 754	MOS VLSI Circuit Design	3
54	CSC 719	Machine Learning	3
55	CSC 750	Advanced Neural Networks	3
56	CSC 759	Agent Based Modeling	3
57	ESC 703	Advanced Qualitative Research Methods	3
58	ESC 704	Advanced Quantitative Research Methods	3
59	ESC716	Advanced Topics in Wireless &Networking	3
60	ESC 701*	Research Methodology	3

*It is mandatory to study ESC 701 Research Methodology, if the scholar has not studied this or equivalent course in MS program.

Allied Engineering Courses

Students can study maximum two allied/interdisciplinary courses during their PhD (EE) program.

The choice of allied courses is not limited to the following list and based on PhD Supervisor's recommendation requisite PhD course(s) from SE, CE and CS department can be registered.

61	ESC 705	Critical Review of Literature	3
62	GSC 701	Logic and Research	3
63	CSC 704	Advanced Cryptography	3
64	CSC 711	Advanced Artificial Intelligence	3
65	GSC 700	Advanced Engineering Mathematics	3
66	CEN 708	Advanced System Modelling and Simulation	3
67	SEN 754	Bio Medical Image Analysis	3
68	CSC 751	Pattern Recognition	3
69	CSC 764	Computer Vision	3
70	SEN 745	Data Ware Housing and Mining	3
71	SEN 751	Human Aspects in Software Engineering	3
72	SEN 754	Advanced Web Computing System and Application	3

Annex D

PhD in Software Engineering

Introduction

PhD in Software Engineering focuses on advancement of theory and practice in the area of Software Engineering and relevant computing domains. Software Engineering discipline is highly inter-disciplinary including application of mathematical, computer science, systems and software engineering concepts. PhD Software Engineering program thus focuses on producing well-educated researchers who can contribute by creation of new knowledge and propose solutions to challenges faced by the practitioners and researchers of the discipline.

Program Mission

To enhance the theory and practice in the domain of Software Engineering by creation of new knowledge and highly qualified academicians and fostering innovation in the core areas of Software Engineering and applied computing disciplines.

Program Educational Objectives

The objectives of PhD (Software Engineering) program are:

1. To equip scholars with necessary knowledge, relevant tools and techniques to make significant contribution in the field of study by conducting quality research independently or in collaboration.

2. To prepare scholars to effectively disseminate result in the form of written and oral presentation
3. To produce skilled professionals who can take up the challenges associated with the advancement of science and technology in industry or in academia.

Program Learning Outcomes

PhD scholars who successfully complete their PhD in Software Engineering will be able to:

- PLO 1:** Synthesize content knowledge, concepts, and principles grounded in the domain of Software Engineering and relevant allied disciplines (Engineering, Mathematics and Computing).
- PLO 2:** Design and conduct research that is grounded in theory, practice and further extends the existing research in the field.
- PLO 3:** Conduct research that positively impacts the domain and society.
- PLO 4:** Communicate effectively both in oral and written formats to a diverse audience.
- PLO 5:** Collaborate with the peers in the domain of Software Engineering and computing to integrate diverse perspectives.

Eligibility Criteria

- 18 Years of education (MS/MPhil/equivalent) in the relevant discipline from an HEC recognized university with a minimum CGPA of 3.00/4.00 (Semester System) or 60% marks (Annual System). HEC's Equivalence Certificate is mandatory for the candidates with foreign degree.
- NTS-GAT (Subject Test) with 60% marks or GRE (Subject Test) with minimum 60% percentile score in the relevant computing domain (Computer Science/Software Engineering/IT) OR University Based Test conducted for Software Engineering with Minimum 70% marks. Result has to be submitted at the time of admission.
- Applicants must submit HEC attested/verified copies of academic degrees/transcripts/certificates.

Program Structure

The PhD program consists of 18 credit hours of course work and 36 credit hours of research work. Coursework should be completed in the first two semesters. After successful completion of coursework, a PhD scholar is required to appear in the comprehensive examination. After passing comprehensive examination PhD scholar can register in the research phase by registering THS 900 PhD Thesis course. The first milestone in research phase is to prepare and submit a research Proposal under the guidance of a supervisor. The scholar appears before a panel of examiners to defend the research proposal. After successful defense, the scholar needs to carry out his/her research and complete total 36 credits of research. The scholar will present the research finding in the form of a written thesis, which shall be evaluated as per HEC and BU rules. For further details about rules governing PhD programs refer to PhD Rules Handbook.

Semester wise breakdown of the program is as follows.

SEMESTER I		
Course code	Subject	Credits
	Course Work (Student shall study 3 courses)	9
	Total credits for 1 st semester	9

SEMESTER II		
Course code	Subject	Credits
	Course Work (Student shall study 3 courses)	9
	Total credits for 2 nd semester	9

SEMESTER III		
Course code	Subject	Credits
	Comprehensive exam	0
THS 900	PhD Thesis	9
	Total credits for 3 rd semester	9

SEMESTER IV		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 4 th semester	9

SEMESTER V		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 5 th semester	9

SEMESTER VI		
Course code	Subject	Credits
THS 900	PhD Thesis	9
	Total credits for 6 th semester	9
Total credit for PhD program		54

PhD Coursework

5. A PhD scholar will select 6 courses in consultation and approval of supervisor/advisory committee from the following list of courses.
6. Scholar can choose minimum of 3 courses from Category-1 courses and maximum of 3 courses from Category-2 courses. Scholar will also be able to take all 700+ courses from MS Software Engineering program as Category-1 courses.

7. Relevant 700+ courses of MS/PhD programs in Computer Science, Data Science and Information Security will be inclusive in category-1 or 2 based on subject area. Supervisor/Advisory committee will decide about the relevance of such courses for each scholar.
8. It is mandatory to study ESC 701 Research Methodology, if the scholar has not studied this or equivalent course in MS program.

S#	Course Code	Title of Course	Cr. Hrs.
Category-1 Software Engineering & Information Systems			
1.	SEN 720	Advanced Human Computer Interaction	3
2.	SEN 756	Advanced Usability Engineering	3
3.	SEN 723	Formal Methods and Specifications	3
4.	SEN 763	Advanced Software Engineering	3
5.	SEN 759	Software Re-Engineering	3
6.	SEN 758	Component-Based Software Engineering	3
7.	SEN 812	Agile Methods	3
8.	SEN 815	Verification and Validation	3
9.	SEN 813	Advanced Software Requirements Engineering	3
10.	SEN 757	Empirical Software Engineering	3
11.	SEN 801	Model Driven Software Engineering	3
12.	SEN 802	Special Topics in Software Engineering	3
13.	SEN 754	Advanced Web Computing System and Application	3
14.	SEN 755	Service Oriented Computing	3
15.	SEN 816	Middleware For Networked and Distributed Systems	3
16.	CSC 781	Cloud Computing	3
17.	CEN 707	Advanced Distributed Systems	3
18.	SEN 803	Advanced e-Learning Systems	3
19.	SEN 761	Advanced Semantic Web	3
20.	SEN 764	Ontology Engineering	3
21.	SEN 760	Complex Adaptive Systems	3
22.	CEN 708	Advanced System Modeling and Simulation	3
23.	CSC 759	Agent Based Modeling	3
24.	SEN 762	Advanced Big Data Analytics	3
25.	CSC 711	Advanced Artificial Intelligence	3
26.	CSC 741	Advanced Natural Language Processing	3
27.	CSC 749	Advanced Neural Networks and Fuzzy Logic	3
28.	CSC 751	Pattern Recognition	3
29.	CSC 746	Advanced Data Mining	3
30.	CSC 760	Advanced Data Warehousing	3
31.	CSC 801	Advanced Information Retrieval	3
32.	CSC 719	Machine learning	3

33.	DSC 703	Data Visualization	3
34.	DSC 705	Deep Learning and Data Analysis	3
35.	CSC 747	Text Mining	3
36.	CSC 764	Computer Vision	3
37.	CSC 765	Bio Medical Image Analysis	3
38.	CSC 701	Computer Supported Cooperative Work	3
39.	CEN 745	Advanced Digital Image Processing	3
40.	CSC 750	Intelligent Tutoring System	3

Category-2 Computing & Cross Domain Courses

1	ESC 701 *	Research Methodology	3
2	GSC 700	Advanced Engineering Mathematics	3
3	CEN 764	Design of Fault-Tolerant Systems	3
4	SEN 753	Power Aware Computing	3
5	SEN 814	Ubiquitous Computing and Interaction	3
6	CSC 704	Advanced Cryptography	3
7	CSC 720	Advanced Operating Systems	3
8	CSC 744	Advanced Computer Graphics	3
9	CSC 753	Distributed Databases	3
10	CSC 757	IP Multimedia System	3
11	CSC 758	Parallel Processing	3
12	CEN 720	Advanced Computer Architecture	3
13	CSC 754	Object Oriented Databases	3
14	CSC 755	Web Based DBMS	3
15	CSC 756	Multimedia Databases	3
16	EET 710	Advanced Computer Networks	3
17	EET 726	Advanced Internet Technologies	3
18	EET 702	Advanced Network Security	3
19	CEN 740	Advanced Embedded Systems	3
20	CEN 742	Advanced Digital System Design	3
21	EET 850	Wireless Sensor Networks	3
22	EET 851	Mobile and ad-hoc Networks	3
23	EEN 725	Advanced Digital Signal Processing	3

*It is mandatory to study ESC 701 Research Methodology, if the scholar has not studied this or equivalent course in MS program.

Course outlines for New Courses

Course Title: Special Topics in Software Engineering

Course Code: SEN 802

Credit Hours: (03)

Course Description:

Theories, concepts, tools and techniques are changing very rapidly in the domain of Software Engineering. Moreover, research issues are very diversified ranging from software processes, design, implementation techniques, testing and quality, project management to application of modern methods from computer science domain. This course will focus

covering classical and contemporary research issues in a particular area of research in the domain of Software Engineering to meet the requirements of a particular research scholar.

On successful completion of this course, students will be able to:

- Have an opportunity to study advanced topics in areas of research and new technologies in Software Engineering based on their research area/topic.
- To present current research issues in areas of Software Engineering.
- Understand the new developments in Software Engineering that are not already covered in other parts of the degree program.

Recommended Books/Reading Materials:

1. Classical reading in Software Engineering from renowned journals and conferences of Software Engineering domain.
2. Contemporary readings of very high significance covering latest research issues from renowned journals and conferences of Software Engineering domain.

Course Title: Model Driven Software Engineering

Course Code: SEN 801

Credit Hours: (03)

Course Description:

This course Model Driven Software Engineering (MDSE) aims enables students to understand in depth the fundamental principles of structural and behavior modelling and know how to apply models for architecture, requirements and process description. Various methodologies and approaches to MDSE – Model-driven architecture (MDA), model-driven engineering, model-driven development & verification. Details and up to date research nodes emphasis to principles and concepts underlying model-driven software engineering, approaches for defining the syntax and semantics of domain-specific modelling languages, objects, object orientation, OOM, MM, MT. Essentials and planning, responsibilities, scheduling, verification risk in Models, MDA and MDSE.

Upon completion of this course, the students will be able to:

- Understand core concepts related to MDA, MDD and MDT.
- Apply these concepts for effective software system design
- Understand contemporary research issues in the domain of Model Driven Software Engineering

Recommended Books/Reading Materials:

1. Model-Driven Software Engineering in Practice: Second Edition (Synthesis Lectures on Software Engineering) 2nd Edition. By Marco Brambilla, Jordi Cabot, and Publisher: Morgan & Claypool Publishers, 2017.
2. Model-Driven Software Development: Technology, Engineering, Management 1st Edition, by Thomas Stahl, Markus Voelter , Krzysztof Czarnecki, Publisher Wiley; ISBN-10: 0470025700.

Course Title: Empirical Software Engineering

Course Code: SEN 757

Credit Hours: (03)

Course Description:

With the passage of time, there has been ever increasing focus of Software Engineering community on evidence based and empirical studies in the domain. Eventually it will lead to experimental Software Engineering with more focused and scientific research finding. Empirical methods such as controlled experiments, case studies, surveys and post-mortem analyses are helpful to help us evaluate and validate the research results. This course will enable the scholars to learn about various types of empirical research techniques including experiments, case study, Post-mortem analysis in the context of Software Engineering domain. Upon completion of this course, the students will be able to:

- Understand the need, concepts and applications of various empirical methods
- Understand, analyze and critically evaluate already published empirical studies in the domain
- Apply, design and execute a particular research study based on an appropriate empirical research method.

Recommended Books/Reading Materials:

1. Ruchika Malhotra, "Empirical Research in Software Engineering, Concepts, Analysis and Applications", CRC Press, 2016.
2. Per Runeson, Martin Host, Austen Rainer, Bjorn Regnell, "Case Study Research In Software Engineering; Guidelines And Examples", John Wiley & Sons, 2012.

Course Title: Advanced eLearning Systems

Course Code: SEN 803

Credit Hours: (03)

Course Description:

E-learning is a multibillion dollar global industry that continues to evolve, with everything from 100% online class offerings to web-enhanced on-campus classroom environments. Students will research and practice hands-on application in visioning, planning and designing of e-learning environments in light of learning theories and styles. This course will provide an in-depth knowledge of curriculum development, design and course delivery via technology and online learning management systems. Students will examine e-learning from aspects such as law, technology resources, teaching and learning in synchronous and asynchronous environments, and instructional design.

Upon completion of this course, the students will be able to:

- Develop leadership skills to support educational practices across diverse instructional and organizational settings.
- Analyze educational theories and research supporting diverse instructional practices.
- Understand and discuss about educational theories, research, and practices.
- Evaluate evidence-based solutions for addressing educational, organizational, and societal issues

Recommended Books/Reading Materials:

1. Harasim, Linda. (2017) Learning Theory and Online Technologies. 2nd edition. New York: Routledge.

Course Title: Intelligent Tutoring Systems

Course Code: SEN 750

Credit Hours: (03)

Course Description:

This course addresses the use of Artificial Intelligence to create computer-based Intelligent Tutoring Systems (ITSs). Students will learn data-driven and theoretical methods for creating ITSs. ITSs have been demonstrated to dramatically enhance student learning in many domains, including, to name a few, mathematics, computer science, medicine, biology and engineering. In addition to discussion and readings about methods and models of problem solving, learning, and tutor design, the course will have a "learning by doing" component.

Upon completion of this course, the students will be able to:

- Understand key ideas in the area of Artificial Intelligence in Education.
- Understand the basics of psychology of learning.
- Explain the functionality of ITSs.
- Critically assess approaches to student modelling in ITSs.
- Design constraints and production rules for use in ITSs.
- Design and develop small-scale constraint-based tutors
- Evaluate ITSs
- Understand and assess current research topics in the area of Artificial Intelligence in Education

Recommended Books/Reading Materials:

- 1 Building Intelligent Interactive Tutors: Student-centered strategies for revolutionizing e-learning by Beverly Park Woolf; published by Morgan Kaufmann. (2009)
- 2 Relevant research papers and case studies

Appendage 3106

BS A&F PROGRAMME – ADDITION “ANALYSIS OF FINANCIAL STATEMENTS” & “BEHAVIORAL FINANCE” AS ELECTIVES

Background/Discussion

BS A&F program was launched at BUKC in Fall 2015 in collaboration with ICAP. Accordingly, based on the ICAP curriculum road map was designed but somehow, the two courses mentioned above are not part of the curriculum as per prospectus published in 2017. Hence, the two courses “Analysis of Financial Statement” and “Behavioral Finance” should be included in the list of electives. Detailed outline of the courses are attached as **annexure**. Recommendations: Inclusion of the two courses is important to ensure proper execution of MOU signed between BU and ICAP. Hence, it is recommended that the two courses mentioned above may be approved to be added in the list of elective courses of BS A&F.

Financial Implications: Nil

HR Implications: Nil

Discussion

The point was discussed in combined meeting of FBOS of all campuses of Bahria University. The input was obtained from all the campuses. There is a consensus that suggested two electives “Analysis of Financial Statements” and “Behavioral Finance” should be added to the list of electives in BS A & F program.

Recommendations:

Hence, it is recommended that the agenda item may be approved by the worthy house

Annexure

Course Title: **BEHAVIORAL FINANCE**

Course Code: FIN 661

Course Description:

Behavioral finance is a relatively new but quickly expanding field that seeks to provide explanations for people's economic decisions by combining behavioral and Cognitive psychological theory with conventional economics and finance.

Course Objectives:

- To help the students to understand in depth each component of the Behavioural Finance.
- To help the students to apply the difference between Standard and Behavioural Finance.
- To help the students to understand different theories of Standard and Behavioural Finance

Learning Outcomes:

Upon completion of the course, students will be able to:

Demonstrate the understanding Behavioral Finance and Investor Behavior.

Identify the application of different decision heuristics which affect decision behavior of an investor.

Identify the effects of decision heuristics on today's stock market and how it may be controlled.

Application of Overconfidence with respect to Capital Budgeting.

Week Wise Subjects Distribution

1. Behavioral Finance:An Overview
2. Key Themes in Behavioral Finance
3. Emotions & Market Impact
4. HEURISTICS :
 - AFFECT
 - REPRESENTATIVENESS
 - AVAILABILITY
5. HEURISTICS :
 - ANCHORING AND ADJUSTNEMT
 - FAMILIARITY
 - OVERCONFIDENCE
 - STATUS QUO
6. HEURISTICS :
 - LOSS AND REGRET AVERSION
 - AMBIGUITY AVERSION
 - CONSERVATISM
 - MENTAL ACCOUNTING.
7. Framing & Emotions
8. Behavioral Finance and Market Impact on Investor Behavior
9. Neuroeconomics and Neurofinance
10. Standard Finance :
 - EFFICIENT MARKET HYPOTHESIS
11. CAPITAL ASSET PRICING MODEL
12. Rationale Expectation Investor Trust Game
13. Capital Budgeting and Behavioral Finance
14. Students Presentations
15. Overconfidence and Optimism

Books Recommended

1. BEHAVIORAL FINANCE, Investors, Corporations and Market : *H.Kent Baker and John R. Nofsinger,*
2. Behavioral Finance and Wealth Management : Michael M. Pompian, John Wiley and sons

Course Title: ANALYSIS OF FINANCIAL STATEMENTS
Course Code: FIN 612

Course Description:

This course is to learn intelligent use of published financial reports by decision makers external to the firm (e.g. investors and creditors). This course will focus on key accounting concepts, financial ratios And industry issues which are critical in interpreting and analyzing external financial reports. Throughout this course students will be involved in “hands-on” financial analysis by working on class exercises/problems, discussing special topical readings and analyzing assigned cases. The cases will include primary concepts from the assigned readings, as well as the topics and financial analysis techniques discussed in class.

Course Objectives:

The objective is to strengthen students' understanding of the accounting principles, methods and disclosures underlying financial statements and to make them sophisticated readers of financial accounting information and to improve their ability to adjust the reported information to facilitate financial analysis.

Learning Outcomes:

Upon completion of the course, students will be able to:

Analyze the financial statements of an organization

Identify the financial strength and weaknesses of an organization
Prepare a financial health report of an organization

Develop the financial flowchart for an organization

Week Wise Subjects Distribution

1. Introduction to the financial statement analysis

- What is financial statement analysis
- Need and purpose of financial statement analysis
- what is financial reporting system, what are its purpose
- Financial reporting standards, standard setting bodies IASB and FASB, convergence.
- Principal financial statements(Balance sheet, Income statement, cash flow statement ,statement of changes in Owners' equity, notes to the financial statements)
- Other sources of financial data (MD&A ,foot notes to the financial statements, business reviews etc).

2. Objectives of Financial Statement Analysis With Reference to various stakeholders (creditors , investors, management , regulatory bodies)

3. Sources of financial of financial information (financial statements, auditor's report, MDA, supplementary schedules , press , advisory services etc)

4. Basic Qualitative characteristics (Primary & secondary)

5. Role of auditor (Audit report, Types of audit report etc)

6. Tools and techniques (common size financial statements, trend analysis, Ratios, structural analysis, industry comparisons, common sense and judgments).limitations of financial statement analysis.

7. Concept of revenue

(sources of revenue like sale of product from inventory, rendering services, permitting use of an asset sale of asset other than inventory), measurement and recognition issues regarding revenue, Basic principles and selected application to expense recognition(by nature and function)cost of sales, general and other administrative expenses, other operating expenses, Non operating income and expense gains and losses(peripheral items),Non recurring items, financing cost and taxes net income , Minority and Majority interest ,concept of EPS (Basic and diluted), concept of income from continuing and discontinued operations along with formats (single and multiple)

8. understanding of statement of financial position its usefulness limitations & Elements (Asset , liability and equity), sub classification Asset (current and noncurrent) liability (current and noncurrent) equity (share capital , share premium, other comprehensive income, non controlling interest)

9. ASSETS

- **Current Assets** Inventories , Receivables, Prepaid expenses, short term investments, cash and cash equivalents)
- **Inventories:** Types of inventories (Merchandise & Manufacturing inventories) cost flow .valuation of inventory (physical goods = goods in hand, goods in transit, consigned goods, Cost to include (product Vs period cost) cost flow assumptions (FIFO, LIFO, Average, LIFO reserve. Additional valuation issues (lower of cost or net realizable value LCNRV)
- **Short term investments : to be discussed in noncurrent assets under the head investments**
- **Receivables:** what are receivables , account and notes receivables, non trade receivables , valuation and impairment of receivables
- **Cash:** what is cash, how to report cash, cash related items.

10. Noncurrent Assets

- **Property plant and equipment**
Describe property, plant, and equipment; Identify the costs to include in initial valuation of property, plant, and equipment. Describe the accounting problems associated with self-constructed assets, Describe the accounting problems associated with interest capitalization. Concept of impairment how to recognize impairment, concept of revaluation, recognition and issues regarding revaluation

11. Investments: what are investments , why there is a need of investments ,modes of investments, valuation and classification of investment (held to maturity, trading non trading investments),Equity investment (fair value method, equity method and consolidation)

12. LIABILITIES What is liability, current and long-term liability, contingencies, off balance sheet financing, presentation and analysis.

- 13. Taxation** concept of deferred taxation, future taxable amounts and deferred taxes ,future deductible amounts and deferred taxes, temporary and permanent differences
- 14. EQUITY:** Corporate law, Share system, Variety of ownership interests, Issuance and Reacquisition of equity shares, *features ,accounting and reporting of preference shares, Financial condition and dividend distributions, Types of dividends, Shares split, Disclosure of restriction presentation and Analysis*
- 15. Comprehensive Analysis of Financial Statements**

Books Recommended

- *The Analysis & use of Financial Statements; White, Sondhi, Fried; 3rd Edition, John Wiley & Sons.*
- Financial reporting for managers ,a valuation perspective Jamie pratt , d eric
- Financial statement analysis john j wild ,k R Subramanyamgenda for the 31st ACM

Appendage 3107

BBA & MBA Programmes – Addition of 3 Electives for Finance Major/Specialisation

Background/Discussion

Dynamics of financial market is changing. New market demands new elective courses to be offered to students of finance specialization. Hence, there is a need to improve the pool of electives in finance majors/specialization to make this branch of knowledge more attractive for students. Therefore electives “Advanced Corporate Reporting”, “Corporate Law”, and “Financial Institution Management” may be added to the pool of electives for finance major. Detailed outlines attached in **annexure**.

Financial Implications: Positive as more students may enroll in finance subjects

HR Implications: Nil

Discussion

The point was discussed in combined meeting of FBOS of all campuses of Bahria University. The input was obtained from all the campuses. There is a consensus that suggested electives “Advanced Corporate Reporting”, “Corporate Law”, and “Financial Institution Management” may be added to the pool of electives for finance major.

Recommendations:

Hence, it is recommended that the agenda item may be approved by the worthy house.

Annexure

Corporate Law **Course Code: ACC 609**

Course Description:

This course is to learn legal aspects of business dealing with corporate law. Throughout this course students will be involved in “hands-on” legal issues and cases as class exercises/problems, discussing special topical readings and analyzing assigned cases. The corporate legal cases will include primary concepts from the assigned readings, as well as the topics and case analysis techniques.

Course Objectives:

To enable students to learn fundamentals of corporate law, to have sound grasp of aspects which businessmen encounter in performance of professional obligations, to develop an

understanding of business events and associated legal issues faced by business companies, to apply legal knowledge to recognize and address legal issues as business managers.

Learning Outcomes:

Upon completion of the course, students will be able to:

Learn the fundamental of Corporate Law.

Identify the legal issues in business dealings

Know the distinctive features that differentiate a body corporate from an un-incorporated body Gain knowledge of various forms of Capital and financial transactions

Understand measures and procedures for bailout and winding up of companies

Week Wise Subjects Distribution

1. Introduction

Definition, and Sources of Law, Familiarization with Constitutional State Organs , Legislative Process of Pakistan

Judicial System of Pakistan and Courts, History objects and Functions and Sources of Corporate Law

Basic concepts of rights and obligation under contract laws

2. Company

Legal Persons and personalities , Distinctive Features of Companies, Kinds and Types of Companies

3. Choosing Business Forms

Incorporated Bodies (Companies) and Unincorporated Bodies(Partnership Firms), Advantages and Disadvantages of Incorporation

4. Description of and Distinction between Registered Companies

5. Stages of formation of a company

Incorporation or Registration of Companies, Legal status of pre-incorporation contracts and activities

6. Memorandum and Articles

Legal Status of MOA and AOA, Prospectus, Civil and Criminal Liabilities for untrue statements in Prospectus

7. Corporate Structure

Major Players, Members and shareholders, Directors, Professional Managers

8. Meetings and Resolutions

9. Corporate Books and Records

10. Financing

Forms of Capital, Borrowing Powers and Charges, Raising of Capital

11. Financing

Employment of Capital, Maintenance of Capital, Alteration and Reduction in Capital,

12. Transactions in Shares

Profits and Dividends

13. Organizational Changes

Compromise, Arrangement, Reconstruction, Amalgamation

14. Winding up

Types of Winding up, Liquidators, Contributories

15. SECP Regulations

Books Recommended

1. Nyazee, Imran Ahsan Khan. *Company Law*. Rawalpindi - Advanced Legal Studies , 2008 or latest edition.
2. Shaheen, Nazir Ahmed. *Practical Approach to the Companies Ordinance, 1984*. Rawalpindi - Lahore: Federal Law House, 2013.
3. Petiwala, M Khalid. *Notes on Company Law*. Karachi: Petiwala Book Depot, 2010 or latest edition

Advanced Corporate Reporting

Course Code: ACC 608

Course Description:

This course is a continuation of Principles of Accounting. It explores more deeply the accounting principles and conventions related to financial statements' preparation. Put together these two courses would ensure that students fully understand all the activities leading to preparation of financial statements and the characteristics of financial statement components.

Learning Outcomes:

After having completed this course successfully, participants will be able to:

Prepare financial statements in accordance with specified international pronouncements.

Account for simple transactions related to inventories and property, plant and equipment

in accordance with international pronouncements.

Understand the nature of revenue and be able to account for the same in accordance with

international pronouncements.

Prepare financial statements in accordance with specified international pronouncements.

Understand the fundamentals of accounting for the cost of production.

Week Wise Subjects Distribution

1. Introduction

- Regulatory framework
- Accounting and reporting concepts

2. Financial Statement

- Presentation of financial statements (IAS 1, IAS 34, IAS 24, IFRS 8, IAS 10)
- IAS 16: Property, plant and equipment

2. Assets

- Non-current assets: sundry standards (IAS 23, IAS 20 and IAS 40)
- IAS 38: Intangible assets
- IAS 36: Impairment of assets

3. IFRS 5: Non-current assets held for sale and discontinued operations

- IAS 8: Accounting policies, changes in accounting estimates and errors
- IAS 37: Provisions, contingent liabilities and contingent assets

4. IFRS 15: Revenue from contracts with customers

- IFRS 16: Leases

5. IAS 19: Employee benefits

6. IFRS 2: Share based payments

7. Instruments

- Financial instruments: Recognition and measurement
- Financial instruments: Presentation and disclosure
- IFRS 13: Fair value measurement

8. IAS 12: Income taxes

- Business combinations and consolidation

9. Statements

- Consolidated statements of profit or loss and other comprehensive income
- Associates and joint ventures

10. Business combinations achieved in stages

- Complex groups
- Disposal of subsidiaries

11. Other group standards (IAS 27 and IFRS 12)

- Foreign currency
- IAS 7: Statements of cash flows

12. IAS 33: Earnings per share

- Analysis and interpretation of financial statements
- Sundry standards and interpretations (IAS 2, IAS 41, IFRS 6, IFRS 14, IFRIC 12, SIC 7)

13. IFRS 1: First time adoption of IFRS

- Specialized financial statements
- International public sector accounting standards (IPSAS)

15. Accounting Standards

- Accounting for hyperinflation
- Islamic accounting standards
- Ethical issues in financial reporting

Books Recommended

1. Practice Notes: The Institute of Chartered Accountants of Pakistan CFAP01- Advanced accounting and financial reporting
2. Lecture Notes: The Institute of Chartered Accountants of Pakistan CFAP01- Advanced accounting and financial reporting
3. Lecture Notes: <https://www.iasplus.com/>

Financial Institution Management

Course Code: FIN 660

Course Description:

This course needs to have basic knowledge about the financial markets and about the financial instruments which are available in the primary and secondary market. The unifying theme in this course is the application of modern finance theory to the financial decision making and management of banks and non-bank financial institutions. The subject of bank and financial institution decision-making is approached from a risk perspective. The course covers the major decision areas for financial institutional management within the framework of a regulatory and "corporate responsible" environment

Course Objectives:

To help the students to understand in depth financial markets.

To help the students to analyse case studies related to these financial institutions

Learning Outcomes:

After having completed this course successfully, participants will be able to:

1. Identify bank risk and its management including interest rate risk, off-balance-sheet risk, credit risk, liquidity risk, foreign exchange risk and operational risk
2. The application of modern finance theory and financial modelling techniques to financial decision-making and risk management in financial institutions. Includes:
 - (i) Uniqueness of financial institutions
 - (ii) Application of portfolio, arbitrage pricing, option pricing and corporate finance theories to the management of assets, liabilities, capital structure and off- balance sheet operations
 - (iii) Interest rate risk management and financial futures

- (iv) Liquidity risk management
- (v) Credit risk management, credit evaluation models, loan pricing and credit rationing
- (vi) Capital adequacy, prudential regulation and management

Week Wise Subjects Distribution

1. Introduction – Personal and Course

Revision/Refresher – Financial Intermediary

2. Banks Commercial and Central bank

- Banking system and role of state bank of Pakistan

3. Central bank

- Role of state bank of Pakistan and (continued) and monetary, instruments to control money supply

4. Risk faced by Financial

- Institutions
- Understanding types of Risk to which banks are exposed of and brief introduction on each type of risks

5. Credit Risk

- The importance of Credit Risk across the globe and in Pakistan with examples, Types of Credit Facilities offered by commercial banks

6. Credit Risk

Detailed understanding of each credit facility offered by financial institution

7. Guest Speaker Session on Risk Management

8. Credit Risk

- Credit process flow, Credit Risk Analysis with practical Examples, Understanding client's business model

9. Banks' Internal Risk Management Policy

10. Security Structure

- Types of Securities according to facilities, How to assess perfection of securities

11. Industry Analysis

- How do industry dynamics effects, Financial Positions, Account Performance

12. Risks

- Management Risk, Financial Risk, SBP's Regulation on Credit Risk Management

13. Liquidity Risk Management

- Repricing Gap and Maturity Model, State Bank's Prudential Regulations for Liquidity Risk Management

14. Interest Rate Risk Management and Compliance Risk

- Estimation of Duration and Duration Gap, State Bank's Prudential Regulations for Interest Risk Management

15. Market Risk and Off Balance

- Sheet Activities & Other Risks, Estimating Value At Risk

Books Recommended

- Financial Institutions Management, 3rd Edition by Helen Lange, Anthony Saunders & Marcia Millon Cornett, published by Mc Graw-Hill (2013).
 - Practice and Law of Banking in Pakistan by Dr. Asrar H.Siqqiqi

Appendage 3108

MBA Programme – 10 New Electives of Supply Chain Management

Summary / Background

Supply Chain Management is an emerging as well as in markets demand. Presently, we have limited number of electives in this discipline. In order to strengthen and making the course more attractive as well as market oriented, we need to enhance the list of electives for this discipline. Following are the 10 elective courses suggested to be included in the elective list:

- a. Strategic Procurement and Supply Chain Management
- b. Operations planning in supply chain management
- c. Detailed scheduling and planning (DSP) in supply chain management
- d. Execution and control of operations (ECO) in SCM
- e. Strategic Management of Resources in SCM (SMR)
- f. Master planning of resources (MPR) in supply chain management
- g. Green supply chain management (GSCM)
- h. Shipping in supply chain management
- i. Supply chain implementation and operations
- j. Supply chain strategy, design and compliance

Outlines of the above proposed electives are attached as **annexure**.

Discussion

HOD MS BUKC highlighted the point. With changing trend in supply change, there is a need to add more electives subjects in the course which will make the course more attractive to students of supply chain. There was not much discussion on the point as the house agreed to take this point to the ACM for its approval.

Recommendations:

Hence, it is recommended that the agenda item may be approved by the worthy house.

Annexure

COURSES OUTLINES

Course Title: Execution and Control of Operations in SCM

Course Code: 632

Course Description

This course addresses the fundamentals concepts used for making an effective supply chain management regarding the Execution and control of operations post planning of it. Also addresses the decision making process with inclusion of review check on operations management and control in different environments.

Course Objective

To Create a Basic Understanding of What SCM execution and Control (ECO) is in crafting the strategies pertaining to Process and service industries and the importance of these strategies in relations to operations and labor management.

Learning Outcomes

On completion of the course participants would be able to LO1. Understand the control and management of processes.

LO2. Understand how to provide feedback to suppliers and service providers on service level and performance.

LO3.Understanding the resource allocations, Operations management, labor management and physical organization of the facility.

LO4. Equivalent to partial completion of Global SCM certifications level.

Week Wise Subjects Distribution

1. Personal Introductions/Objective Setting/Expectations & Introduction to Execution and control of Operations
 2. Principles of executing activities.
 3. Flow and Batch Principles
 4. Guiding the execution of Operational Plan
 5. Value Engineering, Push and Pull Strategies
 6. The Five “S” methodology
 7. Control of Operations, Control Goals and Control process management
 8. Mid Term Exam
 9. Costing Comparison in Process Controls
 10. Process Activity Measures and Throughput
 11. Management and Communications in ECO.
 12. DMAIC, PDCA, Seven QC Tools and other principles
 13. Design Tradeoffs in Designing ECO processes.
 14. Design Techniques and Design of Experiments+ Reports Submission
 15. Projects Presentations
-

Books Recommended

1. Execution and Control of Operations, Study Notes for APICS CPIM by Brian Willcox for 2013. APICS (The Association for Operations Management, USA)
 2. Introduction to Materials Management – Sixth Edition- J.R.Tony Arnold, Stephen N.Chapman, Lloyd M.Clive. Pearson, Prentice Hall, NJ, Ohio- USA.
 3. Manufacturing Planning and Control for SCM- Fifth Edition – Vollman, Berry,Whybark,Jacobs. McGrawHill, International Edition.
-

Course Title: **Green Supply Chain Management - GSCM**

Course Code:

Course Description

This course aims to identify critical success factors and propose a framework for creating successful GSCM practices in a country with an emerging environmental sensitivity. Best

practices, legal implications and performance measurements are illustrated at each stage of the supply chain.

Course Objective

Green Supply Chain Management (GSCM) is seen as a modern concept of management practices attempting to integrate environmental concerns to all stages up and down the supply chain. In a globalized market, the environmental performance criteria extends beyond the single firm to its entire supply chain network across national borders.

Learning Outcomes

On completion of the course participants would be able to:

LO1 Understand how to establish and maintain a green SCOR strategy

LO2 Learn to identify corporate social responsibility strategies to meet

organizational needs LO3 Learn how to develop and use Green Supply Practices (GSP)

LO4 Discover how to select and use a variety of environmental accounting methods effectively

LO5 Examine ways to align supply chain operations and business strategies to meet sustainability objectives

Week Wise Subjects Distribution

1. Personal Introductions/Objective Setting/Expectations & Introduction to GSCM
2. SCM Concepts, SCOR model& Green SCOR – Green E2E SCM
3. Key elements of GSCM
4. Green Design – Design for Environment (DIE) – Global Challenges.
5. Green Planning – Green Demand & supply planning.
6. Green Sourcing & Purchasing.
7. Green Manufacturing, Lean & Six Sigma for GSCM.
8. Mid Term Exam.
9. Green Distribution planning
10. Green logistics (Green Warehousing & Transportation)
11. Carbon foot print reduction – Impact & Calculations
12. Green Return – Reverse logistics – Closed loop logistics – Sustainable logistics
13. PCR – Post consumption recycling + economic gains of GSCM + Triple bottom line effect
14. Life cycle analysis (LCA) – Biodegradability – Technology as an enabler of GSCM
15. Role of EPA and regulatory in GSCM implementation + GSCM & CSR

Books Recommended

Green Supply chain management: Product Life cycle approach By Haiso – Fan weng&Surendra M Gupta

Introduction to GSCM By Venkatesh Ganapathy

Course Title: **Master Planning of Resources in SCM**

Course Code: SCM 633

Course Description

This course addresses the fundamentals concepts used for master planning of resources generates from demands of customers and distribution networks. It

addresses the demand management of via forecasting and order servicing and also issues posed to them.

Course Objective

To Create a Basic Understanding of What master plans actually does in crafting the strategies pertaining to Process and service industries and how to transform the master planning into MRP and CRP plans for making it executable and manageable.

Learning Outcomes

On completion of the course participants would be able to LO1. Understand the process used to develop and validate S&OP plan. LO2. Understand how to manage the issues in master scheduling and Final assembly scheduling.

LO3.Understanding the various manufacturing techniques and processes.

LO4. Equivalent to partial completion of Global SCM certifications level.

Week Wise Subjects Distribution

1. Personal Introductions/Objective Setting/Expectations & Introduction to Master Planning of Resources
2. Business Planning Hierarchy & Demand Management.
3. Manufacturing Planning and Control Processes
4. Manufacturing Environment and Processes
5. Extrinsic and Intrinsic Forecasting
6. Sales and Operations Planning (S&OP)
7. Trade Offs Volumes V/s varieties
8. Mid Term Exam
9. Production leveling v/s Chase strategies
10. Master Scheduling, Master Production scheduling (MPS)
11. Bill of Materials (BOM), Typical, Engineering Control Board.
12. Time Fences and APS softwares
13. Distribution planning, DRP and Network planning.
14. Transportation- Re Order Point, Time phased Ordering point and Fair share allocation systems + Report submission
15. Projects Presentations

Books Recommended

1. Master planning of Resources, Study Notes for APICS CPIM by Brian Willcox for 2013. APICS (The Association for Operations Management, USA)
2. Introduction to Materials Management – Sixth Edition- J.R.Tony Arnold, Stephen N.Chapman, Lloyd M.Clive. Pearson, Prentice Hall, NJ, Ohio- USA.
3. Manufacturing Planning and Control for SCM- Fifth Edition – Vollman, Berry,Whybark,Jacobs.McGraw Hill , International Edition.

Course Title: Operational Planning in Supply Chain Management

Course Code: SCM 631

Course Description

Operations Planning & Supply chain operating practices, principles (i.e., the fundamentals of materials and logistics management). Studies and analyzes the dynamic nature of supply chain management for products and services and addresses the impact of the global economy on the management process. The course also develops a solid grounding in the theory of supply chain design, which includes strategies for customer service, quality, logistics, inventory management, and integrated supply chain management. Includes

forecasting, postponement, sourcing (in particular, global sourcing), network design, and virtual integration (web-centric).

Course Objective

To Create a Basic Understanding of What Operations Planning & SCM is & how it supports the overall achievement of business objectives.

Learning Outcomes

On completion of the course participants would be able to LO1. Understand Op & SC Theory in general & practices within organizations. LO2. Make realistic judgments concerning the contribution of OP & SC function to Organizational effectiveness.. LO3. Be able to apply effective tools & Techniques to achieve OP & SC objectives.

Week Wise Subjects Distribution

1. Personal Introductions/Objective Setting/Expectations & Introduction to Op & SCM
2. Strategic Fit to Business Objectives/Drivers & Obstacles
3. Operational Supply Planning
4. Operational Demand Planning
5. Inventory Modeling & Management
6. Inventory Management
7. Customer Services & Exceeding Customer Expectations
8. Mid Term Exam
9. Facility Decisions. Effective use of IT systems in OP & SC Integration.
10. TQM & Six Sigma Application in OP & SCM
11. Financial aspects involved in OP & SCM
12. HSE/Ethics/Legal Issues & Sensitivities in OP & SCM
13. Supply Management & its Strategies
14. Transportation in OP & SCM + Report Submissions
15. Presentations

Books Recommended

1. Supply Chain Management, Sunil Chopra & Peter Meindl., null Edition, Prentice Hall.
2. World Class Supply Chain Management, Burt/Dobler/Starling, null Edition, Prentice Hall.

Course Title: Detailed Scheduling and Planning in SCM

Course Code: SCM 634

Course Description

This course addresses the fundamentals concepts used for making an effective supply chain management regarding the Detailed scheduling of the resources post planning of it. Also addresses the generation of master planning level into requirements that need to be produced and procured and strategies and plans pertaining pertain to it. It also emphasizes on process and service industry requirements for detailed planning and scheduling.

Course Objective

To Create a Basic Understanding of What SCM detailed scheduling and planning as a master plan and crafting the strategies pertaining to Process and service industries and in-depth and executable mode.

Learning Outcomes

On completion of the course participants would be able to LO1. Understand the challenges posed to companies in detailed planning in terms of lead-time, cost, equipment,

personnel and other constraints. LO2. Understand how to bridge the gaps between Master planning and Control and execution. LO3.Understanding the resource allocations and managing supply chain detailing.

LO4. Equivalent to partial completion of Global SCM certifications level.

Week Wise Subjects Distribution

1. Personal Introductions/Objective Setting/Expectations & Introduction to Detailed Scheduling and planning
2. Types and Classification of Inventories
3. EOQ, L4L and POQ models in inventory management
4. Inventory Performance, Valuation, Accuracy and Scraps factors
5. Material requirement planning for Master Scheduling
6. Inventory Planning, Time Fences and Bill of Materials
7. Engineering Control board, Requirement Planning and Pegging
8. Mid Term Exam
9. Lead time, Allocations and Safety stock Calculations
10. MRP and MRP Grid – Numerical Analysis
11. Simulation and Modeling , Project Planning and Capacity requirement Planning (CRP), Routings.
12. Process Flow and its Scheduling
13. Procurement and External sources of supplies
14. Supplier Partnerships, Delivery Issues and Benefits + Report Submission
15. Projects Presentations

Books Recommended

1. Master planning of Resources, Study Notes for APICS CPIM by Brian Willcox for 2013. APICS (The Association for Operations Management, USA)
2. Introduction to Materials Management – Sixth Edition- J.R.Tony Arnold, Stephen N.Chapman, Lloyd M.Clive. Pearson, Prentice Hall, NJ, Ohio- USA.
3. Manufacturing Planning and Control for SCM- Fifth Edition – Vollman, Berry,Whybark,Jacobs.McGraw Hill , International Edition.

Course Title: Shipping in SCM

Course Code: SCM 637

Course Description

This course focuses on shipping industry, port operations and their allied sectors. As logistics and supply chain management are heavily reliant on shipping industry this course deals with the study of shipping industry and applying management principles to it. This course imparts sector-specific management skills to students. The course moulds students into skilled managers, capable of donning managerial and administrative roles in the shipping industry and allied fields.

Course Objective

The main aim of this course to churn out skilled management professionals/work force who are capable of managing port and shipping supply chain operations by having in-depth information regarding its processes, challenges, documentation and operational requirements.

Learning Outcomes

On completion of the course participants would be able to:

- LO1 Have practical job knowledge on the different areas of supply chain shipping
- LO2 Have knowledge about operations of freight forwarding

- companies/CFS/warehousing companies
LO3 Have knowledge about Ocean freight shipping and its challenges
LO4 Have knowledge of latest International commercial Terms and commercial geography
LO 5 Have complete understanding of shipping documentation, import export laws and better understanding of CPEC too

Week Wise Subjects Distribution

1. Introductions – Overview of shipping industry
 2. Shipping supply chain global and local market analysis
 3. Shipping lines and their operations – TEUs operating across world
 4. Strategic global sea ports – Chahbahar – Gwadar- Jabl e Ali – Singapore – Rotterdam – Shanghai - Ningbo
 5. Oil prices impact on shipping supply chain – World's busiest sea ports – Shipping supply chain growth prospects
 6. Shipping equipment – Vessel types – Shipping documentation
 7. Shipping codes – Pollution/Safety/PSE/Dock codes
 8. Mid Term Exam
 9. Dry Docks and advance dry docks
 10. Ships Blasting and De blasting processes
-
11. Port charges, Dredging and Cargo Handling
 12. Ship stability calculations + ship loading patterns
 13. HS codes – Non-negotiable documents (NND's) – Certificate of origins – Duty structures – Free Trade agreements (FTA's) – demurrage – detention charges – Penalties in shipping
 14. Global Challenges in Shipping SCM – Crude oil prices/Sea weather/Piracy/Dangerous zones
 15. Technology & Sustainability in shipping SC – Future shipping SCM

Books Recommended

1. Ninety Percent of Everything: Inside Shipping, the Invisible Industry That Puts Clothes on Your Back, Gas in Your Car, and Food on Your Plate 1st Edition, Kindle Edition by Rose George
2. Logistics and SCM by Martin Christopher

Course Title: Strategic Management of Resources in SCM

Course Code: SCM 635

Course Description

This course addresses the fundamentals concepts used for making an effective supply chain management by strategic management of resources. This includes the process of choosing the appropriate methodologies and techniques for specific needs and fostering an appreciation for the integrated nature of operations.

Course Objective

To Create a Basic Understanding of What SCM Strategic operational management and articulate the proper strategies in different scenarios in real time context.

Learning Outcomes

On completion of the course participants would be able to LO1. Understand the Strategic supply chain management and decision making. LO2. Understand the market requirements at broader level and rational approaches at strategic level.

LO3.Understanding the existing and emerging processes and technologies in SC Function.
 LO4.Equivalent to partial completion of Global SCM certifications level.

Week Wise Subjects Distribution

1. Personal Introductions/Objective Setting/Expectations & Introduction to Strategic Management of resources
2. Understanding the business environment
3. Globalization, Information requirements and Sustainability Challenges
4. Developing the Operations Strategy
5. Product Service Design and Structures
6. Coordination Strategy
7. Measurement of Strategic Actions in SCM
8. Mid Term Exam
9. Logistical Management
10. Organizational Commitment Process and Risk Assessments Strategies in SCM
11. Implementing Operations Strategy in SCM
12. Risk Management in SCM
13. Change Management in SCM
14. Infrastructure Systems in SCM + Structural Deployment + Report Submission
15. Projects Presentations

Books Recommended

- | |
|--|
| 1. Strategic Management of Resources, Study Notes for APICS CPIM by Brian Willcox for 2013. APICS (The Association for Operations Management, USA) |
| 2. Introduction to Materials Management – Sixth Edition- J.R.Tony Arnold, Stephen N.Chapman, Lloyd M.Clive. Pearson, Prentice Hall, NJ, Ohio- USA. |
| 3. Manufacturing Planning and Control for SCM- Fifth Edition – Vollman, Berry,Whybark,Jacobs.McGraw Hill , International Edition. |

Course Title: Strategic Procurement in Supply Chain

Course Code: SCM 630

Course Description

Procurement is much more than simply buying goods and services. Interest in the performance of the procurement function has been fast growing in recent years with ever increasing business competitiveness and the pressure to bring value to stakeholders. Companies are turning their attention to effective global supply chain and strategic procurement for survival and value creation. The amount of money flowing through procurement spend is phenomenal; ranging from 50% to 85% of company revenue. In the search for low cost, high quality goods and services, companies worldwide have turned to different continents for various aspects of sourcing, ranging from sourcing to procure-to-pay transactional processing. This MBA course works with literature publications, select case studies and student projects in building the fundamental knowledge of global supply chain management and strategic procurement for students.

Course Objective

1. Students learn to appreciate how Procurement plays a critical functional role in a company and its influence and interdependencies with other corporate functions, such as R&D, manufacturing, support, finance, etc.
2. Students learn the elements required in achieving a world-class procurement organization and a competitive global supply base.
3. Students become well versed in the strategic sourcing process and the continued supplier performance management methodologies.

4. Students are aware of the ethical, contractual, and legal issues faced by procurement professionals.
5. Students are introduced to the changing procurement environment and skill sets with the advancements in technology, such as eCommerce and reverse auction platforms along with CRM and SRM concepts.

Learning Outcomes

On completion of the course participants would be able to follow the following LO's.

1. Procurement operation, structure, organization, and impact in business competitiveness. Topics to be covered:
 - a. Global supply chain management
 - b. Impact of procurement
 - c. Purchasing and supply chain
2. Building world-class procurement, covering:
 - a. The strategic procurement process – Translating corporate strategy into procurement goals
 - b. Identifying and strategizing the competitive advantage
 - c. Strategic procurement v.s. commodity procurement
 - d. Outsourcing pro's, con's, and risk management
3. From sourcing to continued measurements, with topics on:
 - a. Supplier evaluation, selection, and audits
 - b. Quality and cost management
 - c. Purchasing laws, ethics, and contract management
 - d. Supplier performance management

Week Wise Subjects Distribution

- | |
|--|
| <ol style="list-style-type: none"> 1. Personal Introductions/Objective Setting/Expectations & Introduction to SCM and Procurement 2. Global supply chain management. 3. Impact of procurement 4. Purchasing and supply chain 5. The Transactional & strategic procurement process – Translating corporate strategy into procurement goals 6. Identifying and strategizing the competitive advantage 7. Strategic procurement v.s. commodity procurement 8. Mid Term Exam 9. Outsourcing pro's, con's, and risk management 10. Supplier evaluation, selection, and audits 11. Quality and cost management 12. Purchasing laws, ethics, and contract management 13. Supplier performance management. 14. Revision + Report
Submissions Presentations |
|--|

Books Recommended

- | |
|--|
| <ol style="list-style-type: none"> 1. Purchasing and Supply Chain Management, Monczka, Trent, and Handfield 3rd Edition, 2005, ISBN: 0-324-20254-7 2. World Class Supply Chain Management, Burt/Dobler/Starling, null Edition, Prentice Hall, |
|--|

Course Title: Supply Chain Implementation and Operations**Course Code: SCM 640****Course Description**

This course addresses the Strategic contents of an effective supply chain management Operational implementation and will provide the foundation for grasping the advance knowledge pertaining to Supply chain dynamics, Demand v/c supply variability, Sales and Operations Planning (S&OP) concepts, Master production schedules (MPS) , Material requirements planning (MRP) implementation.

Course Objective

To Create the Understanding of supply chain strategies for organizational Operations and Implementations and for getting the in-depth knowledge regarding the Supply Chain Demand and supply planning, understanding the demand variability's and managing the challenges in SC Operations.

Learning Outcomes

On completion of the course participants would be able to:

- LO1. Understand SCM Demand and Supply measurement, Analysis and Improvement.
- LO2. Understand supply chain dynamics with respect to sources of variability's in demand and supply.
- LO3. Internal and External sources of supplies.
- LO4. Equivalent to module 3 completion of Global SCM certifications level.

Week Wise Subjects Distribution

1. Personal Introductions/Objective Setting/Expectations & Introduction to SC Implementation and Operations
2. Introduction to Supply Chain Dynamics.
3. Sources of Supply and Demand Variability
4. Sales and Operations planning (S&OP)
5. Bullwhip Effect and Collaborative Planning, Forecasting Replenishment (CPFR)
6. Managing Supply From Internal Sources, Masters Scheduling, MPS, MRP, MRP II
7. Lead time, Push V/s Pull Strategy, Capacity requirement planning(CRP) and Production Activity Control (PAC)
8. Mid Term Exam
9. Distribution requirement planning (DRP)
10. Managing Supply From External Sources
11. Internet Enabled sourcing, Supplier Contracts, Biddings and certifications
12. Supplier Score cards and ISO Certifications
13. Supply Chain and Continuous improvement
14. Supply Chain and Approaches to Continuous improvement (Lean, Six Sigma, TQM and Theory of constraints) + Reports Submission
15. Projects Presentations

Books Recommended

~~Supply Chain Strategy, Design and Compliance Module 3, APICS (The Association for Operations Management, USA), Version 3.1, 2013 Edition~~

Course Title: Supply Chain Strategy, Design and Compliance

Course Code: SCM 638

Course Description

This course addresses the Strategic contents of an effective supply chain management infrastructure and will provide the foundation for grasping the advance knowledge in pertaining to organizations strategic perspective regarding Sustainability, Technology, Risk Management, Globalization and challenges and Opportunities posed to SCM in this regard.

Course Objective

To Create the Understanding of supply chain Strategic foot prints on organizational design and how SC policies are crafted in alignment and compliance with the operating environments

Learning Outcomes

On completion of the course participants would be able to LO1. Understand SCM strategic Theory in general & practices within organizations. LO2. Make realistic judgments concerning the compliance of SCM practices in accordance with Sustainability, globalization and other regulations. LO3. Be able to apply effective tools & Techniques to achieve Organizational Strategic objectives and can design them with respect to Operating environment. LO4. Equivalent to module 2 completion of Global SCM certifications level.

Week Wise Subjects Distribution

1. Personal Introductions/Objective Setting/Expectations & Introduction to SC Design, Compliance and Strategies
2. Sustainability in SCM.
3. Sustainability in SC and United Nations Global Compact Initiatives
4. Risk Management in SCM Design
5. ISO 31000, Risk Management- Principles and guidelines
6. Globalization and SCM, Implications on SCM
7. Transportation and warehousing tradeoffs
8. Mid Term Exam
9. Managing the SCM , Efficient v/s responsive
10. Role of Technology in SCM , E- Business
11. Supply Chain Design and Optimization
12. Influencing and Prioritizing Demand
13. Design and Challenges posed to CRM & SRM.
14. Strategic Planning and Inventory control + Report Submissions
15. Projects Presentations

Books Recommended

Supply Chain Strategy, Design and ComplianceModule2, Book 1of 2 and Book 2 of 2 , APICS (The Association for Operations Management, USA), Version 3.1, 2013 Edition

Appendage 3109

Issue/Case: Ratification of Revised Course Codes and Reformatting of MPhil and PhD Professional Psychology Roadmaps

Making the Case

The Faculty Board of Studies (FBOS) in its meeting held on November 30th 2017, suggested reformatting in the MPhil and PhD Professional Psychology Roadmaps and revision in course codes. The approval for which was obtained on file.

Corroborative Data

Reformatted MPhil and PhD Roadmaps and revised course codes attached as Annexure 'A'

Discussion and analysis

There was consensus amongst members of IPP FBOS for the given reformatting. Revised course codes would reflect a unified PPY for Professional Psychology.

Conclusion

Recommendations

The point is placed before the house for ratification.

Annexure 'A'

M.Phil Professional Psychology Road-Map

Area of Specialization:

1. Clinical Psychology
2. Educational Psychology
3. Organizational Psychology

Structure of the Road-Map

Core Courses:

Course Code	Course Title	No. of Credit Hours
PPY 702	Research Methods	3
PPY 703	Measurement and Assessment I	2+1
PPY 710	Statistical Inferences in Psychology	3
PPY 711	Measurement and Assessment II	2+1

Internship Requirements:

PPY 719	Internship I	-
PPY 720	Internship II	6
PPY 721	Internship III	6

Thesis Requirements

THS 701*	Thesis	3
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Note:

*M.Phil research student shall have to register this course at least in 2 semesters to complete the mandatory 6 credit hours of research work. Elective Courses (Clinical Psychology) **04** number of courses shall be chosen as per advice of the supervisor.

Course Code	Course Title	No. of Credit Hours
PPY 704	Classical Approaches to Psychotherapies	3
PPY 707	Neurophysiology	3
PPY 712	Contemporary Approaches to Psychotherapy	3
PPY 715	Pharmacology	3
PPY 612	Cognitive Behavioural Therapy	3
PPY 611	Humanistic and Existential Therapies	3

Elective Courses (Educational Psychology) **04** number of courses shall be chosen as per advice of the supervisor.

PPY 705	Theories of Counselling	3
PPY 708	Patterns of Child Rearing and Development of Personality	3
PPY 713	Psychology of Child and Adolescence	3
PPY 716	Analysis and Treatment of Developmental Disabilities	3
PPY 612	Cognitive Behavioural Therapy	3
PPY 611	Humanistic and Existential Therapies	3

Elective Courses (Organizational Psychology) **04** number of courses shall be chosen as per advice of the supervisor.

PPY 706	Vocational Guidance and Counselling	3
PPY 709	Personnel Selection and Job analysis	3
PPY 714	Training Theory, Design and Evaluation	3
PPY 717	Organizational Leadership and Marketing	3
PPY 612	Cognitive Behavioural Therapy	3
PPY 611	Humanistic and Existential Therapies	3

MPhil Professional Psychology
Semester wise Roadmap
(As per HEC Guidelines 9-12 credit hours are allowed per semester)

First Year:**First Semester**

Course Code	Course Title	Credit Hours		
		Total	Theory	Lab
PPY 702	Research Methods	3	3	-
PPY 703	Measurement and Assessment I	3	2	1
	Elective I	3	3	-
	Elective II	3	3	-

Second Semester

PPY 710	Statistical Inferences in Psychology	3	3	-
PPY 711	Measurement and Assessment II	3	2	1
	Elective III	3	3	-
	Elective IV	3	3	-

Summer Break

PPY 719	Internship I	-	-	-
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Second Year:**Third Semester**

PPY 720	Internship II	6	-	6
THS 701	Thesis	3	3	-

Fourth Semester

PPY 721	Internship III	6	-	6
THS 701	Thesis	3	3	-

Course work	= 24 Cr. Hrs	Internship	= 12 Cr. Hrs
Thesis	= 6 Cr. Hrs	Total	= 42 Cr. Hrs

**Ph.D Professional Psychology
Road-Map**

Area of Specialization:

1. Clinical Psychology
2. Educational Psychology
3. Organizational Psychology

Structure of the Roadmap

Core Courses:

Course Code	Course Title	Cr Hrs
PPY 801	Advanced Quantitative Research and Research Ethics	3
PPY 802	Group Psychotherapy I	3
PPY 810	Advanced Qualitative Research and Research Ethics	3
PPY 811	Group Psychotherapy II	3

Internship Requirements:

Course Code	Course Title	Cr Hrs
PPY 819	Internship I	9
PPY 820	Internship II	3
PPY 821	Internship III	3
PPY 822	Internship IV	3

Thesis Requirements

Course Code	Course Title	Cr Hrs
THS 900*	PhD Thesis	9

Didactic Analysis / Professional Training

Course Code	Course Title	Cr Hrs
PPY 823	Didactic Analysis / Professional Training	3

Note:

*PhD Scholar shall have to register this course at least in 4 semesters to complete the mandatory 36 credit hours of research work

Elective Courses (Clinical Psychology) **02** number of courses shall be chosen as per advice of the supervisor.

Course Code	Course Title	Cr Hrs
PPY 803	Psychological Rehabilitation Basic	3
PPY 804	Expressive Art Therapy	3
PPY 805	Hypnotherapy Basic	3
PPY 812	Psychological Rehabilitation Advanced	3
PPY 813	Complementary and Alternative Healing Therapies	3
PPY 814	Hypnotherapy Advanced	3

Elective Courses (Educational Psychology) **02** number of courses shall be chosen as per advice of the supervisor.

PPY 803	Psychological Rehabilitation Basic	3
PPY 805	Hypnotherapy Basic	3
PPY 806	Vocational Guidance	3
PPY 808	Biological Basis of Behaviour	3
PPY 812	Psychological Rehabilitation Advanced	3
PPY 814	Hypnotherapy Advanced	3
PPY 815	Educational Counselling	3
PPY 817	Psychotherapy with Children and Adolescents	3

Elective Courses (Organizational Psychology) **02** number of courses shall be chosen as per advice of the supervisor.

PPY 803	Psychological Rehabilitation Basic	3
PPY 805	Hypnotherapy Basic	3
PPY 807	Crisis Management Basic	3
PPY 809	Work Team Dynamics	3
PPY 812	Psychological Rehabilitation Advanced	3
PPY 814	Hypnotherapy Advanced	3
PPY 816	Crisis Management Advanced	3
PPY 818	Data Management	3

Ph.D. Professional Psychology

Semester wise Roadmap

(As per HEC Guidelines 9-12 credit hours are allowed per semester)

First Year

Semester 1

Course Code	Course Title	Credit Hours		
		Total	Theory	Lab
PPY 801	Advanced Quantitative Research and Research Ethics	3	3	-
PPY 802	Group Psychotherapy I	3	3	-
	Elective I	3	3	-

Semester 2

PPY 810	Advanced Qualitative Research and Research Ethics	3	3	-
PPY 811	Group Psychotherapy II	3	3	-
	Elective II	3	3	-

Summer Semester

PPY 819	Internship I	9	-	9
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Second Year**Semester 3**

PPY 820	Internship II	3	-	3
THS 900	PhD Thesis	9	-	9

Semester 4

PPY 821	Internship III	3	-	3
THS 900	PhD Thesis	9	-	9

Third Year**Semester 5**

PPY 822	Internship IV	3	-	3
THS 900	PhD Thesis	9	-	9

Semester 6

THS 900	PhD Thesis	9	-	9
PPY 823	Didactic Analysis / Professional Training	3	-	3

Course Work	= 18 Cr. Hrs
Internship	= 18 Cr. Hrs
DA / Professional Training	= 03 Cr. Hrs
Dissertation	= 36 Cr. Hrs
Total	= 75 Cr. Hrs

Appendage 3110

Inclusion of Electives in MS Media Studies Program

Summary of the Case

1. MS Media Studies Program - approved by the HEC on the same roadmap of BUIC - has been launched from spring 2018 at BUKC.
2. The expanding media industry in Karachi demands vast areas of studies in curriculum to attract the interest of students.
3. So, apart from approved ELECTIVES of the current roadmap, three more electives from within the HEC curriculum are to be included in the program.

Recommendation

4. The Electives can be allowed to offer from fall 2018 semester.
5. As per decision (Agenda Item 1729) of the 17th meeting of FBOS held on 1st March 2018 the course outlines have been shared with the Department of Media Studies BUIC; the Dean Management and SS after seeing the courses has ascertained the feasibility for ACM.

Inclusion of Electives in MS Media Studies Program

From within the list of ELECTIVES suggested by the HEC curriculum following three courses are to be included in the roadmap.

- i. Advanced Development Communication
- ii. Digital Media
- iii. Media Effects: advances in theory and practice

The details of course outline are given hereunder:

COURSE: Advanced Development Communication 3-Credit Hrs

Course Objectives

This advanced course in development communication is to help scholars make understand and review the process, problems and paradigm of development communication in broader sense. From strong theoretical background to real situation in the form of case studies will enable students to relate the linkages of information and communication with emphasis in the third world countries, specifically from Pakistani perspective. What role development communication play in social change for the purpose of social and economic empowerment of common people besides political communication and political socialization are a must.

Course Content

Introduction

Development Issues and sub-issues; Communication and the Persistence of Poverty; Human Rights and Development in a Cultural Perspective; Media Globalization through Localization; Overview of Participatory Process and Experiences; History of Participatory Communication Approaches to Development - a theoretical Approach.

Theoretical framework

Mass Media's Role in the Third World; Dependency-Dissociation and Multiplicity-the The International Dimension of Development Communication; Development Support Communication and Social Sector (Health/Education/Rural/Agricultural/Environmental etc); Mass Media and Political Socialization; Designing Communication Campaigns.
Lerner's Model of Development; Region of Feasible Action; Development-Gap Hypothesis; General Paradigm of Motivation; Development Participation; Diffusion of Innovation Model; The Social Technology Model; Context of Participation in Development; A Conceptual Model of Decentralization;

Case Study: Pakistani Development Model based on OPP

A discourse Approach to Communication and Development; Development Communication approaches in an Internal Perspective.

Case Study: Reforming Pakistan's Mixed Health System.

Case Study: Observations on the Processes of Socio-economic Change in Pakistan

Communication Policies, Strategies and Exemplars

Role of Government and Non-Government Agencies in Development; UNESCO Contribution to Cultural Diversity and Communication for Development
Some Evidence based Results from FAO Field Projects; Involving people, evolving behavior: The UNICEF Experience.

Community Media and Conflict Resolution

Access and Participation of Community in Development; Defining Alternative Media; Making Community Media Work; Making Community Media Work; Working with Media in areas Affected by Ethno-political Conflict;

Reference Material

Jan Servaes, 2008. Communication for Development and Social Change, Sage Publications, New Delhi, India

Arif Hasan, 2010. Participatory Development, Oxford, Karachi.

Arif Hasan, 2009. The Unplanned Revolution: Observations on the Process of Socio-economic Change in Pakistan, Oxford, Karachi.

Sania Nishtar, 2010. Choked Pipes: Reforming Pakistan's Mixed Health System, Oxford, Karachi.

Uma Narula, Development Communication: Theory and Practice, Har-Anand Publication Pvt. Ltd., New Delhi.

COURSE: Mass Media Effects: Advances in Theory & Research

3-Credit Hrs

Course Objectives

This course is inclusive of diverse situations of media effects in society since it refers to the many ways individuals and society is influenced by both news and entertainment mass media, including film, TV, newspaper, radio, books, magazines, music websites, and video games etc.

The learning process include to make students understand the media effects based on the idea that how media are used and for what purpose with particular reference to functionalists and critical or culturists viewpoints.

Course Content

Functionalists' School of Thought

Critical /Culturists School of
Thoughts Direct Effects

Media assumed as all-
powerful Audience as
passive recipients Cultural
Studies – Neo Marxist

Media as powerful agent for ideological
hegemony Assumed as major effects

Political Economy

Media as part of political & economic structure

Political Economy – 'Public Sphere' theory

Habermas theory

Romanticized and
naïve New
Audience Research
Ethnographic turn
Recognition of
audience Texts as
polysemic

Focus to audiences, media viewed as less
influential Synthesis of Views/Integrated
Theory

Media influence and matrix of factors

Audience education, race, sex,
religion etc Alternative discourse
(family, peers)

Diversity of media

Reference Material

Bandura A. 2002. Social cognitive theory of mass communication. In Media effects: Advances in theory and research, ed. J Bryant, D Zillmann, pp. 121-53. Hillsdale, NJ: Erlbaum.

Bryant J, Oliver MB. 2009. Media effects: Advances in theory and research. New York: Routledge.

Clark R. 2012. Learning from media: Arguments, analysis, and evidence. Charlotte, NC: Information Age Publishing.

Desmond RJ, Garveth R. 2007. The effects of advertising on children and adolescents. In Mass Media effects research: Advances through meta-analysis, ed. R Preiss, B Gayle, N Burrell,

M Allen, J Bryant, pp. 169-79. Mahway, NJ: Erlbaum.

Knobloch-Westerwick S. 2015. Choice and preference in media use. New York: Routledge. McCombs M, Reynolds A. 2009. How the news shapes our civic agenda.

- In Media effects: Advances in theory and research, ed. J Bryant, MB Oliver, pp. 1-16. New York: Routledge.
- McDonald DG. 2009. Media use & the social environment. In Media processes and effects, ed. RL Nabi, MB Oliver, pp. 251-68. Los Angeles, CA: Sage.

COURSE: Digital Media

3-Credit Hrs

Course Objectives

This course provides a rigorous training in the tools, and applications of the digital environment from the preparation of multimedia content to its effective display and dissemination. Practical elements built of the course will make use of digital contents for media industry. The course combines the applied technological and media-oriented skills with academic training and up-to date digital expertise of the BU. Students, besides the creative and productive skills will also understand the ethical, legal and theoretical dimensions of digital media.

Early sections of the course are taught through discrete group-based tasks. During the latter stages of the module, graduates will produce their own short terms papers and creative projects investigating an aspect of a new media object or system.

Course Contents

New Developments in Digital Media

New media and the dynamics of digital convergence: Critical Survey of Developments; Industrial, Social, and Technological Process; Social Networks, Pervasive and locative technologies, new forms of knowledge organization and gathering; Workshop of Core technologies; and literacy in approaches to content development.

Theory and Practice of Interactive Media

Digital technologies and transforming traditional media systems (television, cinema); New media networks (internet, mobile devices); Techno-cultural transformation, exploration of the form and critical debates on power, force, significance and form of a series of new media texts, artifacts and systems.

Industry Work with Write up

The course convener will develop student-industry placement consult for digital media work placement as a student placement developed in close consultation with the course convener. The work placement is accessed on the basis of case study and a critical analysis based research report. The dissertation workshops, tutorials, work in progress demonstrations, case study development and independent work should critically reflect on the role of digital media in the industry.

Software Project (Case Study) with Write up

The project will be developed by initiating some basic questions like: does it demonstrate anything or experiment with anything? Does it throw up new research in the field of digital media? Develop your ideas into a structured and well informed argument that draws on the practical project as a case study or research. The combination of practice and theory in digital media require a practical project demonstrating digital media practice along with plus 3,000 word reports. It supports to develop the following:

Research a topic and ideas

Development of initial ideas by reading about connected examples and critical work on the idea

Exploring other examples of practice with links to initiated ideas

Feasibility; a clear and realistic production plan and work in relation

Practice on other people - can they access it

The write up facilitate to examine the theoretical questions that are suggested by the practical project. As a case study the projects might examine questions about networked identity, interactivity, augmentation, memory, or digital methods and mapping, for example.

Reference Material

Simon Lindgren, Digital Media and Society, SAGE, 2017

Brian Carroll, Writing and Editing for Digital Media, 2nd edition, Routledge.

Charles Ess, Digital Media Ethics, 2nd Edition, John Wiley & Sons, Inc. ISBN: 978-0-745-65606-9. 2013

Tony Feldman, An Introduction to Digital Media, Routledge, London

Thomas Kenny, James Cohen, Producing New and Digital Media, Focal Press, 2015.

Appendage 3111

Activity Based Assessment: BS English Courses

Summary of the Case

BS (English) has recently been started. Its roadmap covers variety of subjects pertaining to English language imparting written and oral communication skills to the students. Whereas its most of the subjects fulfil the criteria of existing BU examination. We have realized that 'Oral Communication and Presentation Skills (ENG-201) need different system of assessment which should prominently be oral. A similar course was identified in BBA and in ACM 26, activity based assessment scheme of examination was introduced.

We have planned a slightly different scheme of assessment, which needs ACM approval. Details of the case including Roadmap and suggested distribution of marks is given.

HR / Establishment Effects: Nil.

Financial Effects: Nil.

Recommendations: The point be approved for implementation in BS (English) program.

Activity Based Assessment "Oral Communication Course (ENG 201)" Of BBA Program

THE CASE:

1. Various courses for grooming BBA students have been merged with present academic curricula. Due to their nature, some of the courses differ in both their conduct as well as assessment methodologies. The student assessment of "Oral Communication" course needs to be based on demonstrated ability of students to perform different tasks. Proposed format for assessment is attached at Annexure.
2. The point was discussed in combined meeting of FBOS of all campuses of Bahria University. The input was obtained from all the campuses. There is a consensus that such courses should have different evaluation system than other evaluations. It is recommended that activity Based assessment should be first used in "Oral Communication" and for oral communication course students should be evaluated on activity basis.
3. The introduction of activity based assessment in the subjects mentioned above may be approved.

Annexure

Sessional Marks:	35
Midterm:	25
Class Participation:	05
Final Examination:	40
Total:	100

1. Sessional

a. Individual Presentation	Marks 03
b. Group Presentation:	Marks 05
c. Reading Assignment and discussion:	Marks 02
d. Role plays:	Marks 10
e. Listening Activity:	Marks:06
f. Impromptu:	Marks: 04
g. <u>Case Analysis:</u>	Marks: 05
<i>Subtotal:</i>	35

2. Midterm: Marks:25

Students shall be evaluated on the basis of the theoretical knowledge they have of the subject. 60% of the course shall be completed before Midterm Examination

Activity Based Assessment Current and Proposed

3. Final Examination:

Current Status	Proposed
Mock Interviews: Marks 15	Mock Interviews: Marks 15
Group Presentations: Marks: 20	Group Presentations: Marks 15
	Listening Activity: Marks 10
Subtotal Marks: 35	Sub Total: 40
Participation Marks: 05	Total: 100
Sub Total 40	
Total: 100	

Appendage 3112

Title: Revision of Roadmap of MS Finance Program – Replacement of MSF 840 Econometric Course with MSF 825 Theory of Finance

Discussion:

In place of Core course ECONOMETRICS an elective course of "Theory of Finance" may be offered as a core course because no MS Finance degree is of any value until and unless the students are educated about the theories of finance. Currently, the course title 'Theory of Finance' is included as an Elective course in the roadmap, it is further requested to bring Theory of Finance out from Elective courses and be offered as Core Course.

HR Implications:

Nil

Financial Implications:

Recommendations:

Revision of Road map of MS Finance Program – Replacement of MSF 840 Econometric Course with MSF 825 Theory of Finance

Appendage 3113

Title: Final Year Project 3 credit hours as an option for the course Specialization VI in Old BBA Road Map and Final Year Project 3 credit hour as an optional course for University Elective.

Discussion:

Final Year projects for the BBA students will enable them to apply their theoretical knowledge to corporate problems and increase their chances of employability.

HR Implications:

Nil

Financial Implications:

- a. Students who register for the BBA project will pay the same 3 credit hour fee as any other course and will be assigned a Supervisor for one time payment of Rs. 8000/ and Rs. 2000 for examiners of the Project Viva.

Recommendations:

- a. Final Year Project 3 credit hours as an option for the course Specialization VI in Old BBA Road Map and Final Year Project 3 credit hour course as an optional course for University Elective.
- b. One BBA project will be limited to maximum three students

Appendage 3114

Title: Inclusion of 'DIGITAL MARKETING' & 'MARKETING PLANNING' Courses as Electives in MS Marketing & Sales

Discussion:

Digital Marketing

With the unfolding of modern technologies and preponderance of Digital Marketing (DM), businesses are doing all that they can to match up with the pace. Internationally, 72% marketers believe that traditional marketing is no longer sufficient and Digital Marketing will make their company revenue to be increased by 30% by the end of 2017. DM is grown exponentially in Pakistan in the last couple of years. It is imperative that this latest business trend be introduced at this advanced level. Students should be made to learn and practice, the intricacies and tools necessary to develop technology to manage DM.

Marketing Planning

It is the process of analyzing one or more potentially interesting marketplaces in order to determine how a business can optimally compete in them. The market planning process typically results in a marketing strategy that can be used to enhance sales for the business producing it. After completing MS in Marketing and Sales, our students should not only be able to exercise the best marketing practices but should also be able to provide consultancy to existing businesses. This subject, therefore, must be a part of the existing pool of subjects in the program. As the world's largest organization for professional marketers, the Charter Institute of Marketing (CIM) has a global reputation as a center of excellence and its qualifications are recognized worldwide.

HR Implications: Nil

Financial Implications: Nil

Recommendations:

Inclusion of MKT 689 DIGITAL MARKETING COURSE as Elective course in MS Marketing and Sales Road Map.

Digital Marketing

1. Recommended Texts

- 1.1. Digital Marketing: Strategy, Implementation and Practice by Dave Chaffey and Fiona Ellis-Chadwick
- 1.2. Internet Marketing: Strategy, Implementation and Practice by Dave Chaffey, Fiona Ellis-Chadwick, Kevin Johnston, and Richard Mayer

2. Course Requirements and Expectations

- 2.1. 3 Quizzes (20-30 minutes duration, 5 marks each)
- 2.2. 3 Assignments (to be decided in consultation with the course participants, 5 marks)

2.3. 1 Project Report (12-15 pages incl. annex and bibliography, 10 Marks) with individual presentations followed by discussions, comments, questions and answers

2.4. 1 Mid Term Examination (Conceptual-type questions, 30 Marks)

2.5. 1 Final Examination (3 hours, conceptual and/or case study type questions, 40 Marks)

2.6. Inquisitiveness, critical and analytical thinking, and hard work are expected from all course participants throughout the course. Display of creativity by the students is encouraged and appreciated. Classes will be conducted using PowerPoint slides which will be shared with the students as the course progresses and few of the classes will be based on the hands-on work on the internet technologies which will require laptops from the participants. If you have read this, please send me an email with subject 'Digital Marketing Zindabad'. Participants are expected to bring their machines in the class, preferably with internet access.

3. Learning Outcomes

Those who successfully complete the module will be able to:

1. Comprehend the trends in the technological landscape related to the marketing
 2. Detect the risks and threats digital transformation might pose to the businesses
 3. Identify the opportunities digitization might provide to the businesses and entrepreneurs
 4. Prepare and plan the digital marketing campaigns for the businesses

4. General and Subject Outcomes

Students should be able to:

1. Prepare the assessment and evaluation of the businesses in new era of technological development
 2. Prepare digital marketing plan for the entrepreneurial and business expansion opportunities
 3. Plan and develop the digital platforms for the online business presence and e-commerce solutions

5. Learning & Teaching

- | | |
|---|---------------|
| 5.1. Lectures, Case Studies, Activity Based, Hands-On Exercises | |
| 5.2. Teaching Contact Hours | 3 hours/ week |
| 5.3. Expected Students' Private Study hours | 3 hours/ week |

6. Course Outline

Wk	Topic	Other Activity
1	Introduction, Digital Marketing Fundamentals	
2	Digital World and Business Environment	Development of digital interface
3	Internet Marketing Strategy	Development of digital interface

4	Digital Marketing Plan	Development of the e-commerce portal
5	The Internet and the Marketing Mix	Development of the e-commerce portal
6	Relationship Marketing in the Digital Age I	Hands on social media mgt tools
7	Relationship Marketing in the Digital Age II	Case Study
8	Delivering Online Customer Experience	Case Study
9	Mid Term Exam	
10	Interactive Marketing Communication I	Case Study
11	Interactive Marketing Communication II	Hands on analytics
12	Maintenance of Online Presence	Hands on Search Engine Optimization
13	Business to Consumer Internet Marketing	Case Study
14	Presentations I	
15	Presentations II	
16	Final Exam	

7. Attendance:

This is a course that deals with some difficult issues in digital marketing, so attendance is essential for good performance.

8. Policy on Scholastic Dishonesty:

Academic dishonesty is defined as cheating, plagiarism, unauthorized collaboration, falsifying academic records, and any act designed to avoid participating honestly in the learning process. Scholastic dishonesty also includes, but is not limited to, providing false or misleading information to receive a postponement or an extension on a test, quiz, or other assignment, and submission of essentially the same written assignment for two courses without the prior permission of the instructor. By accepting this syllabus, you have agreed to these guidelines and must adhere to them. Scholastic dishonesty damages both the student's learning experience and readiness for the future demands of a work career.

Marketing Planning

Course Description

Implementing marketing planning is probably one of the most challenging and often fraught areas of business strategy. Each division and department will be involved in fighting for their share of the budget and appropriate resource allocations, in order to achieve the objectives that are the fundamental basis of the future success of the organization. Ultimately this can often result in one of the most dramatic changes of all, i.e. change in the organizational structure. It is necessary to consider carefully the nature, structure and culture of any organization. in order that it can clearly meet the challenges to achieve a sustainable competitive advantage and remain at the heart of the marketplace.

Learning Outcome:

Explain the role of the marketing plan within the context of the organization's strategy and culture and broader marketing environment (ethics, social responsibility, legal frameworks and sustainability) Conduct a marketing audit considering appropriate internal and

external factors Develop marketing objectives and plans at an operational level Develop the role of branding and positioning within the marketing plan Integrate marketing mix tools to achieve effective implementation of plans

Course Plan

Focus	Details
Introduction to Marketing Planning	Marketing Planning Process Corporate Planning Marketing Strategy Marketing & Social Responsibility
The Marketing Audit	Analysis of micro-economics Analysis of macro-analysis Identify key opportunities
Marketing Planning, Implementation & Control	The setting up of objectives Gap Analysis The balanced scorecard Marketing segmentation and competitive positioning The control process
Promotional Operations	Marketing mix in the context of marketing planning Push and pull strategy Promotional mix Branding & brand value
Product Operations	Product operations Product management Product life cycle New product development Targeting decision-makers
Price Operations	Influence on distribution Marketing issues for distribution Distribution channels Why use intermediaries? Vertical channel integration
Managing Marketing Relationship	Relationship marketing From transactional to relationship management Customer retention management The relationship management plan
International Marketing	Why go international? Levels of international marketing Know your markets Acquiring marketing research Potential barriers to entry
Service Marketing	Business to Business marketing

	Marketing strategies for FMCGs Marketing of services
Non-Profit, SMEs & Virtual Marketing	Charities Non-profit organizations Virtual marketing Marketing of SMEs
Making Marketing Planning Work	Complete cycle of Marketing Planning and possible ways to implement

Books Recommended:

1. Marketing Planning, The official CIM (Chartered Institute of Marketing) Course Book by Karen Beamish, Ruth Ashford (CIM Chief Examiner)
2. Marketing Planning by Malcolm McDonald

Appendage 3115

Title: Inclusion of MSP 629 Project in Controlled Environment (PRINCE2) & MSP 630 Agile Project Management as Electives in the MSPM Program

Discussion:

PRINCE2

PMI-USA is considered to be an institute that provides guidance to Project Managers of all projects. Similarly, PRINCE2-UK is providing guidance and providing international certifications in PM. Apparently, the two institutes were considered to have different terminology. Recently, PMBoK 6th Edition has included some of the aspects of PRINCE2 in it. Besides, countries in Middle East prefer to have professionals who have knowledge of both the Schools of thought. In order to meet the market demand and add versatility to our MS PM program, awareness of PRINCE2 should be made a part of MS PM Curriculum.

AGILE

Agile Project Management has been knocking at the doors of project management institute (PMI) for a few years but could not make any inroads. In the 6 th edition of PMBoK, PMI has not only recognized the existence of Agile Project Management but has included a 168-page Agile Practice guide and supplemented it with their PMBoK. They have also included Agile Certification in their set of internationally acclaimed certificates, recognized all over the world. Since MS project management theme of our MSPM program is based on PMIPMBoK, therefore, it is imperative to include Agile Project Management as an Elective in the pool of Electives for MS PM.

HR Implications: Nil

Financial Implications: Nil

Recommendations:

MSP 629 Project in Controlled Environment (PRINCE2) and MSP 630 Agile Project Management are recommended to be added as Electives to the MSPM Program

PRoject IN Controlled Environment (PRINCE2) Project Management MSP 629 (MSPM)

Course Description:

PRINCE2 is the UK de-facto standard for project management developed by the Government and used in both the public and private sectors. The acronym stands for Projects in Controlled Environments - the "2" refers to its relaunch in October 1996. PRINCE2 is the world's most widely adopted project management method, used by people and organizations from wide-ranging industries and sectors. It is a flexible method that guides through the essentials for

managing successful projects, regardless of type or scale. Built upon seven principles, themes and processes, PRINCE2 can be tailored to meet any specific requirements.

Course Overview:

PRINCE2 is a structured project management method based on principles that originate from lesson learnt from projects, both successful and otherwise. PRINCE2 helps to meet the ever-increasing demand of the dynamic business scenario while dealing with the challenges presented by the risks and complexities of project management. It achieves this through controlled, structured and systemic way of managing projects. PRINCE2 method can be applied to any type of project and can easily be implemented alongside the specialist, industry-specific models or development life cycles.

Course Contents:

No.	Modules	Module Learning Objectives
1	Overview	Identify key management questions addressed by PRINCE2 State the six project performance aspects in PRINCE2 Explain the key concepts of PRINCE2 Identify the four integrated elements of PRINCE2 Describe the customer and supplier environment List the benefits of PRINCE2
2	Organization	State the purpose of the organization theme State the defined roles within organization theme Explain the principle of defined roles and responsibilities Identify how the seven principles are applied in this theme Identify the stakeholders in a project Identify the purpose of Communication Management Strategy
3	Business Case	Define the purpose of the Business Case theme State the principles related to the Business Case theme List down the output, outcome, benefits of the project Explain the purpose of the management products
4	Risk	State the purpose of Risk theme and the principles related to the theme Define risk and differentiate between a threat and an opportunity Differentiate between a risk owner and risk actionee Explain the difference between cause, event and effect when expressing risk
5	Plans	State the purpose of the plans theme Identify the levels of plan and their purpose Explain the levels of plan and their inter-relationship Explain the principles related to the plan theme Describe the product-based planning technique.
6	Quality	Define the purpose of Quality theme Explain the principles related to Quality theme Explain the purpose of management products Explain quality planning and quality control

		Explain the objectives of the quality review technique
7	Change	<p>State the purpose of Change theme</p> <p>Explain the principles related to Change theme</p> <p>Identify the five steps in the issue and change control procedures</p> <p>Explain the activities of the configuration management procedure</p> <p>State the purpose of change budget</p>
8	Progress	<p>Define the purpose of Progress theme</p> <p>Explain the difference between event-driven and time-driven controls</p> <p>Identify the four levels of project management and delegating authority</p> <p>Differentiate between technical stages verses management stages</p> <p>Describe the factors to consider in identifying management stages</p>
9	Starting up a Project	<p>Explain the purpose of Starting up a Project (SU) process</p> <p>Define the objectives of SU process</p> <p>State the context of SU process</p> <p>Identify the activities of SU process</p> <p>Explain the purpose of Project Brief</p>
10	Directing a Project	<p>Explain the purpose of Directing a Project (DP) process</p> <p>Explain the objectives of DP process</p> <p>Describe the context of DP process</p> <p>List the activities of DP process</p>
11	Initiating a Project	<p>State the purpose of Initiating a Project (IP) process</p> <p>Explain the objectives of IP process</p> <p>Explain the context of IP process</p> <p>List the activities of IP process</p> <p>Define the purpose of Project Initiation Documentation</p> <p>Explain how to trigger the first delivery Stage Plan</p>
12	Controlling a Stage	<p>Define the purpose of Controlling a Stage (CS) process</p> <p>Explain the objectives of CS process</p> <p>Explain the context of CS process</p> <p>Identify the activities of CS process</p>
13	Managing Product Delivery	<p>Define the purpose of Managing Product Delivery (MP) process</p> <p>Explain the objectives of MP process</p> <p>Describe the context of MP process</p> <p>Identify the activities of MP process</p>
14	Managing a Stage Boundary	<p>Define the purpose of Managing Product Delivery (SB) process</p> <p>State the objectives of SB process</p> <p>Explain the context of SB process</p> <p>Identify the activities of SB process</p>
15	Closing a Project	<p>Define the purpose of Closing a Project (CP) process</p> <p>State the objectives of CP process</p> <p>Explain the context of CP process</p>

	Identify the activities of CP process
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MSP 630: Agile Project Management (MSPM)

COURSE DESCRIPTION

The course is designed for the beginners, students and professionals of Project Management who wish to develop expertise in understanding Agile and application of agile process in projects.

TEACHING METHODOLOGY

1. Interactive lectures/Discussions
2. Case Studies/Assignments for self-study

LEARNING OBJECTIVES

1. To understand Agile framework.
2. To understand Agile Project Management and how is it different from PMBOK, Incremental and Iterative project management methodologies/frameworks.

***MODULES PLAN**

No.	Modules	Details
1	Introduction to Agile	Introductions Concepts and Functions of Agile
2	Agile Project Management	Agile Process Who is using Agile and why? Agile Manifesto Agile Principles
3	Methodologies and Frameworks I	Agile Methodologies and Frameworks <ul style="list-style-type: none"> ○ Scrum ○ Extreme Programming (XP) ○ Lean Software Development
4	Methodologies and Frameworks II	Agile Methodologies and Frameworks <ul style="list-style-type: none"> ○ Feature Driven Development (FDD) ○ Agile Unified Process (AUP) ○ Crystal ○ Test Driven Development (TDD) - a Tool ○ Agile Modeling (AM) - a Modeling Tool
5	Comparison between Agile and frameworks	PMBOK 6th Edition for Agile Iterative Models Waterfall Models Incremental Model
6	Initiating Project - I	Initiating Projects Iterative Scope Iterative Contracts
7	Agile Estimating I	Sizing Sizing techniques Agile Estimation Story Points Agile Estimating Velocity Forecasted Velocity

8	Agile Estimation II	Various sizing activities <ul style="list-style-type: none">○ Wideband Delphi○ Planning Poker○ Affinity Estimates
9	Planning Project - I	Planning Projects Adaptive Planning Designing Product Roadmap
10	Planning Project – II	Planning by Date Planning by Scope Other KA planning
11	Iterating Projects I	Product Backlog Grooming Cycle Time Cumulative Flow Diagram
12	Iterating Projects II	Kanban Modes Work in Progress Limit Value Stream Mapping
13	Controlling Projects	Variance and Trend Analysis Agile Earned Value Management
14	Closing Projects	External Stakeholders Engagement Closing Knowledge Areas Retrospective and Lessons Learned
15	Tools and Techniques	Discussion on applying Tools and Techniques to multiple Knowledge Areas
16	Code of Ethics and Professional Conduct	Code of Ethics Compliance with Rules and Policies Qualification, Experience & Performance of Professional Services

Appendage 3116

Title: Inclusion of the Chinese Language in BBA program as 3 Credit Hour Course

Discussion:

In the context of the CPEC and extended involvement of Chinese companies in Pakistan, it is the need of the hour that the relevant and competent workforce be prepared according the market need. In this regard, a dedicated course on the Chinese language may be introduced at undergraduate level.

It was further informed in the meeting that the HoD (SS&H) is vigorously pursuing the inclusion of this course 'Learning Chinese Language', therefore it was also proposed that the department may coordinate with the SS&H Department for further formalities i.e., preparation of outlines etc.

HR Implications:

Hiring of Chinese speaking AS VFM

Financial Implications:

Payment to Chinese teaching VFM

Recommendations:

- a. It is recommended that Chinese language 3 credit hour course may be approved as a University Elective for the NEW BBA Road map approved in 2016
- b. It is recommended that for the Old BBA Road Map 2011, Chinese language 3 credit hour course may be given as optional course in lieu of Specialization VI.

Chinese Language Course (CLE 401) BBA-Program

Learning a second language, any language, will always be a valuable investment of time and effort. Language-learning automatically stimulates the mind, helps gain multi-tasking skills, and can even boost intelligence. Besides having intellectual benefits, learning a new language can also be a gateway into a new culture, and allows for a better understanding of certain people and their customs.

Chinese is now considered as an important language worldwide because of its increase in presence in the business world. Chinese are involved in many businesses throughout the world. Learning their language would be the best way to open the doors to a lot of business and educational opportunities.

Course Material is obtained from Confucius Institute Headquarters (Hanban). Their HSK Standard Course Level-1 is being taught in many institutes in Pakistan. The course material also includes a work book. Audi-video clips are also provided that help in acquiring the correct pronunciation and expression style. The material includes English translation and has Pictures that make it easy to comprehend. Every lesson comprises of four parts, Listening, Reading, Pronunciation and Writing Chinese Characters.

No.	Module	Learning Objectives
1	Hello	Reading and writing the monosyllabic and disyllabic words Listening the audio-video clips
		Matching the pictures with words How to write Chinese alphabet
2	Thank you	Learning how to greeting Learning common day-to-day used items How to interact in dialogues How to write pair of characters Practicing single-component characters
3	What's your name	Listen to the words and phrases and decide whether the pictures are right or wrong Listen to the dialogues and choose the right picture for each dialogue Listen to sentences and answer questions Listen to the recording and mark the syllables you hear Trace the corresponding stroke in each pair of characters
4	She is my Chinese Teacher	Listen to the sentences and answer questions Look at the pictures and readout the words in Chinese Read the questions and choose the right answer to each of them Read the sentences and choose the right words to fill in the brackets Listen the recording and mark the syllables you hear
5	Her daughter is 20 years old this year	Learning the numbers Look at the picture and decide whether the given words are write or wrong Read the questions and choose the right answer to each of them Read the sentences and choose the right words to fill in the brackets Listen the recording and mark the syllables you hear
6	I can speak Chinese	How to communicate effectively. Dialogues, Telephone calls, Instructions, Orders. Ways to conduct verbal communications.
7	What's the date today	Learning days, weeks, months and years Listen to questions and answer the questions Read the questions and select the right answer
8	I'd like some tea	Learning the names of food and grocery items Writing the names of all items studied during the class
9	Where does your son work	Learning about places: Store, Hospital, School and writing them in Chinese
10	Can I sit here	Learning about places around the world Learning some more characters and their writing style
11	What's the time now	How to communicate time Listen to recording and read after. Paying attention to the pronunciation of the neutral tones.
12	What will the weather be like tomorrow	Learning about the seasons and weather. Looking at similarly shaped characters and making a comparison
13	He is learning to cook Chinese food	Learning about food, cooking of food, utensils and related food items. Looking at the characters and group the characters with same radical Looking at the stroke order and practicing the single-component

characters		
14	She has bought quite a few clothes	Learning about dresses and things and clothes used for all weathers
15	I came here by air	Learning about modes of transportation and their using techniques

Appendage 3117

Chinese Language (Certificate and Diploma), Launch

Proposal Sponsored by: HOD Humanities and Social Sciences

Department, BUKC Summary of the Case

The Department has planned certificate and diploma level courses in Chinese language, to be launched in Fall 2018. Feasibility report of the program has been prepared according to the format provided in ACM-27. Detailed report is attached as Appendage-5. It appears logical to move ahead in launching this program in view of the marketing requirements emerging out of Chinese business activities in Pakistan.

HR / Establishment Effects: Would require additional HR and infrastructures, details are covered in the feasibility report.

Financial Effects: Details are covered in the feasibility report.

Recommendations: The point may kindly be approved for launching the program in Fall 2018.

Proposal for Launching Chinese Language Program (HSK and BCT-Business Chinese Teaching)

A. ACADEMIC DETAILS	
1	Faculty/Department: Humanities and Social Sciences, BUKC
2	Name of the Program: Chinese Language Program
3	Mission of the Program: The Chinese program is to enable participants in acquiring understanding of Chinese language especially the oral communication. At the same time, the program would give them cultural awareness and Chinese way of business understanding in contemporary environments of OBOR and CPEC.
4	Objectives of the Program: <ul style="list-style-type: none"> ■ To enable participants to communicate in Chinese language in dealing with business matters and in organizational functioning. ■ To give them basics of Chinese language writing and use of daily use words in business and organizational working. ■ To make the students learn and understand the rich and different culture(s) of China, so that they are more culturally aware and ready to be global citizens. ■ To enable the participants to communicate in writing in Chinese language in daily use language and words.
5	Outcomes of the Program: Diploma/Certificate holders of Chinese Language Program will be able to: - <ul style="list-style-type: none"> ■ Communicate with reasonable proficiency in Chinese language after attending the program. ■ Understand different cultures of China so that they are more culturally aware and ready to get into joint business ventures. ■ Communicate with Chinese people for Business and Work, especially related to CPEC. □ Obtain basic skills in Chinese writing skills and styles.

- 6 **Rationale for the Program:** With CPEC progressing, Pakistan and China are getting more and more closer in business and economic matters. China being a close aid of Pakistan and major Financer of CPEC, is bringing a lot of Industry and Business to Pakistan. With all this happening in the region a great number of job opportunities are being creating, especially for those who can communicate with the Chinese. As the Chinese, do not have very good proficiency of English, it would be a beneficial for job seekers to have Chinese Language Proficiency. With Chinese language proficiency, Pakistani people from all fields, can get easily hired for the jobs related to CPEC. Moreover, with Chinese being one of the languages you speak, you can also have an opportunity to do business with China and avail study opportunities in China.
- 7 **Brief Description of the Program:**
- We plan following two models of the program ie certificate courses and diploma in Chinese language.
 - Certificate of 6 months and Diploma of 12 months would be conducted as per intake of the participants.
- 8 **Duration:**
- Certificate Course: 6 Months (one Semester)
 - Diploma Course: 12 Months (Two Semesters)
- 9 **Venue(s): On Site/Off Site/Both On & Off Site (tick one/strike-through the ones not applicable; if Off Site, give details):** Department of Humanities and Social Sciences, BUKC
- 10 **Programme Scheduling Format:**
Morning/Evening/Weekend (tick one/strike-through the ones not applicable): Evening /
Weekend
Bi-Semester/Trimester/Semester Summer Session/Annual/Bi-Annual (tick one/strike-through the ones not applicable): Semester System
- 11 **Proposed Date of Commencement:** Fall 2018
- 12 **Mode of Study/Examination:** It will follow the BU rules for distribution of marks; however, conduct of Sessional Marks and Paper Settings would also have oral communication testing.
- 13 **Additional Faculty Member(s) Required:** (*Indicate if there is a requirement for additional faculty members, fulltime/visiting, along with qualifications.*)
- One Native Speaker (Visiting)
 - Two Chines Language Qualified Non Native (Visiting)
- 14 **Additional Skilled-Worker(s) Required:** (*Indicate if there is a requirement for additional Skilled Staff, fulltime/part-time, along with their qualifications/skill sets.*): Nil
- 15 **Additional Classroom(s) required:** (*The requirement is to include the number of classrooms and their capacities.*) Nil
- 16 **Additional Requirement for Laboratories:** (*The requirement is to include the number of laboratories, their equipment and their capacities.*): Language lab.
- 17 **Additional Requirement for Books, Subscriptions, Memberships to Online Research Sites/ Repositories:**
- Basic Books on Chinese Language.

	Advance Books on Chinese Language and Culture
18	Minimum Entry Level: HSSC / Equivalent
19	Admission Criteria: BU admission policy except entry test shall be followed.

(Indicate if there will be any examination requirement, additional to or different from the BU Academic Rules or Examination Policy in vogue). BU Examination Rules.

21	Number of Admissions Expected for First Intake: 20 to 30
22	Number of Admissions Planned/Expected for Subsequent Intakes: 30 – 40 per
23	FBOS: <i>(Indicate the FBOS meeting reference and Item No.):</i> 17 th FBOS
24	Competent Authority: <i>(Indicate the File No & date; reproduce the decision)</i>
25	Complete Plan of Studies, inclusive of complete Roadmap: <i>(Attach as Annex 'A')</i>
	Course Outlines, Descriptions, Pre-Requisites & Readings (Compulsory & Recommended) <i>(Attach as Annex 'B')</i>

B. FINANCIAL DETAILS

1	Source of Funding: BU: Fully/Partially: BU Public Sector (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> NNGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> INGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> UN/IGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i>
2	Degree Duration: Annual or Semester System: <ul style="list-style-type: none"> ▪ Certificate Course: 6 months (One Semester) ▪ Diploma Course: 12 Months (Two Semesters)
3	Expected fee to be charged based on Cost & Benefits Analysis: <i>(show working)</i> Suggested Model to be followed: PGD (L&PM)
4	Expected Number of students for 1st & 2nd Intakes: 60
5	Expected Earning from first two Intakes (B5): <i>(Show working)</i> <ul style="list-style-type: none"> ▪ Tuition Fee: $32400 \times 60 = 19,44,000$ ▪ Admission Fee and Other Charges: $8900 \times 60 = 5,34,000$ ▪ Total: 24,78,000 (2.5 Million Approximate)
6	Expected Earnings for the Next Five Years (B6): <i>(show working)</i> : Rs 22,11,000 per year for every succeeding year.
7	Total Estimated Salaries of all Additional Human Resources per annum (B7): <i>(Show working)</i> Faculty Hiring: Rs 16,00,000
8	Cost of Additional Laboratory Equipment/Tools (B8): <i>(show working)</i> : Rs 200,000 (Software)
9	Cost of Additional Classrooms (B9): <i>(Include furniture, technical aids etc)</i> : Nil
10	Cost of Additional Books, Subscription & Memberships to on-line Sites/Repositories (B10): <i>(show details)</i> : 100,000 (approximate)
11	Off-Site rental Expenses and Cost of other Fixtures (B11): <i>(Show details)</i> : Nil
12	Miscellaneous Expenses required for Starting the Program (B12): <ul style="list-style-type: none"> - Advertisement: 50,000 - Printing & Stationery: 10,000 - Admin Cost: 30,000

- Any other: 10,000
- **Total:** 100,000

13 Annual Recurring Expenditures in Subsequent Years (B13):

- Salaries: 24,00,000
- Rentals: -

	<ul style="list-style-type: none"> - Subscriptions/Memberships: - - Advertisements: 100,000 - Printing & Stationery: 100,000 - Admin Cost: 500,000 - Any other: 100,000 - Total: 32,00,000
14	Total Cost of the Program (B14): [Add B (7) to B (12)] PKR 20,00,000
15	Net Cost of the Program (B15): [Subtract B (1) from B (14)] 24,78,000 – 20,78,000 = Rs 400,000
16	Net Earnings in First Year (B16): [Subtract B (15) from B (5)]: Rs 400,000
17	Projected Annual Gross Earning in Subsequent Years (B 17): (show details & working; add 10% towards all expenses in subsequent years.): Since the cycle completes in one year, net amount would almost remain the same with slight variations as per strength of students
18	Projected Annual Net Earning in Subsequent Years: [Subtract B (13) from B (17)]: Since the cycle completes in one year, net amount would almost remain the same with slight variations as per strength of students

Annex A**Roadmap: Chinese Language****Certificate Course**

S.No	Codes	Course	Level	CH	Pre-requisite
1	CHL-101	Introduction to Chinese Language	Core	3	
2	CHC-102	Overview of Chinese Culture	Core	3	
3	CHL-102	Listening I	Core	3	
4	CHS-103	Speaking I	Core	3	

Diploma Course**Semester 1**

S.No	Codes	Course	Level	CH	Pre-requisite
1	CHL-101	Introduction to Chinese Language	Core	3	
2	CHC-102	Overview of Chinese Culture	Core	3	
3	CHL-102	Listening I	Core	3	
4	CHS-103	Speaking I	Core	3	

Semester 2

S.No	Codes	Course	Level	CH	Pre-requisite
1	CHL-123	Listening II	Core	3	
2	CHS-124	Speaking II	Core	3	
3	CHR-125	Reading I	Core	3	
4	CHW-125	Writing I	Core	3	

Annex B

Course Descriptions: Chinese Language

Course Description: Certificate Course

Introduction to Chinese Language

The course will start the course by introducing Chinese Language as a whole to the students. The Course will introduce the language to the students providing basic knowledge about it.

How Chinese is Different from other languages Chinese Pronunciation and the tones;

speaking and listening Chinese; Chinese characters;

Elementary patterns of Chinese grammar

Overview of Chinese Culture

The course will introduce students to the new world of Chinese Culture. As a language can be best learned by knowing the culture of the people who speak this language. Introduction to Chinese Culture will enhance students Chinese Language learning

experience. Chinese Culture
Chinese Philosophy; Famous philosophers Chinese Cuisine

Chinese People
Chinese Arts

Listening I

The Course will introduce students to Chinese Language, specially focusing on listening. As Listening is the base of learning a language, the course would help students to acquire language in a better way

To follow simple classroom instructions;

To understand words, phrases, and short sentences aided by context and limited to the learned vocabulary

Writing: The fundamental rules of the Chinese script; Basic Chinese radicals;

Handwriting and correct stroke orders;

To make simple sentences with basic Chinese syntax;

Begin to express oneself in short notes, letters, essays, etc.

Speaking I:

The course is designed to introduce Chinese speaking to the students. The basics of Chinese speaking including Phonetic training, frequently-used vocabulary and sentence patterns, communication skills in their daily life and study are part of this course.

Command of the pinyin system;

Chinese pronunciation and the four tones;

To speak simple sentences with correct grammar;

To provide answers grammatically consistent with the questions;

To conduct elementary communicative exchanges

Recommended Books:

“Chinese Course Book” and “Road to Success” published by Beijing Language and

Culture University Press
“Intermediate Spoken Chinese” and “Advanced Spoken Chinese” published by Beijing University Press
“Home with Kids” published by World Publishing Company “China Panorama” published by Higher Education Press

Chinese Made Easy. 2nd Edition, simplified characters’ version. By Yamin Ma and Xinying Li.

**Course Description: Certificate
Course Introduction to Chinese Language**

The course will start the course by introducing Chinese Language as a whole to the students. The Course will introduce the language to the students providing basic knowledge about it.

How Chinese is Different from other languages
Chinese Pronunciation and the tones;
speaking and listening
Chinese; Chinese characters;
Elementary patterns of Chinese grammar

Overview of Chinese Culture

The course will introduce students to the new world of Chinese Culture. As a language can be best learned by knowing the culture of the people who speak this language. Introduction to Chinese Culture will enhance students Chinese Language learning experience.

Chinese Culture

Chinese Philosophy; Famous philosophers Chinese Cuisine
Chinese People
Chinese Arts

Listening I

The Course will introduce students to Chinese Language, specially focusing on listening. As Listening is the base of learning a language, the course would help students to acquire language in a better way

To follow simple classroom instructions;
To understand words, phrases, and short sentences aided by context and limited to the learned vocabulary
Writing: The fundamental rules of the Chinese script; Basic Chinese radicals;
Handwriting and correct stroke orders;
To make simple sentences with basic Chinese syntax;
Begin to express oneself in short notes, letters, essays, etc.

Speaking I:

The course is designed to introduce Chinese speaking to the students. The basics of Chinese speaking including Phonetic training, frequently-used vocabulary and sentence patterns, communication skills in their daily life and study are part of this course.

Command of the *pinyin* system;
Chinese pronunciation and the four tones;

- To speak simple sentences with correct grammar;
- To provide answers grammatically consistent with the questions; To conduct elementary communicative exchanges

Listening II

The course is designed to improve the listening skills of Chinese language learners. In this course the students are expected to develop listening skills from word to sentence oriented listening. Comprehension level up to daily life conversation acquired.

- To understand all major sentence patterns;
- Comprehension on studied topics within the second-year vocabulary;
- Introduction to Chinese media and popular cultural materials

Speaking II

Speaking skills are more focused in this course, students are taught to make full use of their acquired language. The use of tones and learned vocabulary is also done. Students are expected to speak sentences and short paragraphs with this course.

- To be more comfortable with Chinese pronunciation and the tones;
- Command of all major sentence patterns;
- To converse in short paragraphs;
- Begin to explain, compare, describe, narrate, etc.;
- To perform tasks and solve problems in everyday linguistic situations

Reading I

The course would help the students develop reading skills. The students would be helped to learn reading Chinese, the basics.

- To understand the elementary textbook materials within the studied vocabulary;
- To understand all major sentence patterns;
- Consistent and full comprehension of textbook materials on familiar topics; To use the Chinese dictionary

Writing I

The basics of Chinese writing is taught in this course. Students, with this course would be able to write basic characters of Chinese language. The students will know the fundamental rules that govern Chinese transcript. With this course the students will be able to learn Chinese handwriting and correct strokes.

- The fundamental rules of the Chinese script;
- Basic Chinese radicals;
- Handwriting and correct stroke orders;
- Able to choose best syntax patterns in given contexts;

Recommended Books:

- “Chinese Course Book” and “Road to Success” published by Beijing Language and Culture University Press
- “Intermediate Spoken Chinese” and “Advanced Spoken Chinese” published by Beijing University Press
- “Home with Kids” published by World Publishing Company
- “China Panorama” published by Higher Education Press
- Chinese Made Easy. 2nd Edition, simplified characters version. By Yamin Ma and Xinying Li.

Appendage 3118

Subject: OBE Implementation Framework in Engineering Departments at BU

Background to the Case

Engineering Departments at BU are implementing Outcome Based Education (OBE) in their undergraduate programs since Fall'2016. The progress of OBE implementation was presented to BU management in a meeting chaired by Honorable Rector. It was decided to present the implementation framework in the next ACM. The work on defining initial PEOs, PLOs and CLOs and correlating them with University Vision and Mission, Departmental vision and program mission is completed by each engineering department of BU (it will be presented by each department as separate agenda point). There is a need to establish a framework to implement CQI process which is an integral part of OBE system.

Financial Effect Nil

Recommendations:

The attached OBE Implementation framework (annexure-1) may be considered for approval.

OBE Implementation Framework in Engineering Departments at BU

The OBE model has three Continual Quality Improvement (CQI) cycles to update PEOs, PLOs and CLOs at periodic intervals which is shown in Figure 1. There is need to define the fine details of each CQI cycle.

The overall CQI cycle applied on PEOs, PLOs and CLOs is described in Figure 1 and is detailed below:

1. Process of Assessment of PEOs, PLOs and CLOs:

This will be a periodic process for assessment of each of PEOs, PLOs and CLOs.

1.1 PEO Assessment

The PEOs are assessed four years after graduation of a batch. In order to assess a PEO, information shall be collected using following sources:

Employer
Survey Forms
Alumni Survey
Forms CAC
feedback

1.2 PLO Assessment

The PLOs are assessed at the end of each academic year (June - August) using the following assessment tools:

PLO based result assessment (Combination of all course assessments) Internship Survey Forms

CSP Feedback forms

Exit Forms – Graduating Students (Direct Method).

1.3 CLO Assessment

The CLOs are assessed at the end of the semester using the following assessment tools:

Individual course survey summary by students (Direct Method) Course Review Report by Instructor (Direct Method)

CLOs based Result Assessments (through exam, quiz, assignments and projects) (Direct Method)

2. Process of Analysis of Assessment results of PEOs, PLOs and CLOs:

Each engineering department shall have its own OBE implementation team which will be responsible to analyze the assessment results of PEOs, PLOs and CLOs. The team shall be composed of subject specialist FMs/ cluster heads and selected FMs. The internal working of the Departmental OBE Implementation Team is shown in Figure 2. This team shall acquire the required data (section 1), perform the analysis and finally give its recommendations to update CLOs, PLOs and PEOs, if required.

3. Process of update and establishing of PEOs, PLOs and CLOs:

The recommendations of the OBE implementation team shall be discussed first at DBOS level and recommendations shall be forwarded to FBOS, if required. Any change limited to change in CLOs shall be approved by the DBOS and intimated to FBOS; whereas changes in PLOs and PEOs shall be forwarded for approval to ACM after recommendation from FBOS.

4. Process of reviewing of PEOs, PLOs and CLOs:

Following is the review process of PEOs, PLOs and CLOs. Figure No. 03 presents the CQI cycle for the reviewing process of PEOs, PLOs and CLOs.

4.1 Process of Reviewing PEOs

Process of reviewing of PEOs shall be based on KPIs set by each department. KPIs shall be set for the attainment of each PEOs based on the PEO assessment (section 1.1). KPIs shall be recommended by department at DBOS and will be forwarded for further approval at FBOS.

4.2 Process of Reviewing PLOs

Process of reviewing of PLOs shall be based on data collected by PLO assessment (section 1.2). A PLO shall be revisited in case an overall satisfactory level of that PLO goes below 70%. Recommendation (or mapping) shall be discussed at DBOS and shall be forwarded for further approval at FBOS.

4.3 Process of Reviewing CLOs

Process of reviewing of CLOs shall be based on data collected by CLO assessment (section 1.3). A CLO shall be revisited in case an overall satisfactory level of that CLO goes below 60%. Recommendation (or mapping) shall be discussed by and reviewed by OBE Implementation team and shall be forwarded for further approval at DBOS.

5. Clearing/Passing PLOs and CLOs in order to attain Graduate Status for Engineering Department

A CLO shall be cleared if a student takes at least 50% marks in that CLO.

In order to clear a PLO, 60% of CLOs related to that PLO should be cleared.

If failed (or lagging) to clear PLO at the time of assessment (at the end of 6th, 7th or 8th Semester end), Students shall be required to do one or more of the following on the recommendations of OBE Team of the department on the basis of deficiency:

- Attend workshop related to the said PLOs
- A Comprehensive assignment in order to meet that PLOs
- Repeat the course

Appendage 3119

Subject: Updated PEOs and PLOs of BEE Program

Background to the Case

- For OBE system implementation of BEE Program, the university vision, program mission, program educational objectives, program learning outcomes, course learning outcomes should be defined and mapped hierarchically.

University Vision

To become an internationally recognized university that contributes towards the development of nation through excellence in education and research.

University Mission

To remain committed to the attainment of highest standards in teaching, learning and research, at par with the international standards.

- Department Vision, Program Mission and Program Educational Objective (and mapping) need to be designed or updated

Recommendations:

Following is the detail of each of afore-mentioned items.

Department Vision

A commitment to prepare students for professional and research activities with an ability to learn independently, within a diverse multi-cultural environment, and enabling them to become the global leaders in their respective fields.

Program Mission

The mission of BEE program is to produce ethically sound and technically competent electrical engineers who can serve in the diverse fields of research, design & development, teaching, system installation, support and maintenance.

Program Educational Objectives

Graduates from Bachelor of Electrical Engineering program are expected to achieve the following Program Educational Objectives and would possess the ability to:

PEO 1: Professional Employment

Find employment related to Electrical engineering in the fields of design, development, research, operations and maintenance, technical sales and marketing as well as explore entrepreneurship and find jobs in diverse areas like business, law, NGOs, media etc.

PEO 2: Technical competence

Demonstrate technical competence in the field of electrical engineering through finding solutions to complex problems, design new products, and use their analytic, engineering and problem solving skills to provide value to their industry.

PEO 3:Professional growth

Pursue their professional growth by taking up higher studies for advanced degrees, learn new technologies as they emerge, develop skills in the usage of new tools, undertake professional development courses and keep themselves current in their chosen specialization.

PEO 4:Social Engagement

Work in multicultural teams, provide leadership in their area; be sensitive to ethical, moral, environmental, gender and societal issues and leave an impact of their work on the society and the community.

1. Program Learning Outcomes

Following are the PLOs as approved by PEC.

PLO 1 (Engineering Knowledge): An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO 2 (Problem Analysis): An ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO 3 (Design/Development of Solutions): An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PLO 4 (Investigation): An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

PLO 5 (Modern Tool Usage): An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO 6 (The Engineer and Society): An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

PLO 7 (Environment and Sustainability): An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

PLO 8 (Professional Ethics): Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PLO 9 (Individual and Teamwork): An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.

PLO 10 (Communication): An ability to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PLO 11 (Project Management): An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

PLO 12 (Lifelong Learning): An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

2. Mapping of PEOs on Departmental Vision and Program Mission to PEOs

PEOs	Department Vision	Program Mission
PEO 1:	✓	✓
PEO 2:	✓	✓
PEO 3:	✓	✓
PEO 4:	✓	✓

3. Mapping of PLOs on PEOs

PLO	PEO1	PEO2	PEO3	PEO4
PLO 1: Engineering Knowledge	✓	✓		
PLO 2: Problem Analysis		✓		
PLO 3: Design/Development of Solutions	✓	✓		
PLO 4: Investigation	✓	✓	✓	
PLO 5: Modern Tool Usage	✓	✓	✓	
PLO 6: The Engineer and Society				✓
PLO 7: Environment and Sustainability				✓
PLO 8: Professional Ethics				✓
PLO 9: Individual and Teamwork	✓		✓	✓
PLO 10: Communication	✓		✓	
PLO 11: Project Management	✓		✓	
PLO 12: Lifelong Learning			✓	

Financial Effect

Nil

Recommendations:

The updated program mission, PEOs, PLOs and their hierarchical mapping may please be approved.

Appendage 3120

Updated PEOs and PLOs of BCE Program

Background to the Case

- As per PEC new regulation, “it should be ensured that the program mission and objectives are aligned with the vision of the institution. Program mission and objectives should be articulated and made known to everyone in the institution through institutional publications and websites.”
- In this regard, revisions in program’s mission, program’s educational objective and learning outcomes have been carried out to ensure proper alignment of all of these aspects.

University Vision

- To become an internationally recognized university that contributes towards the development of nation through excellence in education and research.

University Mission

- To remain committed to the attainment of highest standards in teaching, learning and research, at par with the international standards.
- Department Vision, Program Mission and Program Educational Objective (and mapping) need to be designed or updated

Recommendations:

1. Department Vision

The Computer Engineering Department is committed to prepare students for professional and research activities with an ability to learn independently, within a diverse multi-cultural environment, and enabling them to become global leaders in their respective fields.

2. Program Mission

The mission of Bachelor of Computer Engineering program is to produce ethically sound and technically competent graduates who can fulfill the evolving needs of academia, industry and society.

3. Program Educational Objectives:

Graduates of Computer Engineering Program are expected to achieve the following Program Educational Objectives for BCE program.

PEO 1: Attain an ability to identify and solve challenging problems in their professions by applying theory, principles and modern tools learnt during degree program.

PEO 2: Demonstrate effective communication as an individual or team player with strong managerial and entrepreneurial skills.

PEO 3: Maintain highest ethical and professional standards in pursuing their careers.

PEO 4: Engage in life-long learning to continually polish their professional capabilities for their personal growth and the betterment of society.

4. Program Learning Outcomes:

The Computer Engineering program prepares students to attain the program educational objectives by ensuring that students demonstrate achievement of the following graduate attributes.

PLO-1 Engineering Knowledge: An ability to apply knowledge of mathematics, computer engineering fundamentals and computer engineering specialization to the solution of complex engineering problems.

PLO-2 Problem Analysis: An ability to identify, formulate, research literature and analyze complex computer engineering problems reaching substantiated conclusions using engineering and natural sciences principles.

PLO-3 Design/Development of Solutions: An ability to design solutions for complex computer engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health & safety, cultural, societal, and environmental considerations.

PLO-4 Investigation: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

PLO-5 Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO-6 The Engineer and Society: An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

PLO-7 Environment and Sustainability: An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

PLO-8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PLO-9 Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.

PLO-10 Communication: Ability to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PLO-11 Project Management: Ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

PLO-12 Lifelong Learning: Ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

PEOs and PLOs Mapping

		PEO 1	PEO 2	PEO 3	PEO 4
PLO 1	Engineering Knowledge	✓			✓
PLO 2	Problem Analysis	✓			
PLO 3	Design/Development of Solutions	✓		✓	
PLO 4	Investigation	✓			
PLO 5	Modern Tool Usage	✓			✓
PLO 6	The Engineer and Society			✓	✓
PLO 7	Environment and Sustainability			✓	✓
PLO 8	Ethics			✓	
PLO 9	Individual and Team Work		✓		
PLO 10	Communication		✓		✓
PLO 11	Project Management	✓	✓		✓
PLO 12	Lifelong Learning	✓			✓

Financial Effect

Nil

Recommendations:

- The updated program mission, PEOs, PLOs and their mapping may please be approved.

Appendage 3121

Updated PEOs and PLOs of BSE Program

1. Background to the Case

1. As per PEC new regulation, “it should be ensured that the program mission and objectives are aligned with the vision of the institution. Program mission and objectives should be articulated and made known to everyone in the institution through institutional publications and websites.”
2. In this regard, revisions in departmental vision and program’s mission, educational objective and learning outcomes have been carried out to ensure proper alignment of all of these aspects for BSE program.

2. Financial Effect

Nil

3. Recommendations:

Revised Departmental Vision, Program Mission and Educational Objectives & Learning Outcomes at (Annex A) is recommended for approval.

Annex A

Vision Statement of the Department

Department of Software Engineering aims to be recognized as a premier institution in Software Engineering education and research by producing graduates who can contribute to the society and profession through the application or creation of relevant knowledge, independent learning and leadership.

Program Mission - Bachelor of Software Engineering

The mission of Bachelor of Software Engineering program is to prepare technically strong Software Engineers who can contribute effectively towards the nation, society and the world at large through effective problem solving skills, application of engineering knowledge, leadership and healthy lifelong learning attitude.

Program Educational Objectives

Software Engineering department aims to deliver a strong and coherent Software Engineering program for the development of skilled Software Engineers. The curriculum is inline with PEC and HEC regulations to equip students with latest skills for industry and research activities. Software Engineering graduates should achieve the following educational objectives:

PEO-1: Graduates should demonstrate competence in applying Software Engineering knowledge & practices in various phases of software/system development life cycle in their respective professional career.

PEO-2: Graduates should demonstrate an ability to work as a member and/or leader in a team with a strong sense of societal context, professional ethics and effective communication skills in professional practice.

PEO-3: Graduates should demonstrate sustained learning by pursuing life-long learning through graduate studies, professional development or managerial/leadership skills.

Program Learning Outcomes

PLO 1: Engineering Knowledge: An ability to apply knowledge of computer science, software engineering fundamentals and an engineering specialization to the solution of complex software engineering problems.

PLO 2: Problem Analysis: An ability to identify, formulate, research literature and analyze complex software engineering problems reaching substantiated conclusions using software engineering principles, natural sciences and engineering sciences.

PLO 3: Design/Development of Solutions: An ability to design solutions for complex software engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PLO 4: Investigation: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis, and interpretation of experimental data, and synthesis of information to derive valid conclusions.

PLO 5: Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO 6: The Engineer and Society: An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

PLO 7: Environment and Sustainability: An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

PLO 8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PLO 9: Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.

PLO 10: Communication: An ability to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PLO 11: Project Management: An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

PLO 12: Lifelong Learning: An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

PEO and PLO Mapping

Program Learning Outcomes (PLOs)	Program Educational Objectives (PEOs)		
	PEO-1	PEO-2	PEO-3
PLO 1: Engineering Knowledge	✓		
PLO 2: Problem Analysis	✓		
PLO 3: Design/Development of Solutions	✓		
PLO 4: Investigation	✓		
PLO 5: Modern Tool Usage	✓		
PLO 6: The Engineer and Society		✓	
PLO 7: Environment and Sustainability		✓	
PLO 8: Ethics		✓	
PLO 9: Individual and Team Work		✓	
PLO 10: Communication		✓	
PLO 11: Project Management		✓	
PLO 12: Lifelong Learning			✓

Appendage 3122**NEW PROGRAMME PROPOSAL - BACHELOR OF SCIENCE IN SOCIOLOGY**

A. ACADEMIC DETAILS	
1	Faculty/Department: Department of Humanities and Social Sciences, Bahria University, Islamabad Campus (BUIC)
2	Name of the Programme: Bachelor of Science (BS) in Sociology
3	Mission of the Programme: Promoting positive attitude and tolerance among students as members of society
4	Objectives of the Programme: To equip the students with sociological knowledge and perspectives for understanding societal problems and providing viable solutions. To train the students in terms of their intellectual and professional development. To impart sociological discourses & techniques among students for understanding the problems and issues of social institutions. To prepare the sociologists who can contribute to socio-cultural & economic growth and sustainable development of the country.
5	Outcomes of the Programme: To make the students healthy social members of the society who should serve humanity. To bring patience, tolerance and better communication skills in the students through sociological knowledge. Application of sociological knowledge in everyday life. To pursue a professional and successful career in their field of specialization.
6	Rationale for the Programme: a. Sociology offers a breadth of subject matter that any other field in the sciences struggles to match. Sociology as a subject came in Pakistan in University of the Punjab in 1952 for the first time and was gradually introduced in many universities. Later, University of the Punjab and University of Karachi became able to establish their departments. Sociology as a discipline is being taught in many reputed universities and institutions at different levels (Intermediate, Bachelors, Masters and Doctoral). A significant number of students are enrolled in Sociology Programs and a considerable number of the sociology graduates have completed their degrees and are working as Civil Servants, Social welfare Officers, Criminologists, Population Officers, Community Mobilizers, Planners, Field Workers, Academicians, Researchers, Counsellors and so on. b. Currently, there are only three public sector universities - IIU, Arid Agri Univ & QAU in twin cities offering BS Sociology Program and are getting good number of students along with PG programmes. BS in Sociology at BU will also make the graduates ready for higher studies as well as making them ready to achieve the professional excellence.

- c. This course has high reputation in terms of its employability as the graduates have scope in teaching, research, civil service, management, media, politics, industry, administration & NGOs. It is an excellent spring board to a variety of

	<p>careers. Islamabad is hub of development sector and the development sector offers a valuable array of jobs to the graduates with majors in Sociology.</p> <p>d. Moreover, the program will not only bring revenue to the university but also a source of marketing of the institution as it will provide a substantive portion of such students to professional segment of the society.</p>
7	<p>Brief Description of the Programme: The dept of HSS has planned to launch the full fledge separate degree program i.e. BS in Sociology (Evening) w.e.f. Fall-2018. It has been realized that a larger number of students aspire to do BS Sociology for attaining sixteen years of education and want to pursue their career. BS in Sociology will prepare the students for their intellectual and professional development and offer them a greater scope in the existing job market apart from academia. The curriculum of BS Sociology has been designed in the light of HEC guidelines</p>
8	Duration: 4 Years (8 Semesters)
9	<p>Venue(s): On Site/Off Site/Both On & Off Site (Tick one; if Off Site, give details) Department of Humanities and Social Sciences, Bahria University, Islamabad Campus, Shangrilla Road Islamabad.</p>
10	Programme Scheduling Format: Initially Evening Twice a year
11	Proposed Date of Commencement: Fall- 2018
12	Mode of Study/Examination: Semester System
13	<p>Additional Faculty Member(s) Required: (<i>Indicate if there is a requirement for additional faculty members, fulltime/visiting, along with qualifications.</i>) 01 PFM will be needed initially</p>
14	<p>Additional Skilled-Worker(s) Required: (<i>Indicate if there is a requirement for addl Skilled Staff, fulltime/part-time, along with their qualifications/skill sets.</i>) Nil</p>
15	<p>Additional Classroom(s) required: (<i>The requirement is to include the number of classrooms and their capacities.</i>) Nil</p>
16	<p>Additional Requirement for Laboratories: (<i>The requirement is to include the number of laboratories, their equipment and their capacities.</i>) Nil</p>
17	<p>Additional Requirement for Books, Subscriptions, Memberships to Online Research Sites/ Repositories: Nil</p>
18	<p>Minimum Entry Level: 12 years of education (minimum 50% marks) from HEC recognized educational institutes</p>
19	Admission Criteria: As per HEC/BU Policy
20	<p>Additional/Different Examination Requirement (<i>Indicate if there will be any examination requirement, additional to or different from the BU Academic Rules or Examination Policy in vogue.</i>) As per BU Policy</p>
21	Number of Admissions Expected for First Intake: 20-30 students
22	<p>Number of Admissions Planned/Expected for Subsequent Intakes: 50 students in total are expected in each subsequent semester</p>
23	Referred by: (<i>delete which is inapplicable</i>)

	FBOS: 17 th FBOS (Item 1731) held on 1 st March, 2018	
24	Complete Plan of Studies, inclusive of complete Roadmap:	Attached
25	Course Outlines, Descriptions, Pre-Requisites & Readings (Compulsory & Recommended)	Attached
B. FINANCIAL DETAILS		
1	Source of Funding:	BU: Fully
2	Degree Duration:	Annual or Semester System: Semester: Minimum 8 semesters (4 years) Total Number of Credit Hours: 133
3	Expected fee to be charged based on Cost & Benefits Analysis: (show working)	Fee is to be in uniformity with other BSS programs.
4	Expected Number of students for 1st & 2nd Intakes:	20-30 students
5	Expected Earning from first two Intakes (B5): (Show working)	$80,000 \times 20 \text{ (1}^{\text{st}} \text{ intake)} + 80,000 \times 30 \text{ (2}^{\text{nd}} \text{ intake)} = 1.6 \text{ Million} + 2.4 \text{ Million} = 4 \text{ Million}$
6	Expected Earnings for the Next Five Years (B6): (show working)	One semester earning: $50 \times 80000 = 4 \text{ Million}$ Five years earning= $4 \times 10 = 40 \text{ Million}$
7	Total Estimated Salaries of all Additional Human Resources per annum (B7): (Show working)	Salary of one non PhD PFM= $50000 \times 12 = 0.6 \text{ Million/annum}$
8	Cost of Additional Laboratory Equipment/Tools (B8): (show working)	Nil
9	Cost of Additional Classrooms (B9): (Include furniture, technical aids etc)	Nil
10	Cost of Additional Books, Subscription & Memberships to on-line Sites/Repositories (B10): (show details)	0.3 Million/annum
11	Off-Site rental Expenses and Cost of other Fixtures (B11): (Show details)	Nil
12	Miscellaneous Expenses required for Starting the Program (B12): Advertisement: Printing & Stationery: Admin Cost: Any other	Total: 0.3 million
13	Annual Recurring Expenditures in Subsequent Years (B13): Salaries: Rentals: Subscriptions/Memberships: Advertisements: Printing & Stationery: Admin Cost Any other -	Total: 0.5 million
14	Total Cost of the Programme (B14): [Add B(7) to B(12)] $B(7) - B(12) = 0.6 \text{ Million} + 0.3 \text{ Million} + 0.3 \text{ Million} + 0.5 \text{ Million} = 1.7 \text{ Million}$	
15	Net Cost of the Programme (B15): [Subtract B(1) from B(14)] $1.7 \text{ Million} - 0 = 1.7 \text{ Million}$	
16	Net Earnings in First Year (B16: [Subtract B(15) from B(5)] $B(5) - B(15) = 1.7 \text{ Million} - 4 \text{ Million} = -2.3 \text{ Million}$	
17	Projected Annual Gross Earning in Subsequent Years (B 17): (show details &	

	<i>working; add 10% towards all expenses in subsequent years.)</i> 1.7 Million (incremental)
18	Projected Annual Net Earning in Subsequent Years: [Subtract B(13) from B(17)] $B(17) - B(13) = 1.7 \text{ million} - 0.5 \text{ million} = -1.2 \text{ Million}$

Appendage 3123

BS (Economics), New Launch Proposal

Sponsored by: HOD Humanities and Social Sciences Department,

BUKC Summary of the Case

The Department has planned BS (Economics) to be launched in Fall 2018. Feasibility report of the program has been prepared according to BU. Detailed report is attached as Appendage-

2. It appears logical to move ahead in launching this program in view of the marketing requirements.

HR / Establishment Effects: Would require additional HR and infrastructures, details are covered in the feasibility report.

Financial Effects: Details are covered in the feasibility report.

Recommendations: The point may kindly be approved for launching the program in Fall 2018.

Proposal for Launching BS (Economics)

C. ACADEMIC DETAILS

1	Faculty/Department: Management and SS / Humanities and Social Sciences, BUKC
2	Name of the Programme: BS in Economics
3	Mission of the Programme: BS (Economics) prepares the future economic planners, managers of organizations, corporate governors, entrepreneurs and auditors to safeguard stake holders' financial health. The program also inculcates ethical practices in future economic planners to cope up with the challenges emerging from complex economic issues in regional and global economic perspective like CPEC.
4	Objectives of the Programme: <ul style="list-style-type: none"> ■ To prepare future economic planners / professionals for societal growth and development. ■ To develop micro and macroeconomic acumen among the students to get professional degrees' in commensuration to their growth in the job market. ■ To promote ethical economic practices for development of an economically balance society. ■ To prepare the students for meticulous economic planning of various projects for mutual benefits and collaborative well-being.
5	Outcomes of the Programme: Graduates of BS (Economics) will be able to: - <ul style="list-style-type: none"> ■ Prepare, analyze and interpret budgets and economic statements ■ Put across economic analysis of various projects and cost-benefit reviews in logical and convincing manners. ■ Recognize the rationale behind the growth and development of modern world economy. ■ Develop an in-depth knowledge of the underlying principles of economics and provision of interface between the knowledge and practice

- Critically realize awareness of current economic problems and new insights in countries progress and prosperity.

6 Rationale for the Programme:

	<ul style="list-style-type: none"> ■ Economics has its relevance with business management and economic planning, it is growing with the passage of time. ■ It provides multiple employment opportunities in public as well as private sectors and upward growth in education. ■ Our initial survey reflects potential of students' pool for admission.
7	<p>Brief Description of the Programme: Bachelor in Economics is designed to develop qualified and educated workforce. It will explore theoretical concepts and share regional and global best practices using case studies. The professional deficiency in the services sector can consequently be covered by demonstrating the skills necessary to tackle problems within the complex world of international economics and development. It is a four years' degree program for students who have passed higher secondary / equivalent schooling / examination under HEC rules.</p>
8	<p>Duration: 4 Years</p>
9	<p>Venue(s): On Site/Off Site/Both On & Off Site (<i>tick one/strike-through the ones not applicable; if Off Site, give details</i>) Bahria University Karachi Campus, Humanities and Social Sciences Department</p>
10	<p>Programme Scheduling Format: Morning/Evening/Weekend (<i>tick one/strike-through the ones not applicable</i>): Morning Bi-Semester/Trimester/Semester Summer Session/Annual/Bi-Annual (<i>tick one/strike-through the ones not applicable</i>): Bi-Semester</p>
11	<p>Proposed Date of Commencement: Fall 2018</p>
12	<p>Mode of Study/Examination: As per BU Examination Rules</p>
13	<p>Additional Faculty Member(s) Required: (<i>Indicate if there is a requirement for additional faculty members, fulltime/visiting, along with qualifications.</i>) 1st and 2nd Years' requirement. Regular: 3 (1 PhD and 2 MPhil / MS) Visiting: 1</p>
14	<p>Additional Skilled-Worker(s) Required: (<i>Indicate if there is a requirement for additional skilled staff, fulltime/part-time, along with their qualifications/skill sets.</i>): Nil</p>
15	<p>Additional Classroom(s) required: (<i>The requirement is to include the number of classrooms and their capacities.</i>) <ul style="list-style-type: none"> ■ First Semester: 1 ■ Additional one classroom with the start of every semester till 8th semester. </p>
16	<p>Additional Requirement for Laboratories: (<i>The requirement is to include the number of laboratories, their equipment and their capacities.</i>) One computer lab would be required; may be shared with existing labs.</p>
17	<p>Additional Requirement for Books, Subscriptions, Memberships to Online Research Sites/ Repositories: Following books are required: - <input checked="" type="checkbox"/> An Inquiry into the Nature and Causes of the Wealth of Nations, 1776, by <u>Adam Smith</u>. <input checked="" type="checkbox"/> <u>On the Principles of Political Economy and Taxation</u>, 1817, <u>David Ricardo</u> <input checked="" type="checkbox"/> <u>Progress and Poverty</u>, 1879, <u>Henry George</u>. <input checked="" type="checkbox"/> Principles of Economics, <u>Carl Menger</u>.. <input checked="" type="checkbox"/> Alfred Marshall, 1890. <u>Principles of Economics</u>, 8th ed., 1920..</p>

- Paul A. Samuelson, 1948. *Economics: An Introductory Analysis*.
 - ☒ Microeconomics, by John R. Hicks.
 - ☒ Theory of Games and Economic Behavior by John von Neumann & Oskar Morgenstern
 - ☒ Foundations of Economic Analysis, by Paul A. Samuelson
-

- Handbook of Econometrics, Griliches, Zvi.
 - Handbook of Econometrics, Five volumes (Amsterdam: North-Holland), 1984.
 - Distribution of the Estimators for Autoregressive Time Series with a Unit Root, Dickey, D. A. and Fuller, W. A
 - ☒ Behavioral economics, Advances in Behavioral Economics, Camerer, C., Loewenstein, G., and M. Rabin.
 - Some more books on contemporary economics would be required, shall be decided after 1st Semester.
- 18 **Minimum Entry Level:** HSSC / Equivalent with 50% Marks
- 19 **Admission Criteria:** As per BU Rules for BBA / A&F Program
- 20 **Additional/Different Examination Requirement**
(Indicate if there will be any examination requirement, additional to or different from the BU Academic Rules or Examination Policy in vogue). Nil
- 21 **Number of Admissions Expected for First Intake:** 20 - 25
- 22 **Number of Admissions Planned/Expected for Subsequent Intakes:** 25-30 / semester
-
- 23 **FBOS:** *(Indicate the FBOS meeting reference and Item No): 17th FBOS*
- Competent Authority:** *(Indicate the File No & date; reproduce the decision): Academic Council*
-
- 24 **Complete Plan of Studies, inclusive of complete Roadmap:** *(Attach as Annex 'A')*
-
- 25 **Course Outlines, Descriptions, Pre-Requisites & Readings (Compulsory & Recommended)**
(Attach as Annex 'B')
-

D. FINANCIAL DETAILS

1	Source of Funding: BU: Fully/Partially: Fully Public Sector (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> NNGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> INGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> UN/IGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i>						
2	Degree Duration:	Annual or Semester System: Annual Number of Years Semester Number of Semester: 8					
Total Number of Credit Hours: 135							
3	Expected fee to be charged based on Cost & Benefits Analysis: <i>(show working)</i> <ul style="list-style-type: none"> ▪ Fee Rate / Credit Hour: Rs 4760 ▪ Tuition Fee / Semester / Student: Rs 85680 						
4	Expected Number of students for 1st & 2nd Intakes: 40						
5	Expected Earning from first two Intakes (B5): <i>(Show working)</i> <ul style="list-style-type: none"> ▪ Tuition Fee / Semester / Student: Rs 85680 						

	<ul style="list-style-type: none"> ▪ Admission Fee and other Charges / Student (One Time): 26000 ▪ Earning from First Two Intakes: $40 \times 85680 = 3427200 + 40 \times 26000 = 1040000$ ▪ Total of first two intakes = Rs 44,67,200
6	<p>Expected Earnings for the Next Five Years (B6): (show working)</p> <ul style="list-style-type: none"> ▪ 1st Year Earning: Rs 39,47,200 (3.9 Millions) ▪ 2nd Year Earning: $39,47,200 + 1713600 = 56,60,800$ (5.6 Millions) ▪ 3rd Year Earning: $39,47,200 + 3427200 = 73,74,400$ (7.4 Millions)
	<ul style="list-style-type: none"> ▪ 4th Year Earning: $39,47,200 + 5140800 = 90,88,000$ (9.8 Millions) ▪ 5th Year Earning: $39,47,200 + 6854400 = 10801600$ (11 Millions)
7	<p>Total Estimated Salaries of all Additional Human Resources per annum (B7): (Show working)</p> <p>Salary Estimates of Faculty for 1st Year: 2700000 Salary Estimates of Supporting Staff for 1st Year: 540000 Total of Faculty and Supporting Staff: Rs 32,40,000 (Approximately)</p>
8	<p>Cost of Additional Laboratory Equipment/Tools (B8): (show working)</p> <p>Cost of Additional: Rs 18,00,000</p>
9	<p>Cost of Additional Classrooms (B9): (Include furniture, technical aids etc)</p> <p>Furniture and Other Accessories of one Classroom: 5,00,000 Furniture and Other Accessories of two Classroom: 10,00,000 (Approximate)</p>
10	<p>Cost of Additional Books, Subscription & Memberships to on-line Sites/Repositories (B10): (show details)</p> <p>Cost of one Book: 12000 Approximately on Average Cost of 100 Books: 250000</p>
11	<p>Off-Site rental Expenses and Cost of other Fixtures (B11): (Show details): Nil</p>
12	<p>Miscellaneous Expenses required for Starting the Program (B12):</p> <ul style="list-style-type: none"> - Advertisement: 100,000 - Printing & Stationery: 10,000 - Admin Cost: 5000 - Any other: 5000 - Total: 1,20,000
13	<p>Annual Recurring Expenditures in Subsequent Years (B13):</p> <ul style="list-style-type: none"> - Salaries: 50,00,000 - Rentals: - - Subscriptions/Memberships: - - Advertisements: 1,00,000 - Printing & Stationery: 2,00,000 - Admin Cost: 5,00,000 - Any other: 1,00,000 - Total: 59,00,000
14	<p>Total Cost of the Programme (B14): [Add B (7) to B (12)]: Rs 64,10,000</p>
15	<p>Net Cost of the Programme (B15): [Subtract B (1) from B (14)] $64,10,000 - 4467200 = \text{Rs } 19,42,800$</p>
16	<p>Net Earnings in First Year (B16): [Subtract B (15) from B (5)]: - 19,42,800</p>
17	<p>Projected Annual Gross Earning in Subsequent Years (B 17): (show details & working; add 10% towards all expenses in subsequent years.)</p>

	<ul style="list-style-type: none">■ In 1st Year, there is no earning, rather setting up expenditure exceeds by about 2 million.■ In 2nd Year, it almost evens out.■ We would start earning from 3rd Year onwards, the amount would depend upon number of students. However if we keep it at 20 students, the net earnings would be 1.5 million in 3rd Year and about 4 million in 4th Year.
18	Projected Annual Net Earning in Subsequent Years: [Subtract B (13) from B (17)] It would vary from 3.9 to 6 million per Year.

Annex A

Roadmap: BS (Economics)
Humanities and Social Sciences, BUKC

Semester-1

S.NO	Codes	Course	Level	CH	Pre-requisite
1	ENG 105	Functional English	Core	3	
2	QTM 101	Business Math (for Economists)	Core	3	
3	ECO 110	Microeconomics- I	Core	3	
4	MIS 161	IT Skills (Word, Excel)	Core	3	
5	HSS 108	Introduction to Sociology	Core	3	
6	MGT 111	Principles of Management	Core	3	

Semester-2

S.NO	Codes	Course	Level	CH	Pre-requisite
1.	ISL 101	Islamic Studies	Core	3	
2.	QTM 105	Introduction to Statistics	Core	3	
3.	QTM 120	Numeracy Skills	Core	3	QTM 101
4.	ECO 121	Macroeconomics-I	Core	3	
5.	ECO 111	Microeconomics-II	Core	3	
6.	HSS 107	Introduction to Psychology	Core	3	

Semester-3

S.NO	Codes	Course	Level	CH	Pre-requisite
1	SOC 240	Pakistan Studies	Core	3	
2	ECO 201	Financial Institutions and Markets	Core	3	
3	ECO 122	Macroeconomics-II	Core	3	
4	ECO 202	Issues in Pakistan's Economy	Core	3	
5	ENG 132 I	Oral Communication (Public Speaking Skills)	Core	3	
6	QTM 232	Statistical Inference	Core	3	

Semester-4

S.NO	Codes	Course	Level	CH	Pre-requisite
1	ECO 301	Fundamentals of Econometrics	Core	3	
2	ACC 102	Introduction to Financial Accounting	Core	3	
3	ECO 304	Business Taxation and Public Finance	Core	3	
4	RMT 240	Research Methods & Techniques	Core	3	
5	ECO 340	Development Economics	Core	3	ECO 110, ECO 121
6	ENG 243	Business Communication Skills	Core	3	ENG 132

Semester-5

S.NO	Codes	Course	Level	CH	Pre-requisite
1	ECO 306	International Economics & Finance	Core	3	
2	ECO 307	Money and Banking	Core	3	
3	ECO 308	Natural Recourse Economics	Core	3	
4	MGT 311	Career Exploring	Core	3	
5	ECO 309	Monetary Theory & Policy	Core	3	

Semester-6

S.NO	Codes	Course	Level	CH	Pre-requisite
1	ECO 362	Managerial Economics	Core	3	
2	HSS 301	Social and Psychological Development	Core	3	
3	ECO 401	Financial Econometrics	Core	3	
4	ECO 501	Banking and Taxation	Core	3	
5	ECO 404	Money and Capital Markets	Core	3	

Semester-7

S.NO	Codes	Course	Level	CH	Pre-requisite
1	ECO 403	Trade Policy	Core	3	
2	MGT 211	Self-Management	Core	3	HSS 301
3		Elective-1	Elective	3	
4		Elective-2	Elective	3	
5		Elective-3	Elective	3	
6		Elective-4	Elective	3	

Semester-8

S.NO	Codes	Course	Level	CH	Pre-requisite
1.	MGT 463	Corporate Skills	Core	3	MGT 211
2.		Elective-5	Elective	3	
3.		Elective-6	Elective	3	
4.	SDW 699	Project / Thesis	Core	6	RMT 246

List of Electives

S. No.	Course Code	Title of the Course	Credit Hours
1.	ECO 502	Industrial Economics	
2.	ECO 503	Budgeting and Financial Planning	3
3.	ECO 504	Advanced Topics in Microeconomics	3
4.	ECO 505	Advanced Topics in Macroeconomics	3
5.	ECO 506	Poverty & Income Distribution	3
6.	ECO 507	International Economics	3
7.	ECO 508	Labor Economics	3
8.	ECO 509	Investment Banking & Security Analysis	3
9.	ECO 510	Islamic Economics	3
10.	ECO 511	Urban Economics	3
11.	ECO 512	General Equilibrium and Welfare Economics	3
12.	ECO 513	Economics of Regulation and Competition Policy	3
13.	ECO 514	International Peace and Security	3
14.	ECO 515	Union and Labor Laws	3
15.	ECO 516	Agriculture Economics and Food Security	3

Courses Descriptions: BS-Economics**Functional English****Course Description:**

This course is designed to improve the writing skills of the students. It helps the students to write logically and coherently using the four keys of effective writing that is unity, support, coherence and sentence skills. This course explains and illustrates the sequence of steps in writing effectively. Throughout this course student are encouraged to think clearly and logically. In order to write effectively one must be a strong reader, in this course the students will be introduced to the essays of professional writers, which will help the students to write effective essays.

Course Content:

Parts of an essay, The Writing Process, Common errors in writing a thesis, Introductions, conclusions and Titles, Sentence Skill, Essay Development, Grammar and Vocabulary, Reading and comprehension

Reading Material:

- ✓ College Writing Skills by John Langan Mcgraw Hill publication
- ✓ Understand and Communicate Series Available with the photocopier
- ✓ Language in use by Adrian Doff, Christopher Jones
- ✓ Practical English Grammar by Thomson and Martinet.

Business Mathematics**Course Description:**

Understanding basic terms in the areas of business calculus and financial mathematics, independently solving of business problems.

Course Content:

Introduction. Basic business calculus: Ratios and proportions. Rule of three (simple and compound). Percentage calculus. Division calculus (simple and compound). Mixture calculus (simple and compound). Chain calculus. Basic interest account: Interest and interest rates. Simple interest account. Decursive and anticipative investment of money at interest. Compound interest account. Types of interest rates. Use of compound interest account: Final value of a single amount. Present value of a single amount. Final value of a series of periodic payments (withdrawals). Present value of periodic payments (withdrawals). Perpetuity. Continuous compounding. Loan: Basic terms and loan repayment table. Loan reprogramming or conversion. Intercalary interest. Loan repayment model of equal annuities. Loan repayment model of equal share payments. Incomplete or defective annuity. Loan repayment model with anticipative interest rates. Consumer credit.

Reading Material:

- Contemporary Business Mathematics for Colleges*, James E. Deitz and James L. Southam, 15th Edition, 0-324-59547-6

Microeconomics-I

Course Description:

The objective of the course is to help student understand the powerful forces that are shaping economic world and help to navigate it in everyday life and work. Microeconomics focuses on the behavior of the units—the firms, households, and individuals—that make-up the economy. It is concerned with how the individual units make decisions and what affects those decisions.

Course Content:

Introduction, The Economic Problem, Demand, Supply, Market Equilibrium, Elasticity, Efficiency and Fairness of Markets, Utility and Demand, Production and Costs, Perfect Competition, Monopoly, Monopolistic Competition, Oligopoly, Game theory

Reading Material:

- ✓ "Microeconomics", 10th edition, Robin Bade & Michael Parkin. Publishers: Pearson Addison Wesley, New York.
- ✓ "Economics", third edition, Joseph E. Stiglitz & Carl E. Walsh. Publishers: W.W. Norton & Co. New York.
- ✓ "Economics" 17th edition, Samuelson & Nordhaus. Publishers: McGraw Hill Irwin, New York

IT Skills

Course Description:

Students will learn basic computer skills to assist their English language learning. The course consists of an introduction to basic vocabulary and terminology related to computer and word processing, Microsoft Word, the Internet, web search and email. Students will also use of different computer language software and programs to practice English. An attempt will be made to support all students' individual needs.

Course Content:

Introduction to Computer – Parts and lab rules 2. Introduction to basic vocabulary and terminology related to computer and word processing 3. Introduction to Grammar mastery program and other available language software and programs 4. Intro to BTS ESL website for students and useful links 5. Intro Typing programs – Nimble finger as a start 6. Introduction to Microsoft Office 2007 - Computer Basics- Open and save a document, change file name, etc.. 7. Formatting a document – margins, font, underline, bold, etc.. 8. Editing skills – Spell check, cut and paste, insert clip art, etc.. 9. Web search on career options and college programs 10. Comparing information from different websites 11. Creating a table – calendar and greeting cards 12. Creating a PPT presentation

Introduction to Sociology

Course Description:

This course introduces the basic concepts of sociology, relationship between individuals, culture and society, the influence of social and cultural forces on personal experience and

social behavior. Particular emphasis will be laid on making analytical connections between social theory and its application, along with the importance of providing clear, informed and consistent reasoning in the presentation of arguments. The purpose of this course is to develop understanding, and the ability to predict and control / manage human behavior in organization. This subject discusses the behavioral aspects of management.

Course Content:

Introduction, Development of Sociology, Theories on Suicide, Social research, Social interaction and Social processes, Classification of Social Processes, Based on unity or opposition, Social Groups and Organization, Culture, Socialization, Social mobility, Social Change

Reading Material:

- ✓ Sociology by John J. Macionis Prentice Hall Inc. Tenth Edition
- ✓ Sociological Theory: A Historical Perspective by Muhammad Khalid, Ph.D. KIFAYAT ACADEMY
- ✓ Sociology An Introduction by Richard J. Gelles & Ann Levine, McGRAW-HILL, INC. Fifth Edition
- ✓ Sociology by Paul B. Horton & Chester L. Hunt, McGRAW-HILL, INC. Sixth Edition
- ✓ Case Studies, Scholarly Articles, Format of Term Report, Case Studies & Scholarly Articles in The Form of Booklet Available at Photocopier (Bahria University-Karachi Campus)

Principles of Management

Course Description:

The aim of this course is to develop understanding of principles of management among the students. After this course, students will understand the key concepts of management and their application in business world.

Course Content:

Introduction to Management, History of Management, Foundation of Planning , Managers as Decision Makers, Strategic Management, Organizational structure & Design, Managers as Leaders, Motivating Employees, Introduction to Controlling

Reading Material:

- ✓ Robbins, and Coulter (2011) Management; 11th edition. Upper saddle river, NJ: Prentice Hall.
- ✓ Daft, R. (2008) Management. 8th Edition, Mason: Thompson.
- ✓ Bateman, T.S. and Snell, S.A. (2012) Management: Leading and Collaborating in Competitive World, 10th Edition, Burr Ridge, IL: McGraw-Hill.

Islamic Studies

Course Description:

This course will introduce the philosophy, concepts of Islamic Teachings and give students the clear concept about Islamic Ideology.

Course Content:

Islam and fundamental articles of faith, Islam and fundamental articles of faith, Islam in Practice, Islam in Practice, Quran & Hadith, Sources of Islamic Law, Ijma (Consensus), Qiyas (Analogy), The Life of Hazrat Muhammad (SAWW) Makki Life, The Life of Hazrat Muhammad (SAWW) Madni Life, Muslims Relationship, Human Rights in Islam, Moral Values of Islam, Islamic Economics, Islam & Science, Some Famous Personalities (Saint)

Reading Material:

- ✓ Islamic Studies by Prof. Mufti Munib-ur-Rehman
- ✓ Sirat-e-Mustaqeem by Prof. Abdul Qayoom Natiq.
- ✓ The light of Guidance by Dr. Muhammad Nawaz.
- ✓ Mohsin-e-Insaniat by Mr. Waheed-ud-din.

Introduction to Statistics

Course Description:

The primary goal of the course is to help students understand how the process of posing a question, collecting data relevant to that question, analyzing data, and interpreting data can help them find answers to real problems from their world.

Course Content:

Displaying Data, Bar Chart, Histogram, Descriptive Statistics, Contingency Table, Boxplot, Normal Distribution, Scatter Plots, Correlation, Linear Regression, More on Regression, Multivariate Regression, Probability, Sampling Distribution Models, Confidence Intervals Proportions, CLT, Confidence Intervals for Means, Hypothesis testing, Comparing Two Populations, Paired Samples, Chi-Square Tests, Chi-Square Tests, Review for Final Exam, Final Exam

Reading Material:

- ✓ The Basic Practice of Statistics (7th ed.), David S. Moore, William I. Notz and Michael A. Fligner

Numeracy Skills

Course Description:

The changing needs of a changing world demand new levels of mathematical literacy for the 21st century and new teaching approaches can help us to meet this challenge. Numeracy is a life-skill and essential for learning other subjects; this course is designed to provide you with a practical toolkit for enhancing the numeracy skills of all your students.

Course Content:

Use basic functions of a calculator for problem solving, investigations and applications, identifying and using the four operation keys, cancel, memory and the result key, and other necessary function keys, on calculators, calculating using whole numbers, money and routine decimals and percentages, calculating with routine fractions, applying order of operations to solve multi-step calculations, interpreting display and record results, making estimations and using them to check the reasonableness of the answer to a problem, using formal and informal mathematical language and appropriate symbolism and conventions to

communicate the result of the task. Interpret and calculate with whole numbers and familiar fractions, decimals and percentages in an everyday adult context, Estimate, measure and calculate routine metric measurements in everyday adult situations, Interpret, draw and construct 2D and 3D shapes, Use routine maps and plans, Construct and interpret routine tables, graphs and charts.

Reading Material:

- ✓ Basic Numeracy Skills and Practice, Macmillan Publishers Limited 1981, by J. Newbury

Macroeconomics-I

Course Description:

This Course of macroeconomics will explore such topics as economic growth, business cycles, the structure of the economy, employment and unemployment, inflation, and government monetary and fiscal policy. To some extent I hope to show you how economists identify and think about economic problems. There is some exposure to theory and modeling in this course you can see how we organize general economic concepts into analytic models.

Course Content:

A First Look at Macroeconomics, Economic Growth and Fluctuations, Jobs and Unemployment, Macroeconomic Policy and Tools, Measuring GDP and Economic Growth, Measuring GDP, Monitoring Jobs and Price Level, The Consumer Price Index, At Full Employment: The Classical Model, The Labor Market and Potential GD, Loanable Funds and the Real Interest Rate, Economic Growth, Money, the Price Level, and Inflation, The Quantity Theory of Money, The Exchange Rate and the Balance of Payments, Rate Fluctuations, Aggregate Supply and Aggregate Demand, Expenditure Multipliers: The Keynesian Model, U.S. Inflation, Unemployment, and Business Cycles, Fiscal Policy, Monetary Policy

Reading Material:

- ✓ Economics by Michael Parkin, Addison Wesley Longman, 8TH Edition
- ✓ "The Economics of Money, Banking and Financial Markets" Frederic S. Mishkin, 6th edition
- ✓ "ECONOMICS" by Roger Arnolds
- ✓ Mankiw, "Principles of Macroeconomics".4th Edition
- ✓ Samuelson, N. "Economics", 18th Edition
- ✓ Jackson & McIver, "Macroeconomics", 7th Edition.
- ✓ Dornbusch, Fischer & Startz. "Macroeconomics", 7th Edition
- ✓ Frank and Bernanke, "Principles of Economics".
- ✓ Walash, S. "Economics", 3rd edition.
- ✓ Lieberman, M. and Hall, R. "Introduction to Economics".

Microeconomics-II

Course Description:

The objective of the course is to help student understand the powerful forces that are shaping economic world and help to navigate it in everyday life and work. Microeconomics focuses on

the behavior of the units—the firms, households, and individuals that make-up the economy. It is concerned with how the individual units make decisions and what affects those decisions.

Course Content:

Introduction, The Economic Problem, Demand, Supply, Market Equilibrium, Elasticity, Efficiency and Fairness of Markets, Utility and Demand, Production and Costs, Perfect Competition, Monopoly, Monopolistic Competition, Oligopoly, Game theory

Reading Material:

- ✓ "Microeconomics", 10th edition, Robin Bade & Michael Parkin. Publishers: Pearson Addison Wesley, New York.
- ✓ "Economics", third edition, Joseph E. Stiglitz & Carl E. Walsh. Publishers: W.W. Norton & Co. New York.
- ✓ "Economics" 17th edition, Samuelson & Nordhaus. Publishers: McGraw Hill Irwin, New York

Introduction to Psychology

Course Description:

Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

Course Content:

What is Psychology, An overall introduction to the topic, Research Methods: Advantages and Disadvantages of each, Research Methods: Advantages and Disadvantages of each, Learning: Issues of efficacy and transferability, Sensation and Perception, Personality: Trait predictors, Psychodynamics, Personality: Trait predictors, Trait Theory, Self-Theory, Social Learning Theory, Theories of Motivation: Comparisons and contrasts of various theories. Motivation Theories, Optimal-Level of Arousal Theory, Drive Theory, Modern Instinct Theory, Pull Vs Push Theory, Memory Process, Memory Retention, Theories of Forgetting, Interference Theory, Motivated Forgetting, Decay Theory, Social Psychology Group Dynamics: Inter- and intra-group behavior. Intelligence, Multiple intelligence, Abnormal Psychology

Reading Material:

- ✓ Power point slides, case studies, Two-way discussion, Group activities
- ✓ Invitation to Psychology, Helen Bee 4th Edition
- ✓ Introduction to Psychology Hill-guard, 13th Edition

Pakistan Studies

Course Description:

Pakistan Studies course is designed to increase students' awareness of Pakistan in 21st Century and this objective can be achieved through the study of History, Geography, Demographics, Culture and Economics of Pakistan.

Course Content:

Muslim Society in Subcontinent, Downfall of Muslim Rule, Educational Movements, The Ideology of Pakistan, The Pakistan Movement, The Emergence of Pakistan, The Economics of Pakistan, Struggle for Constitution Development and Islamic System in Pakistan, Pakistani Culture, The Foreign Policy of Pakistan

Reading Material:

- ✓ Introduction to Pakistan Studies by M.Ikram Rabbani
- ✓ Perspectives on Pakistan Studies with an introduction to Pakistan Affairs (New Edition) By Gul Shahzad Sarwar
- ✓ The Struggle of Pakistan by I.H. Qureshi

Financial Institutions and Markets

Course Description:

The objective of this course is to learn intelligent use of published financial reports by decision makers external to the firm (e.g. investors and creditors). This course will focus on key accounting concepts, financial ratios and industry issues which are critical in interpreting and analyzing external financial reports. Throughout this course student will be involved in "hands-on" financial analysis by working on class exercises/problems, discussing special topical readings and analyzing assigned cases. The cases will include primary concepts from the assigned readings, as well as the topics and financial analysis techniques discussed in class.

Course Content:

financial statement analysis, financial reporting system, Financial reporting standards, Principal financial statements, Other sources of financial data, Role of auditor, Basic Qualitative characteristics, Assumptions and Principles , objectives of financial statement analysis, Sources of financial of financial information, Tools and techniques, common size financial statements, trend analysis, Ratios, structural analysis, industry comparisons, common sense and judgments), limitations of financial statement analysis, concept of revenue, measurement and recognition issues regarding revenue, Basic principles and selected application to expense recognition cost of sales, general and other administrative expenses, other operating expenses, ASSETS, Current Assets, Inventories: Short term investments : to be discussed in noncurrent assets under the head investments, Receivables, Cash, Noncurrent Assets, Investments, Property plant and equipment, LIABILITIES, Understanding of cash flow statement, Comprehensive Analysis of Financial

Reading Material:

- ✓ The Analysis & use of Financial Statements; White, Sondhi, Fried; 3rd Edition, John Wiley & Sons.
- ✓ Financial management theory and practice, Brigham,Ehrhardt 10th edition , Thomson south western

Macroeconomics-I

Course Description:

This Course of macroeconomics will explore such topics as economic growth, business cycles, the structure of the economy, employment and unemployment, inflation, and government monetary and fiscal policy. To some extent I hope to show you how economists identify and think about economic problems. There is some exposure to theory and modeling in this course you can see how we organize general economic concepts into analytic models.

Course Content:

A First Look at Macroeconomics, Economic Growth and Fluctuations, Jobs and Unemployment, Macroeconomic Policy and Tools, Measuring GDP and Economic Growth, Measuring GDP, Monitoring Jobs and Price Level, The Consumer Price Index, At Full Employment: The Classical Model, The Labor Market and Potential GD, Loanable Funds and the Real Interest Rate, Economic Growth, Money, the Price Level, and Inflation, The Quantity Theory of Money, The Exchange Rate and the Balance of Payments, Rate Fluctuations, Aggregate Supply and Aggregate Demand, Expenditure Multipliers: The Keynesian Model, U.S. Inflation, Unemployment, and Business Cycles, Fiscal Policy, Monetary Policy

Reading Material:

- ✓ Economics by Michael Parkin, Addison Wesley Longman, 8TH Edition
- ✓ "The Economics of Money, Banking and Financial Markets" Frederic S. Mishkin, 6th edition
- ✓ "ECONOMICS" by Roger Arnolds
- ✓ Mankiw, "Principles of Macroeconomics".4th Edition
- ✓ Samuelson, N. "Economics", 18th Edition
- ✓ Jackson & McIver, "Macroeconomics", 7th Edition.
- ✓ Dornbusch, Fischer & Startz. "Macroeconomics", 7th Edition
- ✓ Frank and Bernanke, "Principles of Economics".
- ✓ Walsh, S. "Economics", 3rd edition.
- ✓ Lieberman, M. and Hall, R. "Introduction to Economics".

Issues in Pakistan's Economy

Course Description:

This is an introductory course in microeconomics theory. During the course focus will be on examining the behaviors of individuals and firms in the market and how they make their choices, using basic economic principles and tools. This in addition will guide students toward evaluating evidence and applying it to solving problems through social science methods. The objective of this course is to explore the concepts of historic growth & contemporary development, gender and gender inequality, the relationship between gender inequality and poverty, and discuss the importance of gender issues in economic development, importance of agriculture and rural development, the structure of third world agrarian system, the important role of women, stages of agricultural development, agriculture and rural development strategy, the importance of international trade & finance, basic questions about trade & development, the terms of trade & the prebischsinger theories, some criticisms of traditional free-trade theory, third world debt crisis.

Course Content:

Causes of high growth and the success of Zia-ul- Haq Regime, Fifty years of Development, Pakistan's Agriculture sector, Manufacturing sector of Pakistan, Balance of Payment and its components, Money /Capital Market of Pakistan, Banking Sector of Pakistan, Budget, Pakistan's Fiscal Deficit, Monetary policy, savings and inflation, Fiscal Policy, The Social Sector, Institutions, and the Governance.

Reading Material:

- ✓ Zaidi, S. Akbar,(1999), "Issues in Pakistan Economy", Oxford University Press.
- ✓ Saeed, K. Amjad,(2007) "Economy of Pakistan, Institute of Business Management, Lahore.
- ✓ Economics Survey of Pakistan (Latest Issues), Economic Advisor's Wing, Ministry of Finance, Government of Pakistan

Oral Communication (Public Speaking Skills)

Course Description:

The objective of this course is to help the students develop an understanding of basic grammar and language skills. Emphasis on reading, writing, speaking and listening skills and to demonstrate how such knowledge is pertinent for effective communication and particularly in the field business.

Course Content:

Definitions: parts of speech, Parts of speech with emphasis on collective- nous, abstract, nouns, pronouns, adjectives, adverbs, prepositional phrases, conjunctions, Difference between a sentence, phrase and a clause. Tenses with emphasis on present, past, future and continuous tense also emphasizing perfect tense and perfect continuous tense, future and future conditional tense. Articles, Punctuation and Capitalization, Active and Passive voice, Subject Verb Agreement, Gerunds, Different uses of words, Choice of words. Frequently missed used words. Idioms and idiomatic phrases. Increasing word power and Business terminology. Different uses of words, Choice of words. Frequently missed used words. Idioms and idiomatic phrases, Increasing word power and Business terminology. Narrative, descriptive and argumentative writing Organizing the thought process or Mind mapping, Grouping and sequencings, Outling and paragraphing, developing creative writing, Developing oral presentation skill

Reading Material:

- ✓ Understand and Communicate Series Available with the photocopier
- ✓ Language in use by Adrian Doff, Christopher Jones
- ✓ Practical English Grammar by Thomson and Martinet.

Statistical Inferences

Course Description:

At the end of this course the students will be able to understand the common statistical practices by presenting real-world applications from the fields of business, economics,

finance, operations research, and management science, understand the application of statistics in various fields of management sciences, e.g. quality control or total quality management, data analysis etc. The collection and analysis of quantitative data drives some of the most important conclusions that are drawn in today's business world, such as the preferences of a customer base, the quality of manufactured products, the marketing of products, and the availability of financial resources. As a result, it is essential for the students of management science to have the knowledge and skills to interpret and use statistical techniques in various scenarios.

Course Content:

Role of inferential statistics in Management sciences Applications of sampling theory and types of sampling, Methods of drawing sample by using different sampling techniques. Theory and applications of Central limit theorem, Role of estimation in business, point estimates, properties of point estimate, Interval estimates, confidence interval and its applications, interval estimates for population mean from large sample. Interval estimates for population mean from small sample, Interval estimates of the population proportion for large sample. Determining the sample size in estimation, Introduction to testing of hypothesis, basic procedure for testing of hypothesis. Forecasting by regression models. Analysis of regression model. Correlation Study, Applications of Chi-Square, Chi-Square as a test of independence, Inference about the population variance, ANOVA, Applications of non-parametric tests, Applications of decision theory in the field of business, Decision tree analysis, Statistical quality control. Statistical analysis by SPSS.

Reading Material:

- Statistical Inference: A short Course, Michael J. Panik

Fundamentals of Econometrics

Course Description:

Econometrics is the combination of economic theory and statistics to test economic hypotheses from micro and macroeconomics theory to evidence. Econometrics has been the most rewarded courses and has changed the way of looking at the world.

Course Content:

The Nature of Econometrics and Data, Basic Mathematical Tools, Fundamentals of Probability, Fundamentals of Mathematical Statistics, Summary of Matrix Algebra, The Simple Regression Model, Multiple Regression Analysis: Estimation, The Linear Regression Model in Matrix Form, Multiple Regression Analysis: Inference, Multiple Regression Analysis: OLS Asymptotics, Multiple Regression Analysis: Further Issues, Multiple Regression Analysis with Qualitative Information, Hetroskedasticity, Basic Regression Analysis with Time Series Data, Further Issues in Using OLS with Time Series Data, Serial Correlation and Hetroskedasticity, In Time Series Regressions, More on Specification and Data Issues, Instrumental Variables Estimation and Two Stage Least Squares, Simultaneous Equations Models, Pooling Cross Sections Across Time: Simple Panel Data Methods, Limited Dependent Variable Models and Sample Selection Corrections

Reading Material:

- ✓ Woolridge, Jeffrey. 2013. Introductory Econometrics: A Modern Approach, 5th edition. Cengage Learning.

- ✓ Gujarati, Damodar and Dawn Porter, Basic Econometrics, 5th Edition. McGraw-Hill.
- ✓ Maddala, George S., Introduction to Econometrics, Prentice Hall. Any edition.
- ✓ Stock, James H. and Mark Watson. Introduction to Econometrics, 2nd Edition. Pearson, Addison Wesley. 2007.

Introduction to Financial Accounting

Course Description:

The objective of this course is to explore more deeply the accounting principles and conventions related to financial statements preparation. It ensures that students fully understand all the activities leading to preparation of financial statements and the characteristics of financial statement components.

Course Content:

What is accounting, Importance of studying accounting. Use of financial accounting for external and Internal users. Introduction to GAAP, Introduction to Financial Statements. Definition of asset, liability and owner's equity. Various principles of accounting. Introduction of forms of business organizations and business entity concept, What is Accounting equation, Classification of Assets, Classification of Liabilities, Components of equity, What is Capital, What is Profit or Loss , Understanding of financial position, Components of profit or loss, Revenue minus Expenses, What is revenue, What are expenses, Understanding of financial performance. Basic understanding of Accounting equation, Understanding of Debit and Credit, Double entry system, Rules of Debit and credit, The role of accounting records. Ledger and Journal, Recording transaction in General Journal and posting to Ledger. Accounting principles and accounting cycle', Trial balance, Adjusting Entries, Types and characteristics of Adjusting Entries, Apportioning Recorded Costs , Apportioning Unearned Revenue, Recording Unrecorded Expense, Recording Unrecorded Revenue, Closing Entries, Post closing trial balance, Prepare Income statement, Balance sheet and Statement of changes in Owners Equity. The Operating Cycle of a Merchandising Company, Corporation, Bonds.

Reading Material:

- ✓ Financial & Managerial Accounting: The basis for the Business Decision, 13th Edition, By William, Haka, Bettner (Ref Book I)
- ✓ Accounting- The basis of Business Decisions - 11th Edition By Robert Meigs, John Williams, Sue Hakka (Ref Book II)

Business Taxation & Public Finance

Course Description:

Students examine the rationale for government intervention in a market economy, the assessment of public policy, and the impact of government expenditures and taxation on the economy and the citizenry. Topics include government activities, externalities, public goods, social security, fiscal deficits and public debt, principles of taxation, incidence and effects of taxation, and optimal taxation.

Course Content:

The Role of Government in a Market Economy, Conditions for market failure, The Public Sector in Canada, Kinds of government activities, Government and production, Government

purchase of goods and services, Government redistribution of income, Government total expenditure, Externalities – Problems, Solutions and Applications, Private sector solutions to negative externalities, Public sector remedies for externalities, Public expenditure programs, Public Goods, Social Security and Social Insurance, Fiscal Stimulus Package, Taxation: Principles and Its Incidence, Taxation and Economic Efficiency, Tax Inefficiencies and Their Implications for Optimal Taxation, Issues in Sovereign Debt Crisis in Europe

Reading Material:

- ✓ Jonathan Gruber, Public Finance and Public Policy, 2nd Edition, Worth Publishers, 2007

Research Method & Techniques

Course Description:

This course will provide an opportunity for participants to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative, and mixed methods approaches. Participants will use these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, social, local and global environment.

Course Content:

Introduction to Research and the Research Process, Research Ethics and Integrity, Critical appraisal, Quantitative Research Study Designs and Methods, Analysis and Interpretation of Quantitative Data, Critical Appraisal of Quantitative Research, Introduction to Qualitative Research, Study Designs and Methods, Analysis and Interpretation of Qualitative Data, Critical Appraisal of Qualitative Research, Introduction to Mixed Methods Research, Study Designs and Methods, Analysis and Interpretation of Mixed Methods Data, Critical Appraisal of Mixed Methods Research

Reading Material:

- ✓ Creswell, J. W.. *Research design: Qualitative, quantitative and mixed methods approaches*. 4th Ed. Thousand Oaks, CA: Sage, 2014

Development Economics

Course Description:

The study of development economics is one of the newest, most exciting, and most challenging branches of the broader disciplines of economics. This is a preliminary course to development economics, which will examine economic problems and potentials of developing economies. The course is designed to provide a basic overview of the elements of economic theory and policy that are particularly relevant to the study and practice of development. A predominant portion of the course covers the essential theoretical and historical elements of development and international economics, with a focus on growth, income distribution, measurement of development and the basic features of the world economy. Some specific issues currently debated in the development economics field will also be discussed.

Course Content:

The nature of development economics, Economic growth versus economic development, Objectives and core values of development, Overview of social and economic indicators of Pakistan economy, Traditional measures of economic development, Modern measure of economic development, Diverse structures and common characteristics of developing nations, Leading theories of economic development, Rostow's stages of growth, The Harrod-Domar growth model, Obstacles and constraints, Necessary v/s sufficient conditions: some criticism of the stages model, The Lewis theory of development, Solow growth model and its applications, Applications of theories, Measurement of inequality and poverty, Population Growth And Economic Development: Causes, Consequences, and Controversies, Urbanization, Environment: Theory and policy, Education and Development: International trade theories policies and economic development, Channels of transmission mechanism of trade, Country profile and applications of growth models

Reading Material:

- ✓ "Economic Development", Michael p. Todaro, Addison Wesley Longman Inc. New York, USA.—Pearson Education, 11th Edition
- ✓ The process of economic development (2nd edition) James M. Cypher & James
- ✓ Perkins, Dwight H., Steven Radelet, Donald R. Snodgrass, Malcolm Gillis, Economic Development, 5th edition, New York, W.W. Norton, 2001

Business Communication Skills

Course Description:

This course provides a concise, practical guide to communicating effectively in the world of business. This course offers a direct, concrete approach and an opportunity for hands-on application of effective communication strategies. It includes a review of business letters, formal and informal reports, and oral presentation. There is discussion on other strategies in the flow of communication with an emphasis on verbal and non-verbal cues.

Course Content:

Definition and basic forms of communication, Importance of effective Communication in business, Communication Challenges in today's workforce, Process of communication, Functions& forms of organizational communication(external, internal), Role of marketing& public relations department in external communication, Developing oral presentations skills, Principles of effective writing techniques, Structure of a business letter, Writing good news & goodwill messages, Writing bad news messages, Persuasive Messages, Week thirteen& Week fourteen, Communication through reports, Communication through graphs & visuals

Reading Material:

- ② Business Communication: Process and Product, 7th Edition by Mary Ellen Guffey (Author), Dana Loewy (Author)

International Economics

Course Description:

The objectives of this course are to give students the knowledge on the area of international economics and the topics which are related to it.

Course Content:

The themes of the course are topical and spread over the area of international economics, current international economic problems, basis of trade, gains from trade, absolute advantage, comparative advantage, overview of comparative advantage and pattern of trade comparative, advantage and opportunity costs trade under constant costs, students will be well equipped with the standard trade model, Factor Endowment and Heckscher–Ohlin Theory, Economies of Scale, imperfect Competition and International Trade, International Trade and Economic Development, The Rybczynski Theorem

Reading Material:

- ❑ International Economics: Global Markets And Competition H Thompson - 2006 - World Scientific

Money and Banking

Course Description:

The objectives of the course are to address classical and contemporary issues in the theory of money, banking, and financial institutions.

Course Content:

The structure of central banks and the Federal Reserve system, theories of money demand and money supply, the relationship between money supply and overall economic activity, the theoretical and practical aspects of monetary policies and money creation, the efficacy of fiscal policies versus monetary policies, and the role the central bank plays in economic stabilization. We shall pay particular attention to the money creation process, to endogenous money versus exogenous money, and to the ability of the central bank to stabilize the economy. The contents are as follows: Why study money and banking, the financial system, interest rates and their behavior, the banking firm and bank management, the monopoly supply process and the tools and conduct of monetary policy. The gold standard, This is an important course for learning the monetary operations which take place in different macroeconomic scenarios.

Reading Material:

- ❑ Money, Bank Credit, and Economic Cycles, Jesús Huerta de Soto

Natural Resources Economics

Course Description:

The objective is that economics students should know about the important issue which are included in the course of natural resource economics.

Course Content:

This course will include the review of market system Supply, demand, prices, opportunity costs, efficiency, producer and consumer surplus, and property rights, materials balance model, market failure – externality, public goods, and government failure, institutions, institutional innovation. Optimum level of pollution, tax and regulation solutions, property rights and institutions revisited: Coase theorem. Non-market valuation: indirect methods Inter-temporal allocation and scarcity rent, renewable resources: static fishery example, open access problems, and renewable resources: dynamic fishery example, preservation, extinction, safe minimum standard, and policy, exhaustible resources revisited.

Reading Material:

- ☒ Environmental and natural resource economics, TH Tietenberg, L Lewis - 2016

Career Exploring

Course Description:

The main objective of this course is to help students develop a deeper understanding of theory and research in the area of career development and planning and to demonstrate how such knowledge is pertinent for the effective management of your own career, both at the Pre-Employment and the Post-Employment stages. The course operates under the assumption that an in-depth understanding of career issues will help a student become a successful employee and/or leader, and will assist continuous development and planning of long-term career goals and aspirations.

Course Content:

Need for Career Planning-Changing Landscape of work, Definition of Career Planning, Career Management Model, Self-Analysis of Interests, Values , Competencies, work attitudes. Applications of Career Management Model- Career Exploration. Goals, Strategies and Appraisals, Development of Goals, Strategies. Action Planning: CV writing, Interviewing Skills, Job Prospecting, Career Strategies, Developing a Career Plan, Employability Skills & Competencies. Mock Interviews. Post-Employment- Career, Management, Organizational Entry, Early Career, Establishment and achievement, Middle & Late Career Issues, Entrepreneurial Career, Human Resource Support Systems

Reading Material:

- ✓ Career Management by Jeffery H. Greenhaus, 3rd. Edition.
✓ Self-Assessment Tools from Grooms Associates.

Monetary Theory & Policy

Course Description:

This is an advanced undergraduate course in monetary theory and policy. It aims to build on the material typically covered in intermediate macroeconomics and provide the student with an advanced understanding of monetary economics, including contemporary and historical monetary theory, central banking and monetary policy. This course will investigate the origins and role of money, theories regarding the supply of and demand for money and the role of money in determining aggregate demand, output, prices and other key macroeconomic variables. The relationship between money, credit and debt will be emphasized. This course will also analyse the evolving role of central banking and views regarding the role and conduct of monetary policy, including recent and historical international policy actions.

Course Content:

Introduction, Money, Banking, and Financial Markets, Financial System, Interest Rates, Central Banking and Monetary Policy, Central Banks and the Federal Reserve System, The Money Supply Process, Tools of Monetary Policy, The Conduct of Monetary Policy, Monetary Theory, Money Demand, the Quantity Theory, and Inflation, The IS Curve, Monetary Policy and AD Curves, The AS-AD Model, Monetary Policy Theory, The Role of Expectations in Monetary Policy

Reading Material:

- ✓ C. Walsh Monetary Theory and Policy 3rd edition (eBook)

Managerial Economics

Course Description:

The objectives of this course is to integrate various principles and concepts from different fields of economics with typical problems of managerial decision-making and policy formulation in business organizations whether in a local or global context.

Course Content:

Demand concepts for decision making demand estimation and demand forecasting price elasticity of demand & decision making income elasticity of demand & decision making cross elasticity of demand & decision making. Production analysis & estimation, roles of revenues

& cost in productions, cost analysis & estimation, cost volume, profit analysis/break even analysis. Furthermore, it covers more wide areas of pricing analysis & decisions, capital budgeting & investment decisions, location decisions

Reading Material:

- ❑ Managerial Economics, 4th Edition, by Ivan Png

Social & Psychological Development

Course Description:

The aim of this course is to introduce students to empirical research and theories in social and developmental psychology. These are two critical areas of psychological inquiry that directly deal with issues concerning the development of human capacities and abilities, and the way humans interact with, and are influenced by each other. The course contains two components, Developmental and Social Psychology. These two components will be run consecutively. During the first half of the session, you will be acquainted with issues relating to the development of psychological processes that are important to the cognitive, emotional and social aspects of people's lives. During the second half of the session, the social psychology of interpersonal behavior will be covered. There will be 12 lectures in each of the topic areas of Developmental and Social psychology.

Course Content:

Introduction, Research Designs, Genetic Foundations, Prenatal Development, Perceptual Development, Cognitive Development-I, Cognitive Development-II, Children's understanding of health and illness, Emotional Development-I, Emotional Development-II, Memory Development, Social Development, Indigenous psychology-I, Indigenous psychology-II, History and methods in social psychology, Human sociability and Interpersonal behavior, Social perception and cognition-I, Social perception and behavior-I cognition-II, Social perception and cognition-III, Impression formation and communication attribution-I, Impression formation and attribution-II, Social interaction and communication-I, Social interaction and communication-II, Prejudice and discrimination

Reading Material:

- ❑ The Developmental Social Psychology Of Gender, T Eckes, HM Trautner - 2000

Financial Econometrics

Course Description:

The course intends to familiarize students with the principal techniques in Financial Econometrics. Moreover, the course aims to facilitate awareness in students of how these techniques can be used and applied to real data, and provide the necessary background to understand and critically assess empirical findings reported in the financial literature, as well as to carry out their own empirical research in the future.

Course Content:

Definitions of asset returns, distributional properties of asset returns, OLS and MLE methods for time series data, statistical properties of OLS and MLE estimators, Stationarity, autocovariance and autocorrelation function, testing autocorrelation, white noise, AR models, properties, estimation, identification and forecasting, MA and ARMA models, properties, estimation, identification and forecasting, historical, realized, implied and conditional volatility, characteristics of volatility, ARCH models, properties, estimation, identification and forecasting, GARCH and EGARCH models, properties, estimation, identification and forecasting, VaR, RiskMetrics, econometric approach to VaR, quantile estimation, : Intraday returns, transaction data, non-synchronous trading, bid-ask bound

Reading Material:

- ✓ The Econometrics of Financial Markets, J. Y. Campbell, A. W. Lo, and A. C. MacKinlay, 1997, Princeton University Press (CLM)
- ✓ Asset Price Dynamics, Volatility, and Prediction, S. J. Taylor, 2005, Princeton University Press (ST)
- ✓ The Econometric Modelling of Financial Time Series, T. C. Mills, 1999, Cambridge University Press, 2nd edition (TM)
- ✓ Time Series Analysis, J. D. Hamilton, 1994, Princeton University Press (JH)

Banking & Taxation

Course Description:

The aim of this course is to provide students with skills that will enable them to apply Financial Accounting knowledge to banking sector activities, in accordance with the chart of accounts for banks. Upon completion of the course students will be able: 1. to distinguish between active, passive and transfer banking activities; 2. to make recordings of accounting events in accordance with the chart of accounts for the banking sector; 3. to understand the banking operations of derivatives; 4. to analyze bank financial statements and compute financial ratios.

Course Content:

Taxation of Multinational Global Treasuries, In-house Banking, and Financial Institutions, Banking and Finance Background, Major countries, Major transaction types, Largest banks, Bank capital and use of branches, Global treasury and in-house banking, Banking and Finance Regimes, Tax issues for interest, dividends and royalties, Country Tax Regimes, Bank Capital Structures, Changing capital requirements, Tax planning, Hybrid debt and deductions, Bank structures and tax planning, Local country branches, Group financing entities, Offshore funding, In House Banking, Group treasury centres, Terms and conditions, Withholding taxes and credits, Services, Permanent establishments, Head office expense allocation –, Shared service centres,

Cost sharing, Tax grossing up, Credit recovery, Capital Gains and Bank Transactions, Holding companies, Offshore holding companies, Treaty protection, Tax treaty , Tax Treaties and indirect transfers, Tax Due, Diligence, Buyers information request List, Tax due diligence, Accounts and deferred tax, Intellectual Property, IP holding structures, Contract R&D, Bank Financing, Securities, Corporate, Finance Products, Client Financing Methods, Investment Banking, Introduction – M&A, bonds and share, securitization, derivatives, Mergers and Acquisitions, Commercial Issues, Funding client's global M&A

Reading Material:

- ✓ Balancing the Regulation and Taxation of Banking, Book by A. W Mullineux and Sajid M. Chaudhry

Monetary and Capital Markets

Course Description:

A survey of money and capital markets and the role they play in financial intermediation, capital formation, economic growth, monetary policy and business cycles. An advanced and comprehensive examination of macroeconomic policies, with particular emphasis on monetary policy and its role in maintaining sustainable economic growth and stable prices. Special attention will be devoted to the important role of money and capital markets in transmitting monetary policy and in business fixed capital formation. Students should emerge with a clear understanding of the important role of financial intermediation and efficient money and capital markets in support of increased capital formation and sustainable economic growth. Also there should be recognition of the important role that innovation such as the IT revolution and increasing business capital accumulation in boosting productivity growth and achieving an improving standard of living for most citizens.

Course Content:

Introduction to Money and Capital Markets, “Introduction to Money and Capital Markets”, Identifying Fed Policy Signals When Zero Interest Rate Policy (ZIRP) is in effect. Financial Intermediation “Key Economic and Financial Terms” Financial Crisis Reinhart and Rogoff This Time Is Different Major Financial Crisis’ Monetary Policy Monetary Policy Sorken Too Big To Fail, Monetary Policy “Effects of Central Bank Policy” Interest Rates and the Yield Curve “Interest Rates and the Yield Curve” Inflation and Inflation Expectations “Fed Inflation Targeting Debate “Inflation and Inflation Expectations” “Liquidity: Definition Sources and Signals” Risk Management Asset Price Bubbles Alan Greenspan, The Age of Turbulence. David M. Jones, We Won’t Do It Again Financial Innovation Financial Derivatives Movie, Front Line PBS LTCM, Aggregate Demand and Supply Analysis

Reading Material:

- ✓ Fredrick S. Mishkin, The Economics of Money, Banking and Financial Markets; BUSINESS SCHOOL EDITION (Boston: Addison – Wesley, July 2009)

Trade Policy

Course Description:

Trade Policy is an introductory course in international economics. The course focuses on microeconomic dimensions of trade relations between countries. We examine why nations engage in international trade and evaluate the benefits and costs of such activity; the

arguments for and against trade protection; and the impact of trade on developing economies.

Course Content:

World Trade: An Overview Labor Productivity and Comparative Advantage: The Ricardian Model
WEEK Specific Factors and Income Distribution Specific Factors and Income Distribution, - Resources and Trade: The Heckscher-Ohlin Model - The Standard Trade Model

- External Economies of Scale and the International Location of Production - Firms in the Global Economy: Export Decisions, Outsourcing, and Multinational Enterprises - The Instruments of Trade Policy - The Political Economy of Trade Policy - Trade Policy in Developing Countries - Controversies in Trade Policy

Reading Material:

- ✓ Steven Husted and Michael Melvin, International Economics, 8th edition (Pearson: 2010)
- ✓ Douglas A. Irwin, Free Trade Under Fire, 3rd edition (Princeton: 2009)
- ✓ Russell D. Roberts, The Choice: A Fable of Free Trade and Protectionism, 3rd edition
- ✓ (Prentice Hall: 2007)

Self-Management

Course Description:

This course is designed to equip the students with strategic management process. It provides an insight into business and strategic process, starting with strategy formulation, implementation and finally evaluation of the strategy. It is a capstone stone course for MBA students in which their application of knowledge on human resource, marketing and finance is evaluated and enhanced by giving them local and international case studies on real time basis.

Course Content:

Overview on Strategic Management, Defining Strategic Management, Stages of Strategic Management, Vision & Mission Statement, Why mission statement is important, Accountability of top management through mission statements, Components of Mission Statement, The External Assessment, The Nature of External Audit, External Factor Evaluation Matrix, Developing an EFE Matrix, The Internal Assessment, The Resource Based View, Constructing Internal Factor Evaluation Matrix, Financial Indicators and Ratios, Five forces model of competition by Michael Porter, Strategies in Action, Comprehensive Strategy Formulation Framework, SWOT Matrix, Constructing SWOT Matrix, Developing SO, WO, ST and WT Strategies, Strategy Choices, Type of Strategies, Level of Strategies, Strategy Analysis and Choices, Integration strategies, Intensive Strategies, Diversification strategies , Strategic Intent, The Strategic Position and Action Evaluation Matrix (SPACE Matrix, BCG Matrix, Strategy Playbook, Blue Ocean Strategy, Implementation of Strategies , Balanced Score Card, Business ethics/ social responsibility and environment sustainability report

Reading Material:

- ✓ Strategic Management- Concept and Cases – 13th Edition By Fred R David

Corporate Skills

Course Description:

To enable students to learn fundamentals of corporate law, to have sound grasp of aspects which businessmen encounter in performance of professional obligations, to develop an understanding of business events and associated legal issues faced by business companies, to apply legal knowledge to recognize and address legal issues as business managers.

Course Content:

Introduction, Definition, and Sources of Law, Familiarization with Constitutional State Organs, Legislative Process of Pakistan, Judicial System of Pakistan and Courts , History objects and Functions and Sources of Corporate Law, Basic concepts of rights and obligation under contract laws, Company, Legal Persons and personalities , Distinctive Features of Companies, Kinds and Types of Companies, Choosing Business Forms, Incorporated Bodies (Companies) and Unincorporated Bodies (Partnership Firms), Advantages and Disadvantages of Incorporation , Description of and Distinction between Registered Companies, Stages of formation of a company, Memorandum and Articles, Civil and Criminal Liabilities for untrue statements in Prospectus, Corporate Structure, Meetings and Resolutions, Corporate Books and Records, Financing, Transactions in Shares, Organizational Changes, Winding up, Liquidators, Contributors.

Reading Material:

- ✓ The Companies Ordinance, 1984
- ✓ The Partnership Act, 1932
- ✓ Constitution of Pakistan
- ✓ Nyazee, Imran Ahsan Khan. Company Law. Rawalpindi - Advanced Legal Studies , 2008
- ✓ Shaheen, Nazir Ahmed. Practical Approach to the Companies Ordinance, 1984. Rawalpindi Lahore: Federal Law House, 2013.
- ✓ Petiwala, M Khalid. Notes on Company Law. Karachi: Petiwala Book Depot, 2010 or latest edition.

Industrial Economics

Course Description:

Its aim is to familiarize students with a broad range of the methods and models applied by economists in the analysis of firms and industries. A broader goal is that students who take the course will, by working extensively with theoretical models, acquire analytical skills that are transferable to other kinds of intellectual problems.

Course Content:

Introduction to industrial organization Review of basic microeconomic concepts Market power; review of basic monopoly theory, Non-linear pricing and price discrimination, Durable goods monopoly, Static games Cournot and Bertrand competition, Dynamic games The Stackelberg model, Limit pricing and entry deterrence, Collusion , Mergers and vertical integration , Product differentiation , Introduction to markets with asymmetric information ,

Additional topics in markets with asymmetric information , Dynamic games with imperfect information and Perfect Bayesian Equilibrium Signalling games,

Reading Material:



Industrial Economics: An Introductory Text Book, Book by R. R. Barthwal

Budgeting and Financial Planning

Course Description:

Financial planning and budgeting are critical to the success of a business entity – for-profit or otherwise. Financial plans and budgets are an integral part of strategic planning that are indispensable in the deployment and effective allocation of resources to achieve the entity's long- and short-term objectives.

Course Content:

Budgeting and Long-range Planning, Budgeting at Corporate Level, Budgeting at Department or Team Level, Building Assumptions, Budget Worksheet, Laying the Groundwork for Budgeting, Essentials of Effective Budgeting, Impact on Cash Flow Management, Relevance of Cash Flow Forecast in Cash Flow Management, Preparing Budgets, Operating Budgets, Cash Budget, Budgeted Financial Statements, Capital Budgeting, Characteristics of Investment Appraisal Projects, Time Value of Money, Discounted Cash Flows, Capital Budgeting Techniques – Types, Merits and Drawbacks, Net Present Value, Internal Rate of Return, Payback Period.

Reading Material:



Financial Planning, Budgeting, and Forecasting: Financial Intelligence Collection, Book by David A. Moss, Jeremy Hope, Joe Knight, and Karen Berman

Advanced Topics in Microeconomics

Course Description:

This is an advanced course in microeconomic theory. The course covers the main topics of microeconomics from consumer and producer behavior, partial and general equilibrium, behavior under uncertainty, game theory and asymmetric information.

Course Content:

Preferences, choice and demand. Production. Partial equilibrium. Expected utility. Static games. Dynamic games and beliefs. Market power and product differentiation. Adverse selection, signaling and screening. Principal agent problems. General equilibrium and welfare. Existence and uniqueness of equilibrium. General equilibrium under uncertainty. Intertemporal equilibrium.

Reading Material:



D. Kreps, A Course in Microeconomic Theory, Harvester Wheatsheaf . • G. Jehle and P. Reny, Advanced Microeconomic Theory, Addison-Wesley

Advanced Topics In Macroeconomics

Course Description:

The topic of the course is the role and the origins of news and noise in macroeconomics. The class offers a tour of many of the frontier areas of research in macroeconomics: macro-game theory, monetary economics, macro-finance, forecasting and empirical macroeconomics. We'll explore some of the latest research questions and theories designed to address those questions. We'll use information frictions and information choice as a way to reconcile standard theory with puzzling facts. At the same time as we explore theory, we will be building up the tools of Bayesian updating and Bayesian forecasting, powerful tools to address many questions that arise in the business world as well.

Course Content:

Introduction and overview. Bayes law. Bayesian updating with normal variables. If we are going to study information flows, we first need to know how to measure information. Entropy and mutual information. Comparing learning technologies. Information choice in strategic games. Tools do macroeconomists use to describe strategic settings with many players, information choice central to the outcome of this strategic interaction, Introduction to global games. The role of private and public information in coordination games. Strategic aspects of information choice. Information frictions in price-setting. Central Bank Transparency and Confusion. How should central banks choose what information to disclose? Portfolio Choice. What's the most profitable way to form a portfolio of risky assets? How does the ability to learn about assets before investing turn conventional theory on its head? Information choice and under-diversification. Forecasting and uncertainty.

Reading Material:

- ✓ Information Choice in Macroeconomics and Finance.
- ✓ Brunnermeier, Markus. Asset Pricing under Asymmetric Information: Bubbles, Crashes, Technical Analysis and Herding, Oxford University Press, 2001.
- ✓ Vives, Xavier. Information and Learning in Markets

Poverty and Income Distribution

Course Description:

The aim of this course is to introduce students to the subject of poverty and inequality. The emphasis will be on problems in the modern contemporary economy, but the topic will also be approached from an historical perspective, taking a longer term view of the distribution of income in human societies. In particular, we will examine why some individuals and groups have less access to resources and income than others, study some of the philosophical perspectives related to the distribution of income, and examine the effectiveness of some of the policies that are thought to minimize poverty and to reduce the gap between the rich and poor.

Course Content:

Introduction Measurement, Some popular inequality measures, Theory and measurement. Inequality within and across countries, Income inequality, Review of Economic Dynamics special issue, The capital-income ratio and the split of income between capital and labor, Income inequality and its sources, The labor market and wage inequality, "Explained" and

“unexplained” inequality, Skill-biased technical change and the relative demand for and supply of skills, Capital income and wealth inequality “Polarization”, Structural change, Mobility. Income redistribution, An overview of redistributive policies, Consequences of inequality and redistribution for individual behavior (partial equilibrium), Consequences of inequality and redistribution for macro outcomes (general equilibrium): saving, investment, growth

Reading Material:

✓ Moya, Dambiso (2009) *Dead Aid: Why Aid is Not Working and How there is a Better Way for Africa* (Vancouver, Douglas and McIntyre).

✓ Sachs, Jeffrey (2005) *End of Poverty: Economic Possibilities for our Time* (New York, Penguin). Edward N. Wolff (2009), *Poverty and Income Distribution*, 2nd edition, Wiley Blackwell.

Frank Cowell (2011), *Measuring Inequality*, 3rd edition, Oxford University Press.

Thomas Piketty (2014), *Capital in the 21st Century*, Harvard University Press.

International Economics

Course Description:

The course is to introduce students to both classical and modern theories of international trade in goods and services, as well as empirical research on trade. A substantial fraction of the course is dedicated to examination of efficient trade policies. The course is to introduce students to introductory level of theories of international finance flows, determination of interest and exchange rates in interconnected economies, macroeconomic policies available to the government, and the nature of financial crises.

Course Content:

Important issues in international trade. History and present state of world trade flows, Russian trade balance, History of the development of trade theory, Essentials: Ricardo and Comparative Advantage, Factor Price Equalization and Trade, Who Wins and Who Loses from Trade, Standard Trade Models and Country Welfare, An Empirical Evaluation of Trade Patterns, Market Imperfections and Trade, International Factor Movements, Tariffs and Non-Tariff Barriers to Trade, Government Intervention in Trade, Strategic Trade Policies, Development through Trade Policies, Political Economy of Trade (optional, time permitting), World Trade Organization, Preferential Trading Arrangements, Custom Unions and Economic Integration, National Income accounting and the Balance of Payments, Asset Approach to Exchange Rate Determination, Money, Interest Rates, and Exchange Rates, Price Levels and the Exchange Rate in the Long Run, Output and the Exchange Rate in the Short Run, Fixed exchange rate regime, The international monetary system, International capital markets and emerging markets, Financial and economic crisis of 2008-09

Reading Material:

✓ Krugman P., Obstfeld M., Melitz M. (KOM) *International Economics: Theory and Policy*, 2015 (10th edition).

✓ The 9th edition Krugman P., Obstfeld M. (KO) *International Economics: Theory and Policy*, 9th edition, 2012

Labor Economics

Course Description:

The objective of this course is to cover the important elements of labor economics using microeconomics theoretical tools. On the successful completion of this course the students will be able to use economic concepts to explain certain labor market issues in Pakistan.

Course Content:

Labor markets are and the determinants of the supply of and demand for labor. The existence of labor shortages, the effects of the minimum wage on employment, the effects of tax policy on labor supply and demand, investments in education and training, the effects of welfare policy on labor supply and demand, the effects of international trade on labor demand, worker mobility, pay and productivity, the labor effects of outsourcing, the role of trade unions, unemployment, and income inequality, the decision to work, the family and the life-cycle and child labor. Pakistan's labor economics.

Reading Material:

- ✓ Labor Economics, Book by George J. Borjas

Investment Banking and Security Analysis

Course Description:

This course focuses on the fundamental principles and techniques of security analysis. The course will deal with the following topics: definition of securities; securities regulation in the Philippines; the investment environment; markets and instruments; macroeconomic and industry analysis; fundamental analysis; technical analysis; equity valuation models; financial statement analysis; derivatives instruments; and special topics.

Course Content:

Overview of Banking – What are Banks, Introduction, The Meaning of a Bank and Banking Business, Types of Banks, Banks and the Principal Agent Problem, The Economic Functions and the Role of Banks in a Modern Economy, Banking Operations – What do banks do, Standard Banking Services, Types of Banking, Central Banking, Global Regulation of Banks, Managing Banks, Risks and Management of Risks in Banking, Overview of Investment Management, The Investment Process, Financial Market Analysis, Securities Analysis

Reading Material:

- ✓ Bodie, Z., A. Kane and A.J. Marcus. (2002). Investments. New York: McGraw-Hill Companies, Inc.
- ✓ Decasa, L.M. (2013). Securities Regulation Code (Republic Act No. 8799): Annotated with Implementing Rules and Regulations.
- ✓ Manila: Rex Book Store. Graham, B. and D.L. Dodd. (2009). Security Analysis: Principles and Technique. New York: McGraw Hill Companies, Inc.
- ✓ Reilly, F.K. and K.C. Brown. (1997). Investment Analysis and Portfolio Management. Fort Worth: The Dryden Press.



Ross, S.A., R.W. Westerfield and J. Jaffe. (1999). Corporate Finance. New York: McGraw-Hill Companies, Inc

Islamic Economics

Course Description:

The objective is to provide an overview of Islamic economic system, also an overview of capitalism, communism, Islamic view of consumption, production, and factors of production and their ownership, forms of business organizations, saving and investment functions in an Islamic economy.

Course Content:

Islamic concept of money and Western rationale of interest, the concept of "riba", its interpretation and implications, alternatives to interest in an Islamic economic system, commercial banking in interest free economy, Islamic modes of financing. The role of Islamic state, zakat, usher and insurance, theory of fiscal policy in an Islamic state, zakat and fiscal policy, inflation and the Islamic economy. It also explores the application of Islamic banking in Pakistan, introduction of zakat, and usher in Pakistan, evaluation of Islamization process in Pakistan and other Muslim countries (Iran, Sudan, Malaysia, Egypt).

Reading Material:

- ② Introduction to Islamic Economics: Theory and Application, M Haneef - 2015

Urban Economics

Course Description:

The objective of this course is to provide students with the knowledge of urban economics i.e. that what are the various problems of urban areas.

Course Content:

It deals with the nature and development of urban areas. The analytical sections of the course deal with the location of firms and households in an urban spatial context, the size distribution of urban areas, the theory of land rent, and optimal city size. Various urban problems such as poverty, racial segregation and discrimination, pollution and environmental quality are discussed. Other policy questions deal with congestion tolls and efficient highway investment, land use regulation, central city fiscal problems, and alternative educational policies, Local government spending, local government revenue endogenous maintenance, A Commodity Hierarchy Model, Maintenance, Comparative Statics with Durable Housing.

Reading Material:

- ② Urban Economics And Urban Policy: Challenging Conventional Policy Wisdom, PC Cheshire, M Nathan, HG Overman - 2014

General Equilibrium and Welfare Economics

Course Description:

The objective of this course is that students should know adequately about the important topics in microeconomics.

Course Content:

Nature of general equilibrium analysis, General Equilibrium Theory: Multi market equilibrium in a competitive setting; Walras Law; Existence of equilibrium; Stability of equilibrium; Money in a general equilibrium setting. Technical and allocative efficiency and case of exchange economy. Linear programming technique to general equilibrium theory (Activity Analysis). The Von-Neumann Model of a expanding economy, the input-out Model. Pareto principle, optional, production and resource allocation and efficiency of Perfect Competition. Measurement of changes in welfare: consumer surplus, compensation principle. Theory of Social Choice: Social welfare function, Arrow's Impossibility Theorem, Marginal cost pricing, Joint Products, Externalities, Income distribution and compensation principles. Theory of second best and its application in Public Sector and international trade.

Reading Material:

- ❑ General Equilibrium and Welfare Economics An Introduction, Authors: Moore, James C.

Economics of Regulation and Competition

Policy Course Description:

To develop an understanding of the main issues relating to the regulation of industries and competition policy, and to apply economic reasoning in a critical manner to regulated industries and competition policy cases.

Course Content:

Introduction to competition policy and economic regulation, The natural monopoly problem, barriers to entry and market power, Introduction to strategic behavior, Externalities and market failures, Assessing the private and social returns from investment Regulating for competitive outcomes: issues of entry, licencing and deterring collusion, Link between regulation, competition, industrial policy and inclusive growth, Key competition and regulatory decisions and application of economic principles in energy, banking, telecoms, transport and network industries, Entry, access and vertical integration, Creating rivalry while incentivising investment , Licencing and universal access Market definition, market structure

& market power , Difficulties in market definition, Evaluation of market power Understanding Restrictive Trade Practices, Categories of abuse, Price discrimination/unfair pricing, Introduction to exclusionary conduct, Undermining rivalry, Exclusive dealing, Loyalty rebates, Tying and bundling, Margin squeeze, Access to essential facilities Merger analysis, Types of mergers, Possible anti-competitive effects (theories of harm), Analytical framework to assess mergers, Efficiency justifications, Introduction to evaluation of vertical mergers.

Reading Material:

- ❑ Monopolies, Mergers and Competition Policy, F. M. Scherer

International Peace and Security

Course Description:

From the academic point of view, a multidisciplinary approach is required to understand the causes and consequences of threats to national and international peace and security. Thus, there is a genuine relevance of the course for students of engineering, science and technology. The course aims to provide students with knowledge and skills to critically understand and analyze complex contemporary issues in international peace and security. It will help students to understand both the theoretical and historical background of

Course Content:

Approaches and theories of peace & conflict studies, Theoretical approaches to understanding Conflict and Peace Building and International Relations, Conflict analysis tools (hands on practice), Understanding terms such as: Use of Force, Diplomacy and Role of International Law, Role of technology in modern warfare (cyber and drone warfare), Relationship of national security/international security and foreign policy, Contemporary Global Conflicts and Security Challenges, Rethinking Security: Traditional and non-traditional perspective, peace and conflict challenges facing Pakistan and its neighborhood, Pakistan's counter terrorism campaign, Roots of conflict between India and Pakistan – Kashmir issue and water sharing, Political turmoil in the Muslim world including sectarian dimensions and its implications for international peace and stability, Afghanistan after the withdrawal of foreign forces, impact on regional security and cooperation, politics of aid and role of un in

Reading Material:

- ☒ Norrie MacQueen (2006), Peacekeeping and the International System,

Union and Labor Laws

Course Description:

This course focuses on the laws governing collective bargaining by unions and employers, and the laws regulating the relationship between individuals and their unions. Topics covered include, procedures and principles governing both the selection and decertification of unions; the free speech, access and other rights of management and unions during an organizational campaign; the duty to bargain in good faith; the unilateral change doctrine; and the procedural and substantive law governing “unfair labor practices,” by both employers and unions.

Course Content:

Evolution of Labor Relation Laws, Strikes, Picketing and Boycotts Establishment of Collective Bargaining Labor and the Anti-Trust Laws Negotiation in Collective Bargaining Administration of the C. B., Manager: Functions, Roles & Skills, What is an Organization, Characteristics of Organizations. Demographic Characteristics of the Workforce. Ability of the workforce, psychological factors: employee attitudes, and personality, employee perception, and learning. Work Specialization; departmentalization; Chain of Command; Span of control; Centralization and Decentralization; Formalization Simple Structure; Bureaucracy; The Matrix Structure. Virtual Organization; Boundaryless Organization; and The Learning Organization Organization Strategy, Size, Technology, Environment. Organizational Designs and Employee Behavior Functions and Direction of Communication Interpersonal vs. Organizational Communication Persuasive Communication, Barriers to Effective Communication, Performance Evaluation, Organization Change and Stress Management, Forces for Change; Resistance to Change, Work Stress and Its Management

Reading Material:

- ✓ Labor Law in a Nutshell, 1992, 3rd edition. By Douglas L. Leslie. West Publishing Co., St. paul
- ✓ Gold, Michael E. (1998). An Introduction to Labor Law, revised. Cornell University, Ithaca

Agricultural Economics And Food Security

Course Description:

The objective of this course is to explain the concepts of agricultural economics to the students.

Course Content:

In this course students will study the logic of economic theory, economic theory as abstraction consumption versus production economics versus agricultural economics, Production function, fixed versus variable inputs, law of diminishing return, marginal physical product (MPP) and average physical product (app), MPP and marginal product function, neo -classical production function. MPP and APP for the neo- classical function, sign, slope and curvature, single-input production elasticity, elasticity of production for the neo classical production function. It also covers Original Cobb– Douglas production function, characteristics of Cobb– Douglas type of function, isoquants for the Cobb–Douglas type of function, profit maximization with the Cobb–Douglas function, duality and the Cobb–Douglas function, constrained output or revenue maximization, multiple inputs and a single product, many outputs and a single input, many outputs and many inputs

Reading Material:

Agriculture & Food Security, M. Elliott, M. Madkour

Appendage 3124

BS (Maritime Business and Management), Launch Proposal

Sponsored by: HOD Humanities and Social Sciences Department, BUKC

Summary of the Case

The Department of Humanities and Social Sciences at Karachi Campus has planned some new programs to be launched in Fall 2018. BS (Maritime Business and Management) is one such program which has been planned in view of emerging market requirements. Feasibility report of the program has been prepared according to the format provided by BU HO. Detailed report is attached. It appears logical to move ahead in launching this program in view of upcoming CPEC.

HR / Establishment Effects: Would require additional HR and infrastructures, details are covered in the feasibility report.

Financial Effects: Details are covered in the feasibility report.

Recommendations: The point may kindly be approved for launching the program in Fall 2018.

Proposal for Launching

BS (Maritime Business and Management)

E. ACADEMIC DETAILS	
1	Faculty/Department: Management and SS / Humanities and Social Sciences, BUKC
2	Name of the Programme: BS in Maritime Business and Management
3	Mission of the Programme: BS (Maritime Business and Management) prepares the future Maritime Planners, Maritime Business Entrepreneurs, Managers and Corporate Governors to safeguard stake holders' Business Ventures. The program also inculcates ethical practices in future Business Managers and Maritime Planners to cope up with the challenges emerging from complex regional and global businesses especially CPEC and OBOR.
4	Objectives of the Programme: <ul style="list-style-type: none"> ■ To prepare future Maritime Planners and Professionals for developmental growth and employment opportunities. ■ To develop seaborne business acumen among the students to get professional degrees' in commensuration to their growth in the job market. ■ To promote ethical maritime business practices for development of a vibrant, forward looking and balance society. ■ To prepare the students for meticulous maritime planning of various projects for mutual benefits and collaborative well-being.
5	Outcomes of the Programme: Graduates of BS (Maritime Business and Management) will be able to: -

	<ul style="list-style-type: none"> ■ Prepare, analyze and interpret Maritime Business Opportunities and undertake business plans especially SMEs.
	<ul style="list-style-type: none"> ■ Put across viability analysis of various projects and cost-benefit reviews of Maritime Businesses in logical and convincing manners.
6	<ul style="list-style-type: none"> ■ Recognize the rationale behind the growth and development of modern world seaborne businesses and its vast potentials. ■ Develop an in-depth knowledge of the underlying principles of Maritime Business and provisions of interface between knowledge and practice ■ Critically realize awareness of current maritime problems and new insights in countries progress and prosperity under the backdrop of OBOR and CPEC. <p>Rationale for the Programme:</p> <ul style="list-style-type: none"> ■ Seaborne Business has always maintained its relevance with economic growth and development of societies, for Pakistan, it has become essential in view of forthcoming CPEC projects and opportunities. ■ The program provides multiple employment opportunities in public as well as private sectors and upward growth in Regional and Global Businesses ■ Our initial survey reflects potential of students' pool for admission, provided we succeed in creating the right kind of awareness.
7	<p>Brief Description of the Programme: Bachelor in Maritime Business and Management is designed to develop qualified and educated workforce on seaborne business. It will explore theoretical concepts and share regional and global best practices in Maritime Affairs using case studies. The professional deficiency in the services sector can consequently be covered by demonstrating the skills necessary to tackle problems within the complex world of Maritime Business and its growth. It is a four years' degree program for students who have passed higher secondary / equivalent schooling / examination under HEC rules.</p>
8	<p>Duration: 4 Years</p>
9	<p>Venue(s): On Site/Off Site/Both On & Off Site (tick one/strike-through the ones not applicable; if Off Site, give details)</p>
10	<p>Bahria University Karachi Campus, Humanities and Social Sciences Department</p> <p>Programme Scheduling Format:</p> <p>Morning/Evening/Weekend (tick one/strike-through the ones not applicable):</p>
11	<p>Morning</p> <p>Bi-Semester/Trimester/Semester Summer Session/Annual/Bi-Annual (tick one/strike-through the ones not applicable): Bi-Semester</p>
12	<p>Mode of Study/Examination: As per BU Examination Rules</p>
13	<p>Additional Faculty Member(s) Required: (Indicate if there is a requirement for additional faculty members, fulltime/visiting, along with qualifications.) 1st and 2nd Years' requirement. Regular: 3 (1 PhD and 2 MPhil / MS) Visiting: 1</p>
14	<p>Additional Skilled-Worker(s) Required: (Indicate if there is a requirement for additional Skilled Staff, fulltime/part-time, along with their qualifications/skill sets.): Nil</p>
15	<p>Additional Classroom(s) required: (The requirement is to include the number of classrooms and their capacities.)</p>

	<ul style="list-style-type: none"> ▪ First Semester: 1 ▪ Additional one classroom with the start of every semester till 8th semester.
16	Additional Requirement for Laboratories: (<i>The requirement is to include the number of laboratories, their equipment and their capacities.</i>) One computer lab would be required; may be shared with existing labs.
17	Additional Requirement for Books, Subscriptions, Memberships to Online Research Sites/ Repositories: Following books are required: -
	<ul style="list-style-type: none"> ▪ Existing stock of books procured under NCMPR would partially work to start the program.
18	<ul style="list-style-type: none"> ▪ About 100 more books would be required on contemporary thought process by different writers on Maritime Affairs.
19	Admission Criteria: As per BU Rules for BBA / A&F Program
20	Additional/Different Examination Requirement <i>(Indicate if there will be any examination requirement, additional to or different from the BU Academic Rules or Examination Policy in vogue).</i> Nil
21	Number of Admissions Expected for First Intake: 20 - 25
22	Number of Admissions Planned/Expected for Subsequent Intakes: 25-30 / semester
23	FBOS: (<i>Indicate the FBOS meeting reference and Item No</i>): 17 th FBOS Competent Authority: (<i>Indicate the File No & date; reproduce the decision</i>): Academic Council
24	Complete Plan of Studies, inclusive of complete Roadmap: (<i>Attach as Annex 'A'</i>)
25	Course Outlines, Descriptions, Pre-Requisites & Readings (Compulsory & Recommended) <i>(Attach as Annex 'B')</i>

F. FINANCIAL DETAILS							
1	Source of Funding: BU: Fully/Partially: Fully Public Sector (B1): Fully/Partially (<i>provide complete details; attach MOU, agreement etc.</i>) NNGO (B1): Fully/Partially (<i>provide complete details; attach MOU, agreement etc.</i>) INGO (B1): Fully/Partially (<i>provide complete details; attach MOU, agreement etc.</i>) UN/IGO (B1): Fully/Partially (<i>provide complete details; attach MOU, agreement etc.</i>)						
2	Degree Duration: Annual or Semester System: <table style="margin-left: 20px;"> <tr> <td>Annual</td> <td>Number of Years</td> </tr> <tr> <td>Semester</td> <td>Number of Semester: 8</td> </tr> </table> Total Number of Credit Hours: 135			Annual	Number of Years	Semester	Number of Semester: 8
Annual	Number of Years						
Semester	Number of Semester: 8						
3	Expected fee to be charged based on Cost & Benefits Analysis: (show working) <ul style="list-style-type: none"> ▪ Fee Rate / Credit Hour: Rs 4760 ▪ Tuition Fee / Semester / Student: Rs 85680 						
4	Expected Number of students for 1st & 2nd Intakes: 40						
5	Expected Earning from first two Intakes (B5): (Show working) <ul style="list-style-type: none"> ▪ Tuition Fee / Semester / Student: Rs 85680 ▪ Admission Fee and other Charges / Student (One Time): 26000 ▪ Earning from First Two Intakes: $40 \times 85680 = 3427200 + 40 \times 26000 = 1040000$ ▪ Total of first two intakes = Rs 44,67,200 						
6	Expected Earnings for the Next Five Years (B6): (show working) <ul style="list-style-type: none"> ▪ 1st Year Earning: Rs 39,47,200 (3.9 Millions) ▪ 2nd Year Earning: $39,47,200 + 1713600 = 56,60,800$ (5.6 Millions) 						

- 3rd Year Earning: $39,47,200 + 3427200 = 73,74,400$ (7.4 Millions)
- 4th Year Earning: $39,47,200 + 5140800 = 90,88,000$ (9.8 Millions)
- 5th Year Earning: $39,47,200 + 6854400 = 10801600$ (11 Millions)

7 **Total Estimated Salaries of all Additional Human Resources per annum (B7): (Show working)**

Salary Estimates of Faculty for 1st Year: 2700000

Salary Estimates of Supporting Staff for 1st Year: 540000

Total of Faculty and Supporting Staff: Rs 32,40,000 (Approximately)

8 **Cost of Additional Laboratory Equipment/Tools (B8): (show working)** Existing lab facilities shall be used

9 **Cost of Additional Classrooms (B9): (Include furniture, technical aids etc)**

Furniture and Other Accessories of one Classroom: 5,00,000

Furniture and Other Accessories of two Classroom: 10,00,000 (Approximate)

10	Cost of Additional Books, Subscription & Memberships to on-line Sites/Repositories (B10): (show details) Cost of one Book: 12000 Approximately on Average Cost of 100 Books: 250000
11	Off-Site rental Expenses and Cost of other Fixtures (B11): (Show details): Nil
12	Miscellaneous Expenses required for Starting the Program (B12): <ul style="list-style-type: none"> - Advertisement: 100,000 - Printing & Stationery: 10,000 - Admin Cost: 5000 - Any other: 5000 - Total: 1,20,000
13	Annual Recurring Expenditures in Subsequent Years (B13): <ul style="list-style-type: none"> - Salaries: 50,00,000 - Rentals: - - Subscriptions/Memberships: - - Advertisements: 1,00,000 - Printing & Stationery: 2,00,000 - Admin Cost: 5,00,000 - Any other: 1,00,000 - Total: 59,00,000
14	Total Cost of the Programme (B14): [Add B (7) to B (12)]: Rs 46,10,000
15	Net Cost of the Programme (B15): [Subtract B (1) from B (14)] 46,10,000 – 4467200 = Rs 1,42,800
16	Net Earnings in First Year (B16: [Subtract B (15) from B (5)]: - 19,42,800
17	Projected Annual Gross Earning in Subsequent Years (B 17): (show details & working; add 10% towards all expenses in subsequent years.) <ul style="list-style-type: none"> ▪ In 1st Year, there is no earning, rather setting up expenditure exceeds by about Rs 1,42,800 ▪ We would start earning from 2nd Year onwards, the amount would depend upon number of students. However if we keep it at 20 students, the net earnings would be 2.5 million in 2nd Year, 3.5 million in 3rd Year and about 4.5 million in 4th Year.
18	Projected Annual Net Earning in Subsequent Years: [Subtract B (13) from B (17)] It would vary from 3.9 to 6 million per Year.

Annex A

Roadmap: BS (Maritime Business and Management)
Humanities and Social Sciences, BUKC

Semester-1

S.NO	Codes	Course	Level	CH	Pre-requisite
1	ENG 105	Functional English	Core	3	
2	MAT 105	Mathematics	Core	3	
3	IT 101	IT Skills	Core	3	
4	ECO 101	Fundamentals of Economics	Core	3	
5	MTM 101	Introduction to Maritime Industry	Core	3	
6	MGT 211	Self-Management	Core	3	

Semester-2

S.NO	Codes	Course	Level	CH	Pre-requisite
1	MGT 111	Principles of Management	Core	3	
2	BCM 121	Business Communication Skills	Core	3	
3	ISI 101/SOC 361	Islamic Studies/Ethics	Core	3	
4	GEO 115	Introduction to Geophysics	Core	3	
5	MTM 120	Introduction to Meteorology & Oceanography	Core	3	
6	HSS 202	Introduction to Sociology	Core	3	

Semester-3

S.NO	Codes	Course	Level	CH	Pre-requisite
1	MGT 201	Fundamentals of Business Law	Core	3	
2	ENG 132	Oral Communication & Public Speaking Skills	Core	3	ENG 105
3	PAK 101	Pakistan Studies	Core	3	
4	FIN 201	Fundamentals of Finance	Core	3	
5	ETM 201	Economics of Sea Transport & Int Trade	Core	3	
6	MGT 221	Management and Leadership	Core	3	

Semester-4

S.NO	Codes	Course	Level	CH	Pre-requisite
1	MTM 222	Introduction to Coastal Zone Management	Core	3	
2	MTM 223	Marine Insurance	Core	3	
3	MTM 224	Marine Pollution & Control	Core	3	
4	MTM 225	Regulatory Framework of Shipping	Core	3	
5	MAT 205	Statistics	Core	3	
6	HSS 225	Psychological & Emotional Development	Core	3	HSS 202

Semester-5

S.NO	Codes	Course	Level	CH	Pre-requisite
1	MTM 301	Ports Operations Management	Core	3	
2	MTM 302	Maritime Logistics, Distribution & Supply Chain Management	Core	3	
3	MTM 303	Law of Carriage of Goods by Sea	Core	3	
4	MKT 110	Principles of Marketing	Core	3	
5	HRM 353	Human Resource Management	Core	3	
6	MIS 460	E-Commerce	Core	3	

Semester-6

S.NO	Codes	Course	Level	CH	Pre-requisite
1	MTM 321	Shipping Operations Management	Core	3	MMT 301
2	MTM 322	Fisheries Resources & Management	Core	3	
3	MRM 302	Research & Project Writing Methods	Core	3	
4		Elective-I	Core	3	
5		Elective-II	Core	3	
6		Elective-III	Core	3	

Semester-7

S.NO	Codes	Course	Level	CH	Pre-requisite
1	MTM 401	Coastal Eco-Tourism Development and Management	Core	3	
2	MTM 402	Hydrographic Data & Services Management/Hydrography & Navigation	Core	3	
3	MTM 403	Maritime Innovation & Entrepreneurship	Core	3	
4		Elective-IV	Elective	3	
5		Elective-V	Elective	3	

Semester-8

S.NO	Codes	Course	Level	CH	Pre-requisite
1	SDW 499	Project / Thesis	Core	6	MRM 302
2		Elective-VII	Elective	3	
3		Elective-VIII	Elective	3	

List of Electives

S. No.	Course Code	Title of the Course	Credit Hours
1.	MTM 501	Maritime Business: China Pakistan Perspective	3
2.	MTM 502	Maritime and Business Law	3
3.	MTM 503	Pakistan Maritime Affairs: Regional and Global Perspective	3
4.	MTM 504	Maritime Management: Concept and Applications	3

5.	MTM 505	Contemporary Issues of Maritime Management	3
6.	MTM 506	Maritime Management in Pakistan: Past, Present and Future	3
7.	MTM 507	Introduction to Maritime Economics and International Trade	
8.	ECO 508	Labor Economics	3
9.	ECO 515	Union and Labor Laws	3
10.	ECO 502	Industrial Economics	3
11.	HRM 509	HRM in Maritime	3
12.	ECO 502	Industrial Economics	3

Annex B

Courses Descriptions: BS (Maritime Business and Management)
Humanities and Social Sciences, BUKC

Courses Description**Functional English**

The purpose of this course is to develop the English-language proficiency of prospective elementary school teachers and to help them become confident in reading, writing, speaking, and listening to the English language. Instead of teaching grammar in isolation and only at sentence level, this course is based on developing the language abilities of Student Teachers through an integrated approach that provides opportunities to develop their listening, speaking, reading, and writing skills. With a focus on social interaction, the course draws specific attention to the accurate use of structures, improvement of pronunciation, and development of active vocabulary in descriptive, narrative, and instructional texts.

Mathematics

It will cover Number System: Real Numbers; Properties of Real Numbers; Complex Numbers and related laws of addition, multiplication and division; Functions Domain & Range; Inverse of a Function; Quadratic equations and their solutions; Matrices and Determinants; Partial Fractions; Sequences and Series; Permutations and Combination; Mathematical Induction and Binomial Theorem; Basics of Vector Analysis; Elementary Coordinate Geometry; Limits and Continuity of Functions; Differentiation and Integration of Functions.

IT Skills

This course is appropriate for any student interested in using computer applications in an academic, professional, or personal setting. It provides an introduction to word processing, electronic spreadsheet, and database management software.

Fundamentals of Economics

The course will cover fundamental concepts of both macro- and microeconomics at the introductory level. Microeconomic aspects of the course include supply and demand; elasticity; market efficiency; cost of production; and profit maximization in competitive and monopolistic markets. Macroeconomics aspects include national income accounting; unemployment; inflation; Long-run and short-run aggregate demand and supply curves; economic growth and international trade.

Introduction to Maritime Industry

This course consists of facts and figures highlighting the importance of shipping to the world of trade; it will define brief introduction to types of ships Geographical origins and destination of major cargo; Maritime Perils, Meteorology; Role of Broker, Charterers, Shipper, Carrier, Consignee, Distributor, Retailer and end-user; Contracts of carriage, Charter parties, Shipping services; Port operations, Concepts of Maritime logistics; Basics of Shipping economics; Ship management, Quality control; Ship Operations; Ship board operations, Seaworthiness; Maritime Legal Infrastructure, Jurisdiction; Maritime Safety and Security, Marine pollution, Maritime Environmental issues.

Self-Management

Students will learn how to use contemporary learning theories and fundamental management and marketing concepts to guide their self- and career development. Throughout the course, students will engage in a series of learning activities aimed at developing, documenting, evaluating, peer-reviewing, presenting, and improving their practical self-management and self-marketing competencies and skills. They will learn how to use e-portfolios for conducting their personal SWOT analysis and self-assessment and will use social media tools to support their ongoing personal and professional development; in addition, they should be prepared to video tape an elevator pitch. Overall, this course will foster students' self-awareness and self-reflection and will help them develop effective strategies for self-improvement and self-promotion.

Principles of Management

Students examine a basic framework for understanding the role and functions of management and an explanation for the principles, concepts and techniques that can be used in carrying out these functions. Topics include planning, organizing, staffing, leading and controlling, as well as decision-making and managing change.

Business Communication Skills

Develop effective communication skills for the workplace, from enhancing your professional writing techniques to improving your interpersonal and presentation skills. Good communication skills are an important element for a business or organization to function effectively, and for the development of good relationships between work colleagues within a business and with clients and customers outside a business.

Islamic Studies/Ethics

Islamic ethics is the study of the methods used by Muslims to discover the best way they should engage with other individuals and the rest of creation. Islamic ethical reasoning is a holistic approach to behavior, reuniting the principles and tools of Islamic law with the exemplary conduct of the prophets, especially the Prophet Muhammad, in a manner that is appropriate to an actual ethical case. In this class, we will examine principled reasoning in classical Islamic jurisprudence, the theological status of reason in Islam, the principles

and priorities of traditional ethical reasoning, the arguments for a goal-oriented approach to ethics, the contemporary emphasis on the context of the ethicist and the construction of religious authority, and the importance of individual moral formation. By the end of this class, you should be able to argue a controversial ethical issue using the tools and principles of Islamic ethical reasoning.

Introduction to Geophysics

This course is intended to be a survey of geophysical methods and their applications, including studies of deep and shallow Earth structure, as well as resource exploration geophysics. The general format of the course will combine lectures with exercises designed to get you used to working with real data; give you a better understanding of the strengths and weaknesses of individual techniques; and serve as an introduction to survey design and geophysical modeling. By the end of the course, you should be able to:

- Describe Earth's deep structure, and explain how scientists have gained this understanding.
- Explain how geophysical techniques help us to study Earth's subsurface.
- Explain the theoretical underpinnings of geophysical techniques.
- Understand basic geophysical modeling and survey design.
- Read and critically discuss basic geophysics-based scientific literature.

Introduction to Meteorology & Oceanography

This course is a foundation earth science course on meteorology and oceanography. Its objective is to provide students with a basic knowledge of atmospheric and ocean processes. Earth's energy budget, atmosphere moisture and cloud development. Global wind systems, thunderstorms and tornadoes. Seawater properties, atmosphere ocean interaction, ocean currents, tides and waves.

Introduction to Sociology

This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies.

Fundamentals of Business Law

This course reviews important principles found in business law. These principles include details on sole proprietorship, general partnerships, limited partnerships and incorporations. This course explains principles of business law in a clear and easy to understand way. The course also covers topics such as legal requirements, legal recommendations, financial status, taxation, and liability related to these principles. This online course will be of interest to business professionals and students of law who would like a greater knowledge and understanding of laws relating to business and commerce.

Oral Communication & Public Speaking Skills

This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. Students should also demonstrate the speaking, listening, and interpersonal skills necessary to be effective communicators in academic settings, in the workplace, and in the community.

Pakistan Studies

Historical Perspective, Ideological rationale with special reference to Sir Syed Ahmed Khan, Allama Muhammad Iqbal and Quaid e Azam Muhammad Ali Jinnah. Factors leading to Muslim separatism, People and land, Muslim advent, Location and Geo-physical features. Government and Politics in Pakistan, Political and constitutional phases (1947-58, 1958-71, 1971-77, 1977-88 1999 onward), Contemporary Pakistan, global issues of war and peace, economic and political integration, poverty, human rights etc.

Fundamentals of Finance

Fundamentals of Finance provide a comprehensive introduction to corporate financial management. The subject links the mathematics of finance and discounted cash flows to finance theory, valuation and investment analysis. Portfolio theory is used to provide a foundation for determining the relationship between risk and return which is, in turn, extended into an analysis of capital structure and methods of estimating the firm's cost of capital. The focus of this subject is on creating shareholder value, with due consideration given to the role of financial management within the broader context of corporate governance.

Economics of Sea Transport & International Trade

This course answers several critical questions for improving the participant ability to make profitable decisions in the area of sea transport and international trade. Examples of topics will be covered are: Basic economic concepts, the demand for shipping, the supply of shipping, cost analysis and economies of scale, competitive markets (tramps and tankers), liner trades (oligopoly and the competitive market), ports, canals and waterways, shipping and international trade, and exchange rates and balance of payments.

Introduction to Coastal Zone Management

This course will examine major trends and issues that are impacting the world's coastal and ocean resources. Scientific, economic, social and political aspects of each issue will be discussed and case studies will be used to illustrate the challenge of linking good scientific data with regulatory and management decisions. Topics include offshore renewable energy facilities, marine aquaculture, coastal development, climate change and coastal hazards, coastal pollution impacts.

Marine Insurance

The course offers a thorough introduction to the history, framework, practice, economics and legal understanding of International Marine Insurance and the objective is to make the students familiar with the necessity of marine insurance and the important part marine insurance plays in shipping as well as having a general knowledge of individual covers and the terminology used.

Marine Pollution & Control

This course provides a convenient solution and delivers a current, comprehensive knowledge of the overall framework governing marine pollution, including applicable regulations, compliance requirements and related management strategies. It presents an integrated approach, analyzing the many sources of pollution, describing best practices for minimizing contamination, responding to accidents and exploring legal ramifications throughout the maritime and offshore sectors.

Regulatory Framework of Shipping

To understand the legal structure and framework of the shipping industry and the 'international' aspect and complexity of regulating such a dynamic industry. To understand the legal structure and framework of the shipping industry and the 'international' aspect and complexity of regulating such a dynamic industry.

Statistics

A standard approach to statistical analysis primarily for students of business and economics; elementary probability, sampling distributions, normal theory estimation and hypothesis testing, regression and correlation, exploratory data analysis. Learning to do statistical analysis on a personal computer is an integral part of the course.

Psychological & Emotional Development

Emotions organize our behavior and are central to our social interactions. Much of child development is directed by this reciprocal relationship between emotional and social processes. For example, infants are born equipped to express emotions that influence caregiver behavior, while at the same time caregivers train children to regulate and selectively express emotions. This process continues and becomes more elaborate across expanding social contexts over the course of development. The course is divided into four parts. In the first section we will explore answers to the question "What is emotion?" from several perspectives: historical, evolutionary, biological, and psychological. The next section focuses on the first few years of life when forces of nature and nurture join to establish stable patterns of behavior. The third section covers emotional development in adolescence and the development of the ability to regulate, or manage, emotions. The final section explores the various social contexts in which emotions develop.

Ports Operations Management

Shipping and port management falls in the department of logistics, wherein the person in charge ensures that the goods are delivered and received with minimum hassles. In addition, the running of the entire port and the ships that depend on it also falls under this department. So, you can see that a degree in shipping and port management will enable the

candidate to work both in the sea and the land. It will be his or her responsibility as soon as the ship downs her anchor. And with the bulk of trade going the sea route the demand for efficient and skillful managers with knowledge of shipping and port is on an all-time high. Those who wish challenge and thrill every day of their work life should definitely go for this course, and they won't be disappointed either. Given below are more information for students who wish to pursue a course in shipping and port management.

Maritime Logistics, Distribution & Supply Chain Management

Logistics and Supply Chain Management with Shipping and Port Operations examines current practices, trends and issues in the field of global logistics with particular focus shipping and port logistics. It looks at links between global trade, logistics and maritime transport as well as assessing the role and contribution of the shipping and port industry within global trade.

Law of Carriage of Goods by Sea

The law of Carriage of Goods by Sea is generally referred to as Dry Shipping Law because it mainly focuses on the legal implications of the agreements for the transport of cargoes by sea and for the chartering of vessels. The business of carriage of goods by sea is obviously risky. The cargo may arrive late or not at all. How are the various risks allocated between the carriers and the various other parties who might have an interest in the ship and her cargo? Contract of carriage can come in various shapes and in this course you will study the two main forms of contract and carriage and their uses.

Principles of Marketing

This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision-making.

Human Resource Management

This course examines the role of the human resource professional as a strategic partner in managing today's organizations. Key functions such as recruitment, selection, development, appraisal, retention, compensation, and labor relations are examined. Implications of legal and global environments are appraised and current issues such as diversity training, sexual harassment policies, and rising benefit costs are analyzed.

E-Commerce

This course introduces the concepts, vocabulary, and procedures associated with E-Commerce and the Internet. ... The responsibilities for E-Commerce business managers require a general understanding of basic business management concepts as well as basic technical concepts.

Shipping Operations Management

This unit provides an introduction to the technical and operational aspects of ship management. This unit examines the operations that are necessary to transport cargo in a safe, efficient, and commercially viable manner. It looks at ships' nautical, commercial and cargo operations in detail. It also examines the concepts which underpin ship operations - asset maintenance, quality management and risk management.

Fisheries Resources & Management

Introduce the importance and scope of fishery industries on national economy. The subject areas cover the concept of sustainability and fish stock assessment at national, regional & international level. National & international organizations involved in fishery operations and management. Module will cover subject areas like Fisheries Sciences, Potential & Problems, fishing equipment / gears, fishing boats & methods, fish harbors & landing places, fish processing, International & Local fish marketing, fish marketing, WTO & fisheries, Fish Stock Assessment (FSA) & Total Allowable Catch (TAC), Fish management practices inducing Monitoring, Evaluation & Surveillance (MES) Individual transferable quotes (ITQ), Turtle Excluder Devices (TED), Aquaculture & Fisheries management and Deep Sea Fishing.

Research & Project Writing Methods

This course aims to provide students with a broad but thorough understanding of the various methods applied in the field of environment and development. The course explains the characteristics of different research methods, the theoretical assumptions behind each, and how they can be put to use in practical contexts. The course also deals with the challenge of doing interdisciplinary research, and of combining methods in a fruitful way. Finally, the course takes up how to design a research project, including formulating interesting research questions and choosing methods that contribute towards answering those.

Coastal Eco-Tourism Development and Management

This course reflects increasing environmental awareness and growing interest in ecotourism and investigates whether it is truly a sustainable option. It provides a theoretical and applied understanding of ecotourism within Queensland, Australia and internationally and important examples of sustainable tourism practices in natural settings. By examining the dimensions, growth, marketing and best practice in ecotourism, this course assists students in skillfully identifying and evaluating appropriate ecotourism management policies, ecotourism practices and ecotourism strategies which are culturally sensitive and economically, environmentally and socially sustainable.

Hydrographic Data & Services Management/Hydrography & Navigation

This course focuses on hydrography, navigation, and hydrographic survey. Students develop an appreciation of the concepts of coordinates, measurement, underwater acoustics, positioning, sounding, and different sources of hydrographic data and information. Students examine different surveying technologies, developments, and various environmental applications. The course is designed to bridge geography, coastal and marine studies, oceanography, digital mapping, hydrographic surveying, marine spatial planning, remote sensing, and Geographical Information Systems (GIS). Practical experience with hydrographic charts and tide tables for navigation provide an opportunity to introduce the student to a skilled area that may form the basis for a future career.

Maritime Innovation & Entrepreneurship

Innovation and entrepreneurship are key drivers of industrial change and economic growth, and research in the two related fields is rapidly developing. The course introduces students to some of the newest research in the two fields and gives a broad overview of the business

challenges and opportunities faced by entrepreneurs in setting up new ventures and by existing organizations in identifying and implementing innovation projects. The course presents the key issues of innovation management and entrepreneurship in the context of the maritime domain, which includes global shipping and the related businesses of shipbuilding, marine equipment manufacturing, maritime service providers and the offshore wind and oil/gas sectors. Businesses in shipping and the broader maritime domain are generally considered to be capital intensive, have highly volatile profits, use mature technologies, and have high entry barriers and low R&D intensity. The course presents several business cases on innovation management and entrepreneurship from the maritime domain, and as such provides a close integration between theory and practice. The course will provide students with tools for writing and critically assessing innovation projects in shipping companies and other maritime businesses. Moreover, it will enable students to write and critically assess business plans for start-ups in the maritime domain.

Industrial Economics

The Course in industrial economic is aim to familiarize students with a broad range of the methods and models applied by economists in the analysis of firms and industries. A broader goal is that students who take the course will, by working extensively with theoretical models, acquire analytical skills that are transferable to other kinds of intellectual problems.

Maritime Economics and International Trade

Macroeconomics is a broad field of study such as gross domestic product, price level, inflation, unemployment, economic growth and the balance of payments. There are two areas of research that are emblematic of the discipline: the attempt to understand the causes and consequences of short-run fluctuations in national income, and the attempt to understand the determinants of long-run national economic growth. Macroeconomics models and their forecasts are used by governments to assist in the development and evaluation of economic policy.

HRM in Maritime

The aim of this course is to introduce students to the subject of poverty and inequality. The emphasis will be on problems in the modern contemporary economy, but the topic will also be approached from an historical perspective, taking a longer term view of the distribution of income in human societies. In particular, we will examine why some individuals and groups have less access to resources and income than others, study some of the philosophical perspectives related to the distribution of income, and examine the effectiveness of some of the policies that are thought to minimize poverty and to reduce the gap between the rich and poor.

Labor Economics

The aim of this course is to acquaint students with traditional topics in labor economics and to encourage the development of independent research interests. It will cover a systematic development of the theory of labor supply, labor demand, and human capital. Topics include wage and employment determination, turnover, search, immigration, unemployment, equalizing differences, and institutions in the labor market. There will be particular emphasis on the interaction between theoretical and empirical modeling.

Maritime Management: Concept and Applications

Examines the role of financial institutions and economic activities. In-depth evaluation analysis recognizing that the value of assets may depend on who controls them. The course is organized according to a view that professional investment decisions are best made through a three-step process step one is to set objectives, step two is making investment decisions, involving asset allocation, security selection, and risk management, step three is performance evaluation.

Contemporary Issues of Maritime Management

Theory and Application provides an overview of the organizing principles and fundamentals of an Islamic economy. With deep discussion of the characteristics, rationale, key institutions, objectives, and instruments at work, the book addresses the core economic principles underlying a system based on the foundational teachings of Islam and examines the implications for economic policies. Social welfare, economic justice, market functionality efficiency, and equity are explored from an Islamic perspective, and the role and instruments of fiscal and monetary policy in Islamic systems are used to illustrate contemporary applications.

Maritime and Business Law

This course provides a comprehensive presentation of competition policy and regulation. It draws on the literature on the economics and law of antitrust and regulation to present in detail some major cases of cartels, abuses of dominant positions and mergers. It also presents tools of market regulation. Empirical techniques, theoretical models and cases are discussed to explain the economics of competition and regulation.

Union and Labor Laws

This course focuses on the laws governing collective bargaining by unions and employers, the relationship between individuals and the union, and the ways that these collective bargaining laws also govern concerted activities in non-union workplaces. Both the Labor-Management Relations Act and state collective bargaining law for public employees will be examined. Starting in the non-union sector, the course examines various rulings declaring company handbook provision for employees to be unlawful, or finding unlawful the discipline of employees expressing opinions about working conditions in the social media or otherwise. The course then shifts to the various ways the parties can and cannot employ economic coercion to promote their views about what the wages, hours, and conditions of employment should apply via strikes, boycotts, lockouts, and unilateral changes in working conditions. Finally, the course reviews the various ways the rights of individual's vis some vis their union are protected by the labor laws.

Appendage 3125**MS (Maritime Affairs), New Launch Proposal**

Sponsored by: HOD Humanities and Social Sciences Department,
BUKC Summary of the Case

The Department has planned MS in Maritime Affairs to be launched in Fall 2018, subject to approval of ACM and HEC. Feasibility report of the program has been prepared according to the BU format. Detailed report is attached as Appendix-3. It appears logical to move ahead in launching this program in view of the marketing requirements emerging out of CPEC and related projects.

HR / Establishment Effects: Would require additional HR and infrastructures, details are covered in the feasibility report.

Financial Effects: Details are covered in the feasibility report.

Recommendations: The point may kindly be approved for further processing in HEC.

**Proposal for Launching
MS (Maritime Affairs)**

G. ACADEMIC DETAILS

	<p>1 Faculty/Department: Management and SS / Humanities and Social Sciences, BUKC</p> <p>2 Name of the Programme: MS in Maritime Affairs</p> <p>3 Mission of the Programme: MS (Maritime Affairs) prepares Middle and Senior Managers of Seaborne Businesses, Maritime Business Entrepreneurs and Corporate Governors to develop Business Ventures as visionaries of the contemporary world. The program also inculcates strategic outlook and ethical practices in future Managers, Executives and Maritime Planners to cope up with the challenges emerging from complex regional and global businesses especially CPEC and OBOR.</p> <p>4 Objectives of the Programme:</p> <ul style="list-style-type: none"> ■ To develop future Maritime Planners and Professionals for mid to long-term developmental growth in the given sector. ■ To develop seaborne business vision in the wake of changing regional scenario of businesses and economic growth. ■ To promote ethical maritime business practices and corporate social responsibility for development of a forward looking and balance society. ■ To prepare the students for research in the fields of maritime planning, forecasting and working out viability of envisaged projects. <p>5 Outcomes of the Programme: Graduates of MS (Maritime Affairs) will be able to: -</p> <ul style="list-style-type: none"> ■ Appreciate and forecast Maritime Business Opportunities and undertake business plans especially SMEs in mid to long term basis. ■ Analyze maritime business ventures for collaborative options on regional and global perspectives especially in the light of contemporary developments emerging out of Chinese Initiative of One Road One Belt and China Pakistan Economic Corridor. ■ Develop an in-depth knowledge of the underlying principles of Maritime Business and provisions of interface between knowledge and practice ie commercialization of theoretical maritime business plans.
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	<ul style="list-style-type: none"> ■ Critically realize awareness of current maritime problems and get the research works published for adding new ideas into existing stock of knowledge as well as providing solutions to the world of maritime business.
6	<p>Rationale for the Programme:</p> <ul style="list-style-type: none"> ■ Seaborne Business has always maintained its relevance with economic growth and development of societies; with new developments, it is getting accelerated attention and growth. ■ The program provides multiple employment opportunities in public as well as private sectors and middle to higher tiers of management including entrepreneurship. ■ Our initial survey reflects potential of students' pool for admission, provided we succeed in creating the right kind of awareness.
7	<p>Brief Description of the Programme: Masters in Maritime Affairs is designed to develop qualified and educated individuals on seaborne business of middle to higher executive positions in the organizations. It will explore business concepts and share regional and global best practices in Maritime Affairs using case studies. The professional deficiency in Pakistan can be covered by demonstrating the skills necessary to tackle problems within the complex world of Maritime Business and its growth.</p>
8	<p>Duration: 2 Years</p>
9	<p>Venue(s): On Site/Off Site/Both On & Off Site (<i>tick one/strike-through the ones not applicable; if Off Site, give details</i>) Bahria University Karachi Campus, Humanities and Social Sciences Department</p>
10	<p>Programme Scheduling Format: Morning/Evening/Weekend (<i>tick one/strike-through the ones not applicable</i>): Evening /</p> <p>Weekend Bi-Semester/Trimester/Semester Summer Session/Annual/Bi-Annual (<i>tick one/strike-through the ones not applicable</i>): Bi-Semester</p>
11	<p>Proposed Date of Commencement: Fall 2018, subject to approval of HEC</p>
12	<p>Mode of Study/Examination: As per BU Examination Rules of PG Programs</p>
13	<p>Additional Faculty Member(s) Required: (<i>Indicate if there is a requirement for additional faculty members, fulltime/visiting, along with qualifications.</i>) 1st and 2nd Years' requirement. Regular: 3 (2 PhD and 1 MPhil / MS) Visiting: 1</p>
14	<p>Additional Skilled-Worker(s) Required: (<i>Indicate if there is a requirement for additional skilled staff, fulltime/part-time, along with their qualifications/skill sets.</i>): Nil</p>
15	<p>Additional Classroom(s) required: (<i>The requirement is to include the number of classrooms and their capacities.</i>)</p> <ul style="list-style-type: none"> ■ First Semester: 1 ■ Additional one classroom with the start of every semester till 3rd semester.
16	<p>Additional Requirement for Laboratories: (<i>The requirement is to include the number of laboratories, their equipment and their capacities.</i>) PGP Lab of the Campus would suffice.</p>

17 Additional Requirement for Books, Subscriptions, Memberships to Online Research Sites/ Repositories: Following books are required: -

- Existing stock of books procured under NCMPR would work to an extent, however not sufficient; focus would be more on research journals of international repute.

	<ul style="list-style-type: none"> ▪ About 50 books would be required on contemporary thought process by different writers on Maritime Affairs.
18	Minimum Entry Level: As per BU MPhil / MS rules.
19	Admission Criteria: As per BU Rules for MPhil / MS Program
20	Additional/Different Examination Requirement <i>(Indicate if there will be any examination requirement, additional to or different from the BU Academic Rules or Examination Policy in vogue). Nil</i>
21	Number of Admissions Expected for First Intake: 10-15
22	Number of Admissions Planned/Expected for Subsequent Intakes: 10-20 / semester
23	FBOS: <i>(Indicate the FBOS meeting reference and Item No):</i> 17 th FBOS Competent Authority: <i>(Indicate the File No & date; reproduce the decision):</i> Academic Council
24	Complete Plan of Studies, inclusive of complete Roadmap: <i>(Attach as Annex 'A')</i>
25	Course Outlines, Descriptions, Pre-Requisites & Readings (Compulsory & Recommended) <i>(Attach as Annex 'B')</i>

H. FINANCIAL DETAILS			
1	Source of Funding: BU: Fully/Partially: Fully Public Sector (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> NNGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> INGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> UN/IGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i>		
2	Degree Duration: Annual or Semester System: Annual Number of Years Semester Number of Semester: 4 Total Number of Credit Hours: 42		
3	Expected fee to be charged based on Cost & Benefits Analysis: <i>(show working)</i> <ul style="list-style-type: none"> ▪ Fee Rate / Credit Hour: Rs 5500 ▪ Tuition Fee / Semester / Student: Rs 66000 		
4	Expected Number of students for 1st & 2nd Intakes: 20		
5	Expected Earning from first two Intakes (B5): <i>(Show working)</i> <ul style="list-style-type: none"> ▪ Tuition Fee / Semester / Student: Rs 66000 ▪ Admission Fee and other Charges / Student (One Time): 28000 ▪ Earning from First Two Intakes: $20 \times 66000 = 1320000 + 20 \times 28000 = 560000$ ▪ Total of first two intakes = Rs 18,80,000 		
6	Expected Earnings for the Next Five Years (B6): <i>(show working)</i>		

- 1st Year Earning: Rs 16,00,000 (1.6 Millions)
- 2nd Year Earning: $16,00,000 + 6,60,000 = 22,60,000$ (2.26 Millions)
- 3rd Year Earning: $22,60,000 + 6,60,000 = 29,20,000$ (2.3 Millions)
- 4th Year Earning: $29,20,000 + 6,60,000 = 35,80,000$ (3.6 Millions)
- 5th Year Earning: $35,80,000 + 6,60,000 = 42,40,000$ (4.2 Millions)

7 Total Estimated Salaries of all Additional Human Resources per annum (B7): (Show working)

Salary Estimates of Faculty for 1st Year: 30,00,000

	Salary Estimates of Supporting Staff for 1 st Year: 540000 Total of Faculty and Supporting Staff: Rs 35,40,000 (Approximately)
8	Cost of Additional Laboratory Equipment/Tools (B8): (show working) Existing lab facilities shall be used
9	Cost of Additional Classrooms (B9): (Include furniture, technical aids etc): Nil
10	Cost of Additional Books, Subscription & Memberships to on-line Sites/Repositories (B10): (show details) Cost of one Book: 8000-12000 Approximately on Average Cost of 50 Books: 500,000
11	Off-Site rental Expenses and Cost of other Fixtures (B11): (Show details): Nil
12	Miscellaneous Expenses required for Starting the Program (B12): <ul style="list-style-type: none"> - Advertisement: 50,000 - Printing & Stationery: 10,000 - Admin Cost: 5000 - Any other: 5000 - Total: 70,000
13	Annual Recurring Expenditures in Subsequent Years (B13): <ul style="list-style-type: none"> - Salaries: 50,00,000 - Rentals: - - Subscriptions/Memberships: - - Advertisements: 50,000 - Printing & Stationery: 10,000 - Admin Cost: 5,00,000 - Any other: - - Total: 50,65,000
14	Total Cost of the Programme (B14): [Add B (7) to B (12)]: Rs 41,10,000
15	Net Cost of the Programme (B15): [Subtract B (1) from B (14)] $41,10,000 - 18,80,000 = \text{Rs } 22,30,000$
16	Net Earnings in First Year (B16: [Subtract B (15) from B (5)]: - 22,30,000
17	Projected Annual Gross Earning in Subsequent Years (B 17): (show details & working; add 10% towards all expenses in subsequent years.) <ul style="list-style-type: none"> ■ In 1st Year, there is no earning, rather setting up expenditure exceeds by about Rs 22,30,000 ■ We would start earning from 4th Year onwards, the amount would depend upon number of students. However if we keep it at 10 students, the net earnings would be 1-1.5 million in 4th Year.

18	Projected Annual Net Earning in Subsequent Years: [Subtract B (13) from B (17)] It would vary from 1-1.5 million per Year.
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Annex A**Roadmap: MS (Maritime Affairs)****Semester-1**

S.NO	Codes	Course	Level	CH	Pre-requisite
1	MMI 701	Maritime Industry: Pakistan and China Perspective in Regional Setting	Core	3	
2	MSM 702	Shipping Management and Finance	Core	3	
3	MMS 701	Maritime Strategy	Core	3	
4	MEC 701	Maritime Economics	Core	3	

Semester-2

S.NO	Codes	Course	Level	CH	Pre-requisite
1	MCM 720	Coastal Zone Management	Core	3	
2	MLI 720	Commercial Law and Marine Insurance	Core	3	
3		Elective-1	Elective	3	

Semester-3

S.NO	Codes	Course	Level	CH	Pre-requisite
1	MTM 705	Research Methodology & Proposal Development	Core	3	
2		Elective-II	Elective	3	
3		Elective-III	Elective	3	

Semester-4

S.NO	Codes	Course	Level	CH	Pre-requisite
1	SDW 790	Thesis	Core	6	SDW-799

Electives

S. No.	Course Code	Title of the Course	Credit Hours
1.	MTM 750	Maritime and Industrial Economics	3
2.	MTM 760	Logistics Supply Chain Management	3
3.	MTM 762	Oceanographic Data and Service Management	3
4.	MTM 764	Chartering Practices and Ship Brokering	3
5.	MTM 765	Intermodal Transportation	3
6.	MTM 766	Maritime Logistics and Marketing	3
7.	MTM 767	Marine Resources & Environment	3
8.	MTM 768	Hydrography & Management	3
9.	MTM 769	Tourism, Fish & Food Processing	3
10.	MTM 760	Maritime Law (Ocean Governance Policy and Law)	3
11.	MTM 771	Maritime Geophysics	3
12.	MTM 772	Maritime Geology	3
13.	MTM 773	Dynamics of Maritime Domain	3
14.	MMT 774	Maritime Security	3
15.	MMT 775	Management of Oceanic Resources	

Courses Description: MS (Maritime Affairs)**Maritime Industry: Pakistan and China Perspective in Regional Setting****Course Description**

The course includes data from primary resource and then preparing the lecture notes. As such there not enough written on the subject as Pakistan and China specific. Chines may have but that would translation. The course discusses certain basic and fundamental economic cornerstones and serves as a foundation for the maritime students.

Shipping Management and Finance**Course description**

Shipping Management and finance course deals with basic principles and methodologies of management of shipping. The Shipping and Transport Finance Course aims to provide students with the understanding of the key issues in the financing of ships, ports, transport and other infrastructure projects. At the end of the course students will be able to develop, appraise, negotiate and choose among alternative investment proposals under conditions of risk and uncertainty. In addition, module will cover subject areas like types of ships, ships registration & classification, shipping costs and budgeting, Crewing & Manning, Marine Insurance & cargo claims, Vessel Operations & commercial / technical issues, IMDG codes and ISM code, Bunker management & Voyage estimating.

Reading material:**Shipping Finance (ICS)**

Shipping finance 3rd Edition by Stephenson
 Harwood. HSBA handbook on ship finance Edited by
 Springer The business of shipping by James Buckley

Maritime Strategy**Course Description**

The objective of this course is to help students think through organizational issues at strategic level; to familiarize them with the various tools for strategy analysis and formulation; and to sensitize them to the social, political, and legal structures that shape decision making processes. The prescribed teaching approach in this course is primarily inductive. The course uses a combination of theory, practical illustrations, and cases.

Maritime Economics**Course description**

The course Maritime Economics (ME) provides all students with a solid introduction to the principles of micro-, macro- and international economics with respect to maritime domain. The course discusses certain basic and fundamental economic cornerstones and serves as a foundation for the maritime students. It will further built understanding of students on some specific topics like dynamic of maritime industry, behavior of ship owners, shippers and other stake holders.

Reading material: Book- Maritime Economics, 3rd Edition, Author: Martin Stopford

Coastal Zone Management

Course Description

To understand coastal zones, the dynamic environments shaped by natural forces as well as human intervention. To enable students to develop management strategies and identify threats to these environments. History, definition, systems view of the coast Abiotic subsystems: classification of coasts, wave, current, sediment transport. Biotic subsystem: coastal ecosystems, eco-toxicology, marine pollution, socio-economic subsystem: social, economic, legal and political dimensions. Coastal zone protection, beach nourishment, groins, revetments, breakwater, coastal embankment, cyclone shelter, Development option in the coast - tourism and recreation, fisheries, critical management issues and use conflict analysis - case examples, and use of GIS, global climate change, sea level rise and coastal adaptive management, fisheries issues & sustainable aquaculture.

Reading Material:

- Integrated Coastal Zone Management plan for Pakistan by Qureshi, Muhammad Tahir
Integrated Coastal Zone Management Book by Einar Dahl
Perspectives on Integrated Coastal Zone Management , Ed. W. Salomons, S. Ramachandran

Commercial Law and Marine Insurance

Course Description

The course is aimed to provide understanding of the International and National Shipping Laws and policies. Subject areas include admiralty jurisdiction and practical concept of risk management in maritime arena, history and development of marine insurance law, hull and machinery insurance, protection and indemnity (P & I) Clubs, Contract of Affreightment (CoA) and bill of lading (BoL), shipping laws & corporate laws, maritime law & transportation law, customary law and treaty law, Limitation of liability & Salvage, International conventions, Towage & Collision, relationship between national law and international law, and law of the conflict in addition, this module will cover the, maritime logistics international regulatory framework, & Intl organizations like (APH Association of Ports and Harbours) / ISF(International Shipping Federation) / ICS (International Chamber of Shipping) / ITF (International Transport Workers' Federation).

Reading Material:

- Maritime Insurance, ICS
Law of Marine Insurance 2nd Edition by Howard Bennett
Marine Insurance Law 1st Edition by Ozlem Gurses

Research Methodology and Proposal

Development Course description

Students will gain a knowledge and understanding of the concepts and terminology of empirical methods used in social sciences research particularly in business environment. Qualitative research methods are included in this course as they are appropriate for certain research investigations. Selection of specific research methods will be taught based in the problem under investigation, and its underlying assumptions. For quantitative methods, emphasis throughout the course will be on theory development with attention to concept formation and confirmation, in a research program. Planning, design, and sampling will be

covered for various research methods studied in the course. Students are also expected to gain an introductory knowledge of topics in descriptive statistics, inferential statistics, and qualitative research methods.

Reading material

Research Methodology and statistical tools by Pathan, Raman

Research Methodology- Methods and Techniques by C. R.

Kothari Principles of Research Methodology by Phyllis G. Supino

Maritime and Industrial Economics

Course description

The course is focused on the economics of the maritime industry, with a combination of historic and geographic approach, together with general shipping market theory and focus on key market drivers. The course also includes an historical introduction presenting the development of international trade and shipping from the 18th century to the present. It also includes analysis of shipping markets; market structure and the factors that shape supply, market dynamics, demand, and profitability in a short and long-term perspective.

Reading material:

Maritime Economics, 3rd Edition, Author: Martin Stopford

Shipping economics volume Xii by Kevin Cullinane

Economics of sea transport and international trade by institute of chartered ship brokers

International handbook of maritime economics by Kevin Cullinane

Contemporary Issues in Maritime Affairs: Concepts and Applications Course description

This course focuses on fundamentals of maritime sector, public structure and hierarchies, private sector players in maritime businesses. The students will be developing the understanding of contemporary challenges in the maritime domain, ever increasing demand on businesses due to globalization, competitive pressure between, ports, emergence and role of maritime hubs in global logistics chain. Development and trends related to maritime safety, security and supply chain management will also have discussed.

Module will also cover importance of oceans, concepts of integrated coastal zone management, maritime zones & UNCLOS, Maritime organization(IMO) & its key pillars, STCW / MARPOL / SOLAS.

Reading material

Maritime Affairs by Gupta, Manoj Commandar

Maritime affairs, journal of national maritime foundation of India WMU studies in Maritime Affairs by Springer

Globalization and Maritime Management

Course description

This module will cover the impact of globalization and evaluation of maritime ports and logistics in view of emerging trends. The module will also cover subject areas like corporate demands for value addition, global freight management, Baltic Freight Index, international container trade, developing technologies in maritime domain, concept of integrated

maritime arena, carrier alliances and partnerships, regional and international patronage, emerging regulation on marine transportation and its role in maritime management.

In addition, the course will develop understanding of students on international regulatory framework, policies for national control on maritime logistics and role of intl organizations like (APH Association of Ports and Harbours) / ISF (International Shipping Federation)/ ICS (International Chamber of Shipping) / ITF (International Transport Workers' Federation).

Reading material

Dynamic shipping and port development in globalized economy by Lee P Y and Kevin

Cullinane

Maritime governance by Roe, M

Logistics Supply Chain Management

Course description

This course includes; general principle involved in logistics and Supply chain systems also, General principles involved in logistics. Method of optimizing movement of materials, information and finances from supplier to manufacturer to whole seller retailer to consumers; ways of efficient supply and to reduce inventory will also be discussed.

This module will also cover the evolution of maritime logistics concept to meet incorporated demands for value added goods and the impact of maritime logistic on maritime transport. As Maritime logistics has extended the shore boundaries, therefore, module will cover subject areas like maritime freight management, effects of globalization on logistic industry, Baltic Freight Index, international container trade, developing technologies in logistics, concepts of multimodal transport, carrier alliances & partnerships, multimodal logistic process, regional national patronage, marine transportation & its role in supply chain management, national administrative control on Maritime Logistics, international regulatory framework, &Intl organizations like (APH Association of Ports and Harbours) / ISF(International Shipping Federation) / ICS (International Chamber of Shipping) / ITF (International Transport Workers' Federation).

Reading material

Logistics and Supply Chain Management by Christopher, Martin

Maritime logistics: a guide to contemporary shipping and port management by Dong

Wook Song

International logistics: global supply chain management by Douglas C.

Long Essentials of supply chain management by Micheal H. Hugos

Marine Incident Investigation

Course description

This course will give students the expertise required to conduct thorough investigations which could promote improved safety and be of value to maritime employee on duty, cargo and the maritime industry as a whole. People working in accident investigation and prevention and security enforcement in the maritime industry, those responsible for safety standards and those involved in the conducting of or responding to investigations.

The issues relating to accident and incident investigation are fully discussed including different investigation methodologies, interview techniques, witness reliability and the

production of investigation reports. The course gives practical experience of accident and incident investigation using role play exercises.

Reading material

IMO manual on Marine accident and investigation: Instructor's manual

Oceanographic Data and Service Management Course description

This course is designed to introduce students to the important physical processes in the ocean in such a way that they will understand both the conceptual principles and at the larger scale how these fit into the earth as a system. The process includes; ocean dimensions, shape and bottom material, physical properties of seawater, salinity, density, pressure, transmission of sound, formation of water masses, state of seawater, general ocean circulation, boundary currents, ocean waves and tides, coastal processes. long shore currents, oceanography of the Arabian sea, instruments and methods.

Reading Material:

An introduction to the planet Oceanus by Pinet, Paul R

Technical Ship Management Course description

To develop a thorough grasp of different aspects of port activities by providing understanding of the principles and practices of ship management within the framework of overall transportation systems. Study of role of maritime transport in international trade and provides understanding of commercial practices and legislative and contractual framework of international shipping. The subject area covers the types of maritime transportation, ship management, registration, classification, bunker management, economic aspects of ship ownership, laws relating to the ship management, BIMCO shipman 98 & basics of port & terminal infrastructure.

Reading Material:

Risk Management in port operations, logistics and supply chain Security by Bichous,

Khalid

Chartering Practices and Ship Brokering

The course encompasses stowage plans, bunkering, crewing, maintenance, scheduling and fuel. Harbour Marine environment protection. Shipping safety. Legal aspects of chartering and purchase of shipping Broker and liner agent function. Operation of freight markets. Multi charter parties. Special charter forms-Vegoil, Chemicals, Supply Ships and Towage.

Reading Material:

Ship broking and Chartering Practices by Gorton, Lars

Intermodal Transportation

Course description: To provide students with an understanding of the development and characteristics of intermodal transportation. At the end of the course, students should gain the basic knowledge and skills to deal with the key challenges faced by commercial intermodal transportation managers.

Concepts and operational specifics of commercial intermodal transportation pertaining to freight movement. Intermodal services, terminals, equipment and information systems. Interactions between individual modes and intermediaries. Advantages and disadvantages of intermodals. Intermodal operations management. Business strategies for intermodal management.

Reading Material:

Gerhardt Muller. (1999). *Intermodal Freight Transportation*, 4th Edition, Intermodal

Association of North America & Eno Transportation Foundation.

Ronald H. Ballou (2003). *Business Logistics: Supply Chain Management*, 5th edition, Prentice Hall.

Sunil Chopra and Peter Meindl. (2006). *Supply Chain Management*, 3rd Edition, Prentice Hall.

Maritime Logistics and Marketing

Course description: The aim of this course on Maritime Logistics & Marketing is to describe the convergence of maritime transport and logistics and the marketing aspects used in logistics.

Reading Material:

Maritime Logistics, Wood and Panayicles

Appendage 3126

MS (Maritime Trade and Logistics), New Launch Proposal

Sponsored by: HOD Humanities and Social Sciences Department, BUKC

Summary of the Case

The Department has planned MS in Maritime Affairs to be launched in Fall 2018, subject to approval of ACM and HEC. Feasibility report of the program has been prepared according to the BU format. Detailed report is attached as Appendix-4. It appears logical to move ahead in launching this program in view of the marketing requirements emerging out of CPEC and related projects.

HR / Establishment Effects: Would require additional HR and infrastructures, details are covered in the feasibility report.

Financial Effects: Details are covered in the feasibility report.

Recommendations: The point may kindly be approved for further processing in HEC.

Proposal for Launching MS (Maritime Trade and Logistics)

I. ACADEMIC DETAILS	
1	Faculty/Department: Management and SS / Humanities and Social Sciences, BUKC
2	Name of the Programme: MS in Maritime Trade and Logistics
3	<p>Mission of the Programme: MS (Maritime Trade and Logistics) prepares Middle and Senior Managers of Seaborne Businesses, Maritime Business Entrepreneurs and Corporate Governors to develop Business Ventures as prevalent in the contemporary world. The program also inculcates strategic outlook and ethical practices in future Managers, Executives and Maritime Trade and Logistics Planners to cope up with the challenges emerging from complex regional and global businesses especially CPEC and Chinese Initiative of One Belt One Road.</p>
4	<p>Objectives of the Programme:</p> <ul style="list-style-type: none"> ■ To develop future Trade and Logistics Planners and Professionals of seaborne businesses for mid to long-term developmental growth. ■ To develop seaborne business vision in the wake of changing regional scenario of trade and logistics management. ■ To promote ethical trade and logistics management practices and corporate social responsibility for development of a forward looking and balance society. ■ To prepare the students for research in the fields of trade and logistics planning, forecasting and working out viability of envisaged projects.
5	<p>Outcomes of the Programme: Graduates of MS (Maritime Trade and Logistics) will be able to: -</p> <ul style="list-style-type: none"> ■ Appreciate and forecast trade avenues cum opportunities and undertake logistic plan in the most cost effective manner. ■ Analyze trade and logistics planning for collaborative options on regional and global perspectives especially in the light of contemporary developments emerging out of Chinese Initiative of One Road One Belt and China Pakistan Economic Corridor.

	<ul style="list-style-type: none"> ■ Develop an in-depth knowledge of the underlying principles of trade and logistics management and provisions of interface between knowledge and practice i.e. commercialization of theoretical ideas for utilization in business. ■ Critically realize current trade and logistics problems and get the research works published for adding new ideas into existing stock of knowledge as well as providing solutions to the world of maritime business.
6	<p>Rationale for the Programme:</p> <ul style="list-style-type: none"> ■ Seaborne Business and within that trade and logistics management has always maintained its relevance with economic growth and development of societies; with new developments, it is getting accelerated growth. ■ The program provides multiple employment opportunities in public as well as private sectors and growth of middle to higher tiers of management including entrepreneurship. ■ Our initial survey reflects potential of students' pool for admission, provided we succeed in creating the right kind of awareness.
7	<p>Brief Description of the Programme: Masters in Maritime Trade and Logistics is designed to develop qualified and educated individuals on seaborne business of middle to higher executive positions in the organizations. It will explore domestic and international trade concepts, policy parameters and share regional and global best practices in Logistics Management using case studies. The professional deficiency in Pakistan can be covered by demonstrating the skills necessary to tackle problems within the complex world of Trade and Logistics management and growth.</p>
8	<p>Duration: 2 Years</p>
9	<p>Venue(s): On Site/Off Site/Both On & Off Site (<i>tick one/strike-through the ones not applicable; if Off Site, give details</i>)</p>
10	<p>Bahria University Karachi Campus, Humanities and Social Sciences Department</p> <p>Programme Scheduling Format:</p> <p>Morning/Evening/Weekend (<i>tick one/strike-through the ones not applicable</i>):</p> <p>Evening /</p> <p>Weekend</p> <p>Bi-Semester/Trimester/Semester Summer Session/Annual/Bi-Annual (<i>tick one/strike-through the ones not applicable</i>): Bi-Semester</p>
11	<p>Proposed Date of Commencement: Fall 2018, subject to approval of HEC</p>
12	<p>Mode of Study/Examination: As per BU Examination Rules of PG Programs</p>
13	<p>Additional Faculty Member(s) Required: (<i>Indicate if there is a requirement for additional faculty members, fulltime/visiting, along with qualifications.</i>) 1st and 2nd Years'</p> <p>requirement.</p> <p>Regular: 3 (2 PhD and 1 MPhil / MS) Visiting: 1</p>
14	<p>Additional Skilled-Worker(s) Required: (<i>Indicate if there is a requirement for additional Skilled Staff, fulltime/part-time, along with their qualifications/skill sets.</i>): Nil</p>
15	<p>Additional Classroom(s) required: (<i>The requirement is to include the number of classrooms and their capacities.</i>)</p> <ul style="list-style-type: none"> ■ First Semester: 1

- Additional one classroom with the start of every semester till 3rd semester.

16 Additional Requirement for Laboratories: (The requirement is to include the number of laboratories, their equipment and their capacities.)
PGP Lab of the Campus would suffice.

17 Additional Requirement for Books, Subscriptions, Memberships to Online Research Sites/ Repositories: Following books are required:-

- Existing stock of books procured under NCMPR would work to an extent, however not sufficient; focus would be more on research journals of international repute.

	About 50 books would be required on contemporary thought process by different writers on Maritime Affairs.
18	Minimum Entry Level: As per BU MPhil / MS rules.
19	Admission Criteria: As per BU Rules for MPhil / MS Program
20	Additional/Different Examination Requirement <i>(Indicate if there will be any examination requirement, additional to or different from the BU Academic Rules or Examination Policy in vogue). Nil</i>
21	Number of Admissions Expected for First Intake: 10-15
22	Number of Admissions Planned/Expected for Subsequent Intakes: 10-20 / semester
23	FBOS: <i>(Indicate the FBOS meeting reference and Item No):</i> 17 th FBOS Competent Authority: <i>(Indicate the File No & date; reproduce the decision):</i> Academic Council
24	Complete Plan of Studies, inclusive of complete Roadmap: <i>(Attach as Annex 'A')</i>
25	Course Outlines, Descriptions, Pre-Requisites & Readings (Compulsory & Recommended) <i>(Attach as Annex 'B')</i>
J. FINANCIAL DETAILS	
1	Source of Funding: BU: Fully/Partially: Fully Public Sector (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> NNGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> INGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i> UN/IGO (B1): Fully/Partially <i>(provide complete details; attach MOU, agreement etc.)</i>
2	Degree Duration: Annual or Semester System: Annual Number of Years Semester Number of Semester: 4
Total Number of Credit Hours: 42	
3	Expected fee to be charged based on Cost & Benefits Analysis: <i>(show working)</i> <ul style="list-style-type: none"> ▪ Fee Rate / Credit Hour: Rs 5500 ▪ Tuition Fee / Semester / Student: Rs 66000
4	Expected Number of students for 1st & 2nd Intakes: 20
5	Expected Earning from first two Intakes (B5): <i>(Show working)</i> <ul style="list-style-type: none"> ▪ Tuition Fee / Semester / Student: Rs 66000 ▪ Admission Fee and other Charges / Student (One Time): 28000 ▪ Earning from First Two Intakes: $20 \times 66000 = 1320000 + 20 \times 28000 = 560000$ ▪ Total of first two intakes = Rs 18,80,000

6 Expected Earnings for the Next Five Years (B6): (show working)

- 1st Year Earning: Rs 16,00,000 (1.6 Millions)
 - 2nd Year Earning: $16,00,000 + 6,60,000 = 22,60,000$ (2.26 Millions)
 - 3rd Year Earning: $22,60,000 + 6,60,000 = 29,20,000$ (2.3 Millions)
 - 4th Year Earning: $29,20,000 + 6,60,000 = 35,80,000$ (3.6 Millions)
 - 5th Year Earning: $35,80,000 + 6,60,000 = 42,40,000$ (4.2 Millions)
-

7 Total Estimated Salaries of all Additional Human Resources per annum (B7): (Show working)

	Salary Estimates of Faculty for 1 st Year: 30,00,000 Salary Estimates of Supporting Staff for 1 st Year: 540000 Total of Faculty and Supporting Staff: Rs 35,40,000 (Approximately)
8	Cost of Additional Laboratory Equipment/Tools (B8): (show working) Existing lab facilities shall be used
9	Cost of Additional Classrooms (B9): (Include furniture, technical aids etc): Nil
10	Cost of Additional Books, Subscription & Memberships to on-line Sites/Repositories (B10): (show details) Cost of one Book: 8000-12000 Approximately on Average Cost of 50 Books: 500,000
11	Off-Site rental Expenses and Cost of other Fixtures (B11): (Show details): Nil
12	Miscellaneous Expenses required for Starting the Program (B12): <ul style="list-style-type: none"> - Advertisement: 50,000 - Printing & Stationery: 10,000 - Admin Cost: 5000 - Any other: 5000 - Total: 70,000
13	Annual Recurring Expenditures in Subsequent Years (B13): <ul style="list-style-type: none"> - Salaries: 50,00,000 - Rentals: - - Subscriptions/Memberships: - - Advertisements: 50,000 - Printing & Stationery: 10,000 - Admin Cost: 5,00,000 - Any other: - - Total: 50,65,000
14	Total Cost of the Programme (B14): [Add B (7) to B (12)]: Rs 41,10,000
15	Net Cost of the Programme (B15): [Subtract B (1) from B (14)] $41,10,000 - 18,80,000 = \text{Rs } 22,30,000$
16	Net Earnings in First Year (B16: [Subtract B (15) from B (5)]: - 22,30,000
17	Projected Annual Gross Earning in Subsequent Years (B 17): (show details & working; add 10% towards all expenses in subsequent years.) <ul style="list-style-type: none"> ▪ In 1st Year, there is no earning, rather setting up expenditure exceeds by about Rs 22,30,000 ▪ We would start earning from 4th Year onwards, the amount would depend upon number of students. However if we keep it at 10 students, the net earnings would be 1-1.5 million

	in 4 th Year.
18	Projected Annual Net Earning in Subsequent Years: [Subtract B (13) from B (17)] It would vary from 1-1.5 million per Year.

Annex A**Roadmap: MS (Maritime Trade and Logistics)****Semester-1**

S.NO	Codes	Course	Level	CH	Pre-requisite
1	ECO 700	Maritime Economics	Core	3	
2	MTM 700	Shipping Management and Finance	Core	3	
3	MTM 701	Maritime Strategy	Core	3	
4	MTM 702	Logistics Supply Chain Management	Core	3	

Semester-2

S.NO	Codes	Course	Level	CH	Pre-requisite
1	MTM 703	Multimodal Transport Operations	Core	3	
2	MTM 704	Legal framework of Maritime Transport	Core	3	
3		Elective-I	Elective	3	

Semester-3

S.NO	Codes	Course	Level	CH	Pre-requisite
1	MTM 705	Research Methodology and Proposal Development	Core	3	
2		Elective-II	Elective	3	
3		Elective-III	Elective	3	

Semester-4

S.NO	Codes	Course	Level	CH	Pre-requisite
1	SDW 790	Thesis	Core	6	RM

Electives

S. No.	Course Code	Title of the Course	Credit Hours
16.	MTM 750	Maritime and Industrial Economics	3
17.	MTM 751	Maritime Economics and Globalization	3
18.	MTM 752	Maritime Technologies and Applications	3
19.	MTM 753	Globalization and Maritime Management	3
20.	MTM 754	Ports and Logistics Management	3
21.	MTM 755	Tanker Operations	3
22.	MTM 756	Ship Security	3
23.	MTM 757	Maritime Emergency Preparation and Response	3
24.	MTM 758	Custom Clearing and Freight Forwarding	3
25.	MTM 759	LNG Shipping	3

Roadmap: MS (Maritime Trade and Logistics)

Maritime economics

Course description

The course Maritime Economics (ME) provides all students with a solid introduction to the principles of micro-, macro- and international economics with respect to maritime domain. The course discusses certain basic and fundamental economic cornerstones and serves as a foundation for the maritime students. It will further built understanding of students on some specific topics like dynamic of maritime industry, behavior of ship owners, shippers and other stake holders.

Reading material: Book- Maritime Economics, 3rd Edition, Author: Martin Stopford

Shipping Management and Finance

Course description

Shipping Management and finance course deals with basic principles and methodologies of management of shipping. The Shipping and Transport Finance Course aims to provide students with the understanding of the key issues in the financing of ships, ports, transport and other infrastructure projects. At the end of the course students will be able to develop, appraise, negotiate and choose among alternative investment proposals under conditions of risk and uncertainty. In addition, module will cover subject areas like types of ships, ships registration & classification, shipping costs and budgeting, Crewing & Manning, Marine Insurance & cargo claims, Vessel Operations & commercial / technical issues, IMDG codes and ISM code, Bunker management & Voyage estimating.

Reading material:

Shipping Finance (ICS)

Shipping finance 3rd Edition by Stephenson Harwood.

HSBA handbook on ship finance Edited by Springer

The business of shipping by James Buckley

Maritime Strategy

Course Description

The objective of this course is to help students think through organizational issues at strategic level; to familiarize them with the various tools for strategy analysis and formulation; and to sensitize them to the social, political, and legal structures that shape decision making processes. The prescribed teaching approach in this course is primarily inductive. The course uses a combination of theory, practical illustrations, and cases.

Logistics and Supply Chain Management

Course description

This course includes; general principle involved in logistics and Supply chain systems also, General principles involved in logistics. Method of optimizing movement of materials, information and finances from supplier to manufacturer to whole seller retailer to consumers; ways of efficient supply and to reduce inventory will also be discussed.

This module will also cover the evolution of maritime logistics concept to meet incorporated demands for value added goods and the impact of maritime logistic on maritime transport. As Maritime logistics has extended the shore boundaries, therefore, module will cover subject areas like maritime freight management, effects of globalization on logistic industry, Baltic Freight Index, international container trade, developing technologies in logistics, concepts of multimodal transport, carrier alliances & partnerships, multimodal logistic process, regional

& national patronage, marine transportation & its role in supply chain management, national administrative control on Maritime Logistics, international regulatory framework, & Intl organizations like (APH Association of Ports and Harbours) / ISF(International Shipping Federation) / ICS (International Chamber of Shipping) / ITF (International Transport Workers' Federation).

Reading material

Logistics and Supply Chain Management by Christopher, Martin

Maritime logistics: a guide to contemporary shipping and port management by Dong

Wook Song

International logistics: global supply chain management by Douglas C. Long

Essentials of supply chain management by Micheal H. Hugos

Multimodal Transport Operations

Course description

This course teaches the inter-relationship between all modes of transport used in international trade. This course also includes knowledge of distribution in international trade and how basic distribution structures meet international and national needs. Students will then be taken through learning about the physical operations and trade routes and the relationship between transporting and certain goods, and the role each type of transport holds. Also, this course will include non-physical operations. This will be areas such as Inventory management, sale contracts and documentations and regulations.

The principles of cargo handling and the functions and management of cargo handling equipment and facilities have discussed in detail along with contemporary multimodal transport law.

Reading material

Maritime Transportation by Kristiansen, Svein

Multimodal transport law by Micheal Spanjaart

Multimodal transport carrier, liability, and documentation by Ralph de Wit

Legal Framework of Maritime

Transport Course description

The course objective is to enable the students to have sound grasp of the fundamentals of maritime transportation and its laws used by people and amended by the government, particularly those aspects which a maritime sector encounters in the performance of the professional obligations. The course Maritime Logistics (ML) provides students with a deep understanding of the interrelations between terminal design and operations on the one hand, and legal shipping networks on the other. The emphasis is on container terminals as the interface between the maritime and hinterland transportation.

The course will also provide understanding of the International and National Shipping Laws and policies. Course including areas of admiralty jurisdiction and practical concept of risk management in maritime arena, history and development of marine insurance law, hull and machinery insurance, protection and indemnity (P & I) Clubs, Contract of Affreightment (CoA) and bill of lading (BoL), shipping laws & corporate laws, maritime law & transportation law, customary law and treaty law, Limitation of liability & Salvage, International conventions, Towage & Collision, relationship between national law and international law, and law of the conflict.

Reading material

Legal Principles in Shipping Business, ICS

Jurisdiction and arbitration clauses in maritime transport by Sparka, Felix review of maritime transport 2017 by UNCTAD

Insurance law implication of delay in maritime transport by Aysegul Bugra

Maritime transport law by Alexandra Mandaraka

Modern maritime law and risk management by Alexandra Mandaraka

Research Methodology and proposal

development Course description

Students will gain a knowledge and understanding of the concepts and terminology of empirical methods used in social sciences research particularly in business environment. Qualitative research methods are included in this course as they are appropriate for certain research investigations. Selection of specific research methods will be taught based in the problem under investigation, and its underlying assumptions. For quantitative methods, emphasis throughout the course will be on theory development with attention to concept formation and confirmation, in a research program. Planning, design, and sampling will be covered for various research methods studied in the course. Students are also expected to gain an introductory knowledge of topics in descriptive statistics, inferential statistics, and qualitative research methods.

Reading material

Research Methodology and statistical tools by Pathan, Raman

Maritime and industrial

economics Course description

The course is focused on the economics of the maritime industry, with a combination of historic and geographic approach, together with general shipping market theory and focus on key market drivers. The course also includes an historical introduction presenting the development of international trade and shipping from the 18th century to the present. It also includes analysis of shipping markets; market structure and the factors that shape supply, market dynamics, demand, and profitability in a short and long-term perspective.

Reading material:

Maritime Economics, 3rd Edition, Author: Martin Stopford

Shipping economics volume Xii by Kevin Cullinane

Economics of sea transport and international trade by institute of chartered ship brokers

International handbook of maritime economics by Kevin Cullinane

Change Management: Concepts and

Applications Course description

The objective of the course is to familiarize students with various concepts of change management, their intervention strategies, and organizational Development Model. Change management case analysis, presentation and discussion would be an important segment of the course which would enable the students to learn how to apply concepts and formulate strategies.

Reading material Book-Change Management by Jeffrey M. Hiatt & Timothy J. Creasey

Contemporary Issues in Maritime Affairs: Concepts and

Applications Course description

This course focuses on fundamentals of maritime sector, public structure and hierarchies, private sector players in maritime businesses. The students will be developing the

understanding of contemporary challenges in the maritime domain, ever increasing demand on businesses due to globalization, competitive pressure between, ports, emergence and role of maritime hubs in global logistics chain. Development and trends related to maritime safety, security and supply chain management will also have discussed.

Module will also cover importance of oceans, concepts of integrated coastal zone management, maritime zones & UNCLOS, Maritime organization (IMO) & its key pillars, STCW / MARPOL / SOLAS.

Reading material

Maritime Affairs by Gupta, Manoj Commandar

Maritime affairs, journal of national maritime foundation of India

WMU studies in Maritime Affairs by Springer

Globalization and Maritime

Management Course description

This module will cover the impact of globalisation and evaluation of maritime ports and logistics in view of emerging trends. The module will also cover subject areas like corporate demands for value addition, global freight management, Baltic Freight Index, international container trade, developing technologies in maritime domain, concept of integrated maritime arena, carrier alliances and partnerships, regional and international patronage, emerging regulation on marine transportation and its role in maritime management.

In addition, the course will develop understanding of students on international regulatory framework, policies for national control on maritime logistics and role of intl organizations like (APH Association of Ports and Harbours) / ISF (International Shipping Federation)/ ICS (International Chamber of Shipping) / ITF (International Transport Workers' Federation).

Reading material

Dynamic shipping and port development in globalized economy by Lee P Y and Kevin Cullinane

Maritime governance by Roe, M

Port Logistics

Course description

The course is aimed to develop a thorough grasp of different aspects of port activities by providing understanding of the principles and activities of port logistics within the framework of overall marine transportation systems. Study of role of maritime transport in international trade and provides understanding of commercial practices and legislative and contractual framework of international shipping.

The course covers port and development concepts and implementation planning management. It includes management of marine operations like dredging, reclamation etc. Maritime emergency plans response and capabilities are discussed. Module will cover subject areas like Port Development & Organization, Pricing & Costing practices, Port Operations and Nautical Operations, Port Safety and Security, Port Performance & Management, Environmental Management & Ports, Port Labour & HRM. Port Marketing & Competition.

Reading material

Deliberation on the Development Mode of Port Logistics Hub

Port-focal logistics and global supply chains by Ng-a-liu

Journal of maritime economics and logistics

Tanker Operations

Course description

The Tanker Operations course is designed to encompass all aspects relating to the operation of the tanker. The subject matter gives a historical description of the tanker and the types used. The course also discusses all aspects relating to loading off-loading etc., including the tankers operating equipment. In addition, the course describes all safety issues relating to the tankers operations.

Reading material

Manual of Oil Tankers Operations by Jhon Onslow

Crude oil Tankers Basic - Theories and practice of crude oil cargo practice by Paul Armitage (Captain)

Ship Security

Course description

To provide a broad overview of the importance of maritime security in the current context and to understand the developing regime under the ISPS Code, PSI, CSI and other initiatives taking place under the aegis of IMO, regional and international collaboration. Understanding of their implementation measures that impact maritime businesses.

Reading material

Integrated Maritime Security by Paleri Prabha Karam

IMO readings

IMO News(Magazine)

Maritime Emergency Preparation and

Response Course description

This unique course will provide student with essential knowledge needed to prepare for the unexpected. The aim of course is to introduce the fundamentals of safety systems and develop a thorough understanding of safety and reliability analysis, and FSA as they apply to the maritime industry. To examine issues related to management of survey and certification processes. To learn causes of major maritime disasters. Disaster management policies and measures. Organization for marine disaster management. Awareness and responses at various levels. Integration of maritime disaster management into National Crises Management Regime. This unique course will provide you with essential knowledge needed to help prepare you for the unexpected and expected emergencies occur in maritime and how to respond towards those emergencies.

Reading material

Book - A Safer Future: Reducing the Impacts of Natural Disasters

Emergency Response Guidebook (ERG guide) by JJ Keller

Custom Clearing and Freight

Forwarding Course description

This course will cover the Customs Clearing & Freight Forwarding aspects and the complexity of statutory documentation. It is designed for students who are currently engaged in the shipping business or for those desiring to embark on a career in Customs Clearing and Forwarding. Course contents will focus on all aspects necessary for the import and export of goods into and out of Pakistan.

Reading material

How to become a successful freight broker by Stewart, George A.

LNG Shipping

Course description

This course is unique to the LNG Shipping Transportation Industry. It covers all the theoretical and practical aspects of the IMO LNG Training requirements and much more. There is a 25% growth of LNG Carriers as the demand for LNG as a clean fuel continues to grow. There is a desperate worldwide shortage of trained technical personnel to man ships and their support network ashore. The course will help debunk the safety fears that some have and will assist those who wish to enter a very lucrative and rewarding career in the LNG Industry.

Studying this course will boost your career prospects. Many students study to develop themselves in their existing role, while others study with a complete change of career in mind.

Appendage 3127

NEW PROGRAMME PROPOSAL - Master of Science in Peace, Conflict and Development Studies

A. ACADEMIC DETAILS	
1	Faculty/Department: Department of Humanities and Social Sciences, Bahria University, Islamabad Campus (BUIC)
2	Name of the Programme: Master of SCIENCE (MS) in Peace, Conflict and Development Studies
3	Mission of the Programme: To equip the scholars with relevant tools and skills to undertake academic research and teaching in the field of Development Studies
4	Objectives of the Programme: The objective of MS program is to contribute in bringing forward a new generation of scholars equipped with profound knowledge of discipline with an ability to advance scholarship in areas of their specialization. Students will be encouraged to develop a critical understanding of major debates, theories and strategic interventions and of the skills to analyze the issues, and to design and assess interventions aimed at tackling these issues. An essential part of this process is to develop skills in research methodology, which will be applied in a thesis prepared as a requirement for the Master's degree. The two-year MS in Peace, conflict and Development Studies will provide you with a rigorous and critical introduction to development as a process of managed and unmanaged change in societies in the global South. The Program is an excellent preparation for a career in development policy or practice or for further study in the field.
5	Outcomes of the Programme: A thorough understanding about classical and recent theoretical knowledge in the areas of Peace and conflict theory as well as development theory. Ability to draft projects documents, to be able to work in project implementation team as well as to successfully monitor and evaluate and eventually to determine the success and failures of development Interventions To be able to understand the research philosophy along with methodology sophistication and familiarity with academic writing process
6	Rationale for the Programme: It will add diversity to the programs being conducted at Islamabad Campus of Bahria University. Islamabad is the hub of donor agencies, NGO, think tanks and International missions and hence there is continuous need of trained human resource in the field of development Studies. Bahria University currently is the only one in Islamabad to have successfully run the Development Studies Program at undergraduate program that means we already have a strong foundation of students who intend to continue their further studies in similar program at Bahria University. Currently there are two universities, PIDE and Iqra University, which are

running Development Studies Program in Islamabad. Given the demand of Program PIDE have even started Morning and evening batches of Development Studies program and still the demand is unmet. The start of MS program in Development

	Studies will not only make stronger the development studies cluster but also will fulfill the existing gap in the discipline. The department has one PhD PFM in Peace and conflict however we will need another one in development Studies which fulfills the HEC/BU requirements to start a new PHD program.
7	Brief Description of the Programme: Department of HSS is offering a 2 years MS degree in Peace Conflict and Development Studies. The MS in Peace Conflict and Development Studies offers a solid academic and professionally relevant training in theory and methods for development studies. It is designed for those wishing to start or continue their professional careers in the area of development. In the MS program you learn about the most recent theories and debates. You will also learn to apply this knowledge to practical issues of development and social change. The students will be offered course work worth 24 credit hours followed by a dissertation worth 6 credit hours.
8	Duration: Minimum 2 Years (4 Semesters)
9	Venue(s): On Site/Off Site/Both On & Off Site (Tick one; if Off Site, give details) Department of Humanities and Social Sciences, Bahria University, Islamabad Campus, Shangrilla Road Islamabad.
10	Programme Scheduling Format: Evening Bi-Semester
11	Proposed Date of Commencement: Fall 2018
12	Mode of Study/Examination: Semester System
13	Additional Faculty Member(s) Required: (<i>Indicate if there is a requirement for additional faculty members, fulltime/visiting, along with qualifications.</i>) 1 PhD s
14	Additional Skilled-Worker(s) Required: (<i>Indicate if there is a requirement for additional Skilled Staff, fulltime/part-time, along with their qualifications/skill sets.</i>) Nil
15	Additional Classroom(s) required: (<i>The requirement is to include the number of classrooms and their capacities.</i>) Nil
16	Additional Requirement for Laboratories: (<i>The requirement is to include the number of laboratories, their equipment and their capacities.</i>) Nil
17	Additional Requirement for Books, Subscriptions, Memberships to Online Research Sites/ Repositories: Nil
18	Minimum Entry Level: 16 years of education from HEC recognized educational universities / institutes, students with background of; Development Studies Political Science Defense and Strategic Studies Defense and Diplomatic Studies Peace and Conflict Studies Government and Public policy

	Pakistan Studies Area Studies International Relations Media Studies History Any other relevant discipline
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19 **Admission Criteria:** As per HEC/BU Policy20 **Additional/Different Examination Requirement**

	(Indicate if there will be any examination requirement, additional to or different from the BU Academic Rules or Examination Policy in vogue). As per BU Policy
21	Number of Admissions Expected for First Intake: 10-15 students
22	Number of Admissions Planned/Expected for Subsequent Intakes: 20 % increase every semester
23	Referred by: (delete which is inapplicable) DBOS: held on 17 th November 2018
24	Complete Plan of Studies, inclusive of complete Roadmap: Attached
25	Course Outlines, Descriptions, Pre-Requisites & Readings (Compulsory & Recommended) Attached
B. FINANCIAL DETAILS	
1	Source of Funding: BU: Fully
2	Degree Duration: 4 sem (2 yrs)/30 CR Annual or Semester System: Semester
3	Expected fee to be charged based on Cost & Benefits Analysis: (show working) Fee rate per credit hour: Rs. 5,500
4	Expected Number of students for 1st & 2nd Intakes: 10-12 students
5	Expected Earning from first two Intakes (B5): (Show working) $104,000 \times 10 \text{ (1}^{\text{st}} \text{ intake)} + 104,000 \times 12 \text{ (2}^{\text{nd}} \text{ intake)} = 104,000,0 + 12,480,00 = 2.288M$
6	Expected Earnings for the Next Five Years (B6): (show working) $385,000,0 + 462,000,0 + 554,400,0 + 665,280,0 + 798,336,0 + 7,963,000 = 28.7 \text{ Million}$
7	Total Estimated Salaries of all Additional Human Resources per annum (B7): (Show working) Salary of 1 PhD = 0.13 million x 12 = 1.56 million/annum
8	Cost of Additional Laboratory Equipment/Tools (B8): (show working) Nil
9	Cost of Additional Classrooms (B9): (Include furniture, technical aids etc) Nil
10	Cost of Additional Books, Subscription & Memberships to on-line Sites/Repositories (B10): (show details) 0.2 Million/annum
11	Off-Site rental Expenses and Cost of other Fixtures (B11): (Show details) Nil
12	Miscellaneous Expenses required for Starting the Program (B12): Advertisement: Printing & Stationery: Admin Cost: Any other -Total: 0.2 million
13	Annual Recurring Expenditures in Subsequent Years (B13): Salaries: Rentals: Subscriptions/Memberships:

Advertisements:

Printing & Stationery:

Admin Cost

Any other - **Total: 1.96 million**

14 Total Cost of the Programme (B14): [Add B(7) to B(12)]

$$B(7) + B(12) = 1.96 \text{ million} + 0.2 \text{ million} = 2.16 \text{ Million}$$

15 Net Cost of the Programme (B15): [Subtract B(1) from B(14)]

$$B(14) - B(1) = 2.16 \text{ Million} - 0 = 2.16 \text{ Million}$$

16 Net Earnings in First Year (B16: [Subtract B(15) from B(5)]

$$B(5) - B(15) = 2.288 \text{ million} - 2.16 \text{ Million} = 0.128 \text{ Million}$$

17 Projected Annual Gross Earning in Subsequent Years (B 17): (show details &

working; add 10% towards all expenses in subsequent years.)

2.376 Million (incremental)

18 Projected Annual Net Earning in Subsequent Years: [Subtract B(13) from

$$B(17)] B(17) - B(13) = 2.376 \text{ million} - 1.96 \text{ million} = 0.416 \text{ Million}$$

MS-Peace, Conflict & Development Studies

The MS in Peace, Conflict and Development Studies aims to combine the strengths of these two Divisions in providing a structured, innovative and challenging MS program on the important interrelationships between peace, conflict and development. It offers a comprehensive introduction and analysis of the interrelationships between development, conflict and security in developing and transitional societies.

It covers: development theory, policy and programming debates; interrelationships between insecurity, poverty and development; peace and peace building (including conflict prevention and post-conflict reconstruction); human security issues; natural resource conflict, co-operation and management; environment and security in developing and fragile political contexts; and conflict-sensitive development principles and practices. It also equips its students with practical skills in order to design and manage projects and programs in the field.

SCHEME OF STUDIES FOR MS PROGRAM

MS 2-Years Program (30 credit hours) Following is the scheme of studies for two years program in MS Peace Conflict and Development Studies having course work of 24 credit hours along with a thesis of 6 credit hours respectively:

1st Semester- MS 1st Year

S No	Course Title	Credit Hours
1	Issues in Development Policy	3
2	Theories of Conflict and Peace	3
3	Advance Research Methods & Techniques	3
4	Optional-1	3
	Total	12

2nd Semester- MS 1st Year

S No	Course Title	Credit Hours
1	Developing & Managing Projects	3
2	Optional-2	3
3	Optional-3	3
4	Optional-4	3
	Total	12

Semester	Name of the Subject	Credits Hours
Third and Fourth	Thesis	6

CORE COURSES

NO	Course Name	Credit hours
1	Issues in Development Policy	3
2	Theories of Conflict and Peace	3
3	Developing & Managing Projects	3
4	Advance Research Methods & Techniques	3

OPTIONAL COURSES

NO	Course Name	Credit hours
1	Conflict Analysis and Mapping	3
2	Natural Resource Management and Related Conflicts	3
3	Conflict Resolution Mechanisms	3
4	Peace Building and Post Conflict Development	3
5	Cities in Conflict	3
6	<u>Migration Governance in Times of Crisis</u>	3
7	<u>Refugees, Diasporas, Migration,</u>	3
8	<u>Understanding Terrorism: History, Contexts and New Challenges</u>	3
9	<u>International Response to Humanitarian Crises</u>	3
10	<u>Humanitarian Action, Frameworks and Practice</u>	3
11	Gender, Conflict and Development	3
12	Politics of Human Rights	3

DESCRIPTION OF CORE COURSES**1. Issues in Development Policy****Cr.Hr 03**

Course Description: In recent years, poverty and inequality have become increasingly important topics for public debate, reflecting concerns about rising inequality in wealthy countries like the U.S., political instability and protests in middle and lower income countries e.g. Egypt and Brazil, coupled with increasingly visible and growing gaps in wealth and living conditions between rich and poor countries. Some countries have achieved unprecedented rates of growth and massive improvements in living conditions, while others have faltered. Despite this progress, over a billion people still lived on less than \$1.25 a day in 2011 and many remain vulnerable to poverty. Why are so many people still poor? What factors constrain them from catching up? More importantly, what strategies hold the most promise to help the remaining poor rise out of poverty and live better and more secure lives? The aim of the course is to train students to become better informed participants and more effective contributors to global debates about poverty, inequality and economic development.

Objectives

Defining the primary objectives of development

Discussing regional and national trends in related indicators.

The course looks in depth at a selected set of contemporary development challenges.

Course Contents

Defining the primary objectives of development i.e. reducing poverty and vulnerability, promoting equity and “good” types of inequality while reducing “bad” inequalities, promoting human development—

Economic growth has been a driving force for poverty reduction

The course looks at big-picture issues including growth strategies and the role of institutions, and summarizes recent debates around the role of international development assistance and big-push versus incremental development strategies.

To have in depth look at a selected set of contemporary development challenges. Proposed topics include urbanization and rising numbers of urban poor/vulnerable; the persistence of chronic, extreme poverty, including issues of exclusion linked to ethnicity and gender; the primary of measures to improve skills and health outcomes; government failure, linked to corruption and elite capture; and energy subsidies and pricing policies.

Suggested Readings

1. Abhijit Banerjee and Esther Duflo (2006). “Economic Lives of the Poor”. *Journal of Economic Perspectives* 21, No. 1: 141-161.
2. Martin Ravallion (1992). Poverty Comparisons: A Guide to Concepts and Methods. LSMS Working Paper No. 88, The World Bank. Sections 1, 2: esp. pp 1-48
3. Abhijit Banerjee and Esther Duflo (2011). Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty. Public Affairs. Chapter 1
4. Dani Rodrik (2008). “The New Development Economics: We Shall Experiment, But How Shall we Learn?”, paper presented at the Brookings Global Economy and Development Conference—“What Works in Development? Thinking Big and Thinking Small”, May 21st .
5. World Bank (2005). Addressing Inequality in South Asia. *South Asia Development Matters*, World Bank Group. Read the Introduction, also Chapters 1-2 if time permits (and you have a particular interest in South Asia).

2. Theories of Conflict and Peace

Cr.Hr 03

Course Description: Conflicts are a common phenomenon and can be found everywhere this can be traced to family level, at a workplace, within and between societies or states. This course explores the various assumptions behind conflicts. It considers both the positive and critical aspects of conflict and peace theoretical perspectives.

Objectives

After taking this course students will be able to utilize critical thinking and analytical skills to begin an in-depth analysis of the major theories of conflict and conflict resolution.

Theories and case studies covered during the course will include root causes and dynamics of conflict, and methods of conflict analysis and resolution. In addition, issues in relation to conflict and peace including motivations and causations will be covered.

Course Contents

Introduction to theories of conflict and peace

Critical aspects of peace and conflict theories

Motivational factors of conflict

Root causes and dynamics of conflict

Application of conflict theories in relation to peace building

Suggested Readings

1. M. D Collins, “Transcending dualistic thinking in conflict resolution,” *Negotiation Journal*, 21(2), 263-280. 2005
2. A. De Reuck, “A theory of conflict resolution by problem-solving,” *Conflict: Readings in management and resolution* (pp. 183-198). Palgrave Macmillan UK. 1990
3. J.Demmers, *Theories of violent conflict: An introduction*. Routledge. 2012

4. S. Martínez, *Intimate Enemies: Violence and Reconciliation in Peru*. Philadelphia: University of Pennsylvania Press, 2013
5. Oliver Richmond, *A Post-Liberal Peace*. New York: Routledge. 2011

3. Developing & Managing Projects

Cr.Hr 03

Course Description: This course introduces students to a range of concepts, issues and themes in project management and design. We start off with exploring the concepts of project and project cycle management, and discuss how central are projects to the practice of development. We then thoroughly examine the initial phases of project cycle such as project identification, planning and appraisal. Significant amount of time will be devoted to studying and analyzing Logical Framework Analysis (LFA), a logically positivistic method and tool which is considered to be the backbone of the project design. Moving further into the semester, we discuss the advanced stages of the project, viz., implementation, monitoring and evaluation. We shall be delving deep into a number of principles, processes, techniques and methods surrounding these project phases. The aim is to develop a finer understanding of how projects are implemented, reviewed and assessed. Throughout the course, we will be interspersing the study of project cycle with various issues and competencies such as building a team, writing the project proposal, budgeting, communication management, and conflict and risk management. These add-ons, or complementary themes, to put it more appropriately, will enable us to amply and extensively familiarize ourselves with the architecture of project planning and management. We wrap up with a discussion on how to best conclude a development project and effectively disseminate project outcomes to a wider audience.

Objectives

Gain a fine appreciation of the project cycle management.

Develop a profound understanding of a range of trends and motivations underlying the initiation of development projects.

Study a wide range of techniques and competencies associated with development projects. Be able to gauge the success or failure of a project.

Course Contents

Introduction to Projects and Project Management

Project Identification

Conducting Needs Assessment

Overview of Planning and Appraisal

Introduction to Logical Framework

Preparing LFA

Concept Note and Proposal

Writing Budgeting

Project Implementation

Monitoring and Review

Evaluation & Impact Assessment

Communication Management

Conflict and Risk Management

Suggested Readings

1. Potts, D. (2005) 'Project Identification and Design' and 'Project Identification and Formulation' in 'Project Planning and Analysis for Development'. Viva Books.
2. Chap. 6 The Project Team' in 'Successful Project Management: Insights from Distance Education Practices. Virtual University for the Small States of the Commonwealth (VUSSC)
3. Baker, J. (2000) Defining Concepts and Techniques for Impact Evaluation. In 'Evaluating the Impact of Development Projects on Poverty: A Handbook for Practitioners'. The World Bank. Washington D.C.

4. Warner, M. and Jones, P. (1998) Assessing the Need to Manage Conflict in Community-Based Natural Resource Projects. Overseas Development Institutes.
5. Baker, J. (2000) Defining Concepts and Techniques for Impact Evaluation. In 'Evaluating the Impact of Development Projects on Poverty: A Handbook for Practitioners'. The World Bank. Washington D.C.
6. Platteau, J. (2004). Monitoring Elite Capture in Community-Driven Development. *Development and Change*. 35 (2).

4. Advance Research Methods & Techniques

Cr.Hr 03

Course Description: The aim of the course is to provide students with the methodological skills necessary for them to carry out independent research. Throughout the year, methodological and design considerations are integrated with qualitative and quantitative techniques. Students will be trained about different traditions of academic writings along with training on qualitative and quantitative tools. Statistical theory is not emphasized; instead, students are trained to be consumers and users of both qualitative and quantitative data. Applied linkages are developed through the extensive use of the Eviews and SPSS data analysis package.

Objectives

Familiarity with academic writings traditions such as topic selection, proposal format, literature review, referencing guidelines, endnote etc.

Designing conceptual frame work

Decision about suitable methodological framework

Theoretical and applied training related to Quantitative methods such as Measurement and Questionnaire Design, Testing Interaction Effects etc.

Theoretical and applied training related to Quantitative methods such as Introduction to Fieldwork and Ethnography, Observation, Interviewing, Documenting and Analyzing

Course Contents

Familiarity with academic writings traditions such as topic selection, proposal format, literature review, referencing guidelines, endnote etc.

Designing conceptual frame work

Decision about suitable methodological framework

Theoretical and applied training related to Quantitative methods such as Measurement and Questionnaire Design, Testing Interaction Effects etc.

Theoretical and applied training related to Quantitative methods such as Introduction to Fieldwork and Ethnography, Observation, Interviewing, Documenting and Analyzing

Suggested Readings

1. Whetten, D. A. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, 14(4), 490-495..
2. Green, J. P., Tonidandel, S. & Cortina, J. M. (2016). Getting through the gate: Statistical and methodological issues raised in the reviewing process. *Organizational Research Methods*, 19(3), 402-432. DOI: 10.1177/1094428116631417.
3. Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 1, 104-121.
4. Nippert-Eng, Christena. "Appendix: Consent Form and Interview Questionnaire." Pp. 293-306 in Home and Work: Negotiating Boundaries through Everyday Life. Chicago/London. The University of Chicago Press, 1996.
5. Lindlof, Thomas. "Creating and Analyzing Texts in the Field," In Qualitative Communication Research Methods. Thousand Oaks, CA: Sage. 1995.

DESCRIPTION OF OPTIONAL COURSES

1. Conflict Analysis and Mapping **Cr.Hr 03**

Course Description: This course examines the origins of social conflict, exploring the interpersonal, community, and large-scale intergroup conflicts. It also seeks to provide the frameworks for constructive intervention in conflict settings. The course enables the learners to; analyze a conflict, be able to explore the contextual factors that influence conflict. To equip with the conflict resolution techniques and understand the use of complexity of a wide variety of contemporary conflicts with mapping abilities of conflict zones, and also part of the course.

2. Natural Resource Management and Related Conflicts **Cr.Hr 03**

Course Description: The next century is projected to be century of war on natural resources and most of world conflicts, wars and peace building efforts would be surrounded by the issues of natural resources, its scarcity or conflict on its ownership in different regions of the world. Water resource is considered to be the major issue. This course enables the participants to get sensitized on how it is to be done and why it is important to have natural resources management done in due course of time efficiently to avoid conflicts.

3. Conflict Resolution Mechanisms **Cr.Hr 03**

Course Description: The course seeks to give a firm understanding of conflict resolution mechanisms within the area of peace and conflict studies. The purpose of the course is to introduce students about the issues of conflict resolution and management. In addition it offers an intersection of theory and practice, with special focus to the challenges of adaptation, and different approaches and mechanisms to resolve conflicts.

4. Peace Building and Post Conflict Development **Cr.Hr 03**

Course Description: This course examines the issues related to peace building and post-conflict development. Students who graduate this course will be able to examine the relationships between processes of political and economic change and conflict; the relationship between democratization and conflict; the relationship between structural adjustment policies and conflict; and finally, the challenges of post-conflict reconstruction and rebuilding.

5. Cities in Conflict **Cr.Hr 03**

Course Description: This course's aims are two-fold: To offer students the theoretical and practical tools to understand how and why cities become torn by ethnic, religious, racial, nationalist, and/or other forms of identity that end up leading to conflict, violence, inequality, and social injustice; and to use this knowledge and insight in the search for solutions.

As preparation, students will be required to become familiar with social and political theories of the city and the nation and their relationship to each other. They also will focus on the ways that racial, ethnic, religious, nationalist or other identities grow and manifest themselves in cities or other territorial levels of determination (including the regional or transnational). In the search for remedies, students will be encouraged to consider a variety of policymaking or design points of entry, ranging from the political- institutional (e.g. forms of democratic participation and citizenship) to spatial, infrastructural, and technological interventions.

6. Migration Governance in Times of Crisis **Cr.Hr 03**

Course Description: Migration governance relates to policies and laws developed at the international, regional and national levels by international organizations and States. This course analyses the dynamics and tensions underlying migration governance with a focus on key actors such as the United Nations and the European Union etc. It examines their overlapping and sometimes conflicting policy agendas and how unprecedented numbers of migrants and the European migration crisis are tackled. Given today's predominance of mixed migration flows involving not only economic migrants but also refugees, the course further explores the impact of migration policies on refugees'

access to destination countries and their protection therein. The overall objective of this course is for students to grasp the complexity of migration governance and develop a critical understanding of the key policy issues at stake.

7. Refugees, Diasporas, Migration

Cr.Hr 03

Course Description: Migration is considered to index modernity. Yet it is a minority pursuit, nowhere more so than across the boundaries and spaces that arouse the deepest anxieties. Large resources are nevertheless devoted to, and elections fought and won over, migrations that never occur. Perversely slender resources go to managing mobility that do. Refugees / diaspora / migration / etc. are also slippery terms. How have their meanings and uses changed? What do they tell us about our approach to human mobility? What do they mean for the peoples and societies involved? Taking historical examples over the past century or so and drawing on materials from across the disciplines and beyond them, this seminar addresses some critical puzzles and paradoxes speaking directly to the liberal governance of mobility, and indirectly to the nature of liberal governance itself.

8. Understanding Terrorism: History, Contexts and New Challenges

Cr.Hr 03

Course Description: This course examines the evolution of the phenomenon of terrorism, which has (re)emerged as a lead feature of contemporary international relations. It addresses the questions of definition of terrorism, history of the concept, perspectives on causes, structure and organization of terrorist groups, relationship to the debate on the changing face of warfare, and the consequences of terrorism. The approach blends historical and comparative perspectives and a practical outlook on international policies, seeking to differentiate between varying forms of terrorism in relation to the political and societal context from which they originate and the differing domestic, regional, and international responses they generate. The course's aim is to enhance the critical ability of the students to understand and analyze cogently the issue(s) of terrorism, and their overall ability to assess the novel transnational challenges associated with terrorism and their implication for policy.

9. International Response to Humanitarian Crises

Cr.Hr 03

Course Description: Humanitarian emergencies have currently reached unprecedented dimensions. The purpose of this course is to enable students to become familiar with the main international norms and instruments relevant to humanitarian action, by analyzing the international legal frameworks that shape the international response to those emergencies. The course will be divided in three parts. The first part of the course will discuss the international legal obligations that are incumbent on national authorities in situations of humanitarian disasters, civil unrest or in times of armed conflict to enhance humanitarian access and to ensure the wellbeing of affected populations. The second part of the course will examine the specific protection mandate of humanitarian organizations such as the International Committee of the Red Cross (ICRC) and the UN High Commissioner for Refugees (UNHCR). The final part will be devoted to the analysis of the role that coercive diplomacy and recourse to military force can play in facilitating humanitarian access, by discussing the concept of Responsibility to Protect and the current legal framework on the international and regional use of military forces in humanitarian emergencies.

10. Humanitarian Action, Frameworks and Practice

Cr.Hr 03

Course Description: This course is about Humanitarian Action and challenges to be faced by humanitarian organizations. Today's humanitarian landscape and past reform projects. It also discusses Links between humanitarian action and other types of action, development in particular. Introduction into the international humanitarian law and other branches of public international law relevant for humanitarian action with focus on concrete challenges in the field: conduct of hostilities, deprivation of liberty, People on the move, compliance and impunity issues, and fight against terrorism. Each lecture will deal with specific context in order to illustrate operational and legal challenges to be faced. Contexts will also be looked at from a historic, political and socio-

economic perspective. Contexts dealt with: Afghanistan, Iraq, Israel/Palestinian Territories, Mexico, Somalia, South Sudan, Syria, and Ukraine.

11. Gender, Conflict and Development

Cr.Hr 03

Course Description: The aims of this module are: To give students a solid foundation in the key concepts of sex, gender, violence and conflict. It is also about a range of theoretical and disciplinary perspectives on the relationships between gender, violence and peace and to discuss and critically analyze contemporary policy debates and practical initiatives around “Women, Peace and Security” and “Violence Against Women”. Another very important objective of the course is to develop student’s ability to critically engage with academic and policy literature.

12. Politics of Human Rights

Cr.Hr 03

Course Description: The Universal Declaration of Human Rights embodies an ideal based on a ‘recognition of the ‘inherent dignity and of the equal and ‘inalienable rights of all members of the human family’. That ideal emerges from the profoundly important mission of imagining and realising a global human dignity. It is an ideal which is couched in a language and an imagination of global goals and aspirations and a universal human family. But that language does not exist in a political vacuum. There are many ideological battlegrounds and contentious issues related to the issue of the universality of human rights. The course explores the hypothesis that human rights are not neutral but are inherently political in their origin, development and application. The course will examine this hypothesis by evaluating a range of case studies relating, but not restricted, to gender, children, Indigenous peoples, postcolonial struggles, and war. Broadly, the course examines human rights case studies with the aim of critically evaluating what constitutes an appropriate imagination for the aspirations of a universal human family.

Appendage 3128**Diploma in Services Law****Summary / Background:**

With the rapid changes in the business world, awareness and education of Law can play a vital role in our society. There are students who pursue their academic career in Law and therefore get enrolled in programs such as LLB from the very start. There is also a big chunk of professionals in the market who are entrepreneurs themselves or employed in various organizations in the domain of HRM, Finance, Marketing, and Project Management. They may not have the time to pursue degrees that require a total of 4 years of continuous dedication to learning along with their commitments with the job and family. Such professionals are looking for short courses in the shape of certificate or diploma from a reputed university.

As far as law education is concerned, there are 5 out of total 14 institutions in Lahore that are offering Diploma courses while the remaining 9 are offering certificate courses. The diploma courses include Diploma in Corporate Law, Labor Law, Banking Law, Intellectual Property Law etc.

Looking at the inclination of working students towards technical oriented degrees and courses such as MSPM, MS department proposes the launch of various diplomas at BULC over the evening or weekend. For the start, only Diploma in Services Law will be launched if approved. The reason to launch Diploma in Services Law is that no other institution in Lahore is offering this so far.

**New Programme Proposal
Diploma in Services Law**

A. ACADEMIC DETAILS	
1	Faculty/Department: Department of Management Sciences
2	Name of the Programme: Diploma in Services Law
3	Mission of the Programme: Providing awareness of law in the services industry
4	Objectives of the Programme: To provide knowledge of services law among service industry employees
5	Outcomes of the Programme: Students will be equipped with the knowledge of appointment, legal issues, general law, and criminal laws in civil service sector.
6	Rationale for the Programme: <ul style="list-style-type: none"> ▪ Considering professional/technical nature and need of time, law related diploma courses is likely to get popularity. ▪ Importantly, among all the institutions offering diploma programs in the vicinity of Lahore, BULC will be the first one to launch Diploma in Services Law at Lahore. ▪ Other programs such as Diploma in taxation, banking, labor, environmental, international trade law etc. will be launched at the later stage.
7	Brief Description of the Programme: <i>Diploma in Services Law is a program of total 140 contact hours. A total of four courses will be offered in a complete year. Two of them (35 contact hours each) will be taught in the first semester and remaining in the second semester. Names of the four courses are as follows:</i>

	<p>1. <i>Law on Appointment in Civil Services</i> 2. <i>Introduction to Legal issues in Civil services</i></p>															
	<p>3. <i>Remedies and General Law in Civil Services</i> 4. <i>Introduction to Criminal Laws in Civil Services</i></p>															
8	Duration: 1 Year															
9	Venue(s): On Site															
10	Programme Scheduling Format: Weekend Semester System (2 semesters for a complete cycle)															
11	Proposed Date of Commencement: Fall 2018															
12	Mode of Study/Examination: As per BU rules															
13	<p>Additional Faculty Member(s) Required: <i>Relevant Visiting Faculty (Law Experts) will be required</i></p> <p>Initially one VFM specialized & experienced in Law will be hired from the list below:</p> <table border="1"> <thead> <tr> <th>Sr.</th> <th>Resource Person</th> <th>Designation</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Sajjad Mahmood Butt</td> <td>Advocate Supreme Court, Chief Law Officer Lesco</td> </tr> <tr> <td>2.</td> <td>Yaseen Badar</td> <td>Advocate High Court & Deputy Dir Litigation Lesco</td> </tr> <tr> <td>3.</td> <td>Nasir Iqbal Siddiqui</td> <td>Advocate High Court</td> </tr> <tr> <td>4.</td> <td>Muhammad Asif</td> <td>Advocate High Court</td> </tr> </tbody> </table>	Sr.	Resource Person	Designation	1.	Sajjad Mahmood Butt	Advocate Supreme Court, Chief Law Officer Lesco	2.	Yaseen Badar	Advocate High Court & Deputy Dir Litigation Lesco	3.	Nasir Iqbal Siddiqui	Advocate High Court	4.	Muhammad Asif	Advocate High Court
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4.	Muhammad Asif	Advocate High Court														
14	Additional Skilled-Worker(s) Required: Nil															
15	Additional Classroom(s) required: Nil															
16	Additional Requirement for Laboratories: Nil															
17	<p>Additional Requirement for Books, Subscriptions, Memberships to Online Research Sites/ Repositories: Handouts will be provided by the resource persons. However ten copies of the book entitled 'Manual of Services Law' will be bought and placed in the library. Total cost will be approximately Rs. 10,000.</p>															
18	<p>Minimum Entry Level: Minimum 14 years of education from HEC recognized educational universities / institutes, candidates can be from any educational background</p>															
19	<p>Admission Criteria:</p> <ul style="list-style-type: none"> ▪ Min 50% marks or min 2.50 CGPA if degree obtained from a CGPA based system. ▪ Must pass Bahria University Admission Test. ▪ And / Or ▪ NTS-GAT Gen with 50 % marks obtained in less than two years prior to admissions. ▪ (policies of HEC shall apply as amended from time to time) 															
20	Additional/Different Examination Requirement As per BU exam policy															
21	Number of Admissions Expected for First Intake: 15 to 25 students															
22	Number of Admissions Planned/Expected for Subsequent Intakes: 10% increase every Fall semester															
23	Referred by FBOS: (FBOS conducted on 1 st March, 2018 - Item No 1740)															
24	<p>Complete Plan of Studies, inclusive of complete Roadmap: <i>Diploma in Services Law is a program of total 140 contact hours. A total of four courses will be offered in a complete year. Two of them (35 contact hours each) will be taught in the first semester and remaining in the second semester. Names of the four courses are as follows:</i></p> <ol style="list-style-type: none"> 1. <i>Law on Appointment in Civil Services</i> 2. <i>Introduction to Legal issues in Civil services</i> 3. <i>Remedies and General Law in Civil Services</i> 															

	4. Introduction to Criminal Laws in Civil Services
25	Course Outlines, Descriptions, Pre-Requisites & Readings: <i>A total of four courses will be offered in one year. Two courses will be offered in the first semester and remaining in the second semester. Brief Course Description of these four courses is attached at Flag A.</i>

B. FINANCIAL DETAILS

1	Source of Funding: BU (Fully)
2	Degree Duration: Annual or Semester System: 1 Year/Semester system/Semester: 2 Total Number of Credit Hours: 12
3	Expected fee to be charged based on Cost & Benefits Analysis: Expected fee to be charged for one year = $60000 * 20 = 1.2$ Million
4	Expected Number of students for 1st & 2nd Intakes: 20 in Fall and 15 in Spring semester
5	Expected Earning from first two Intakes (B5): 1.2 Million (for complete cycle)
6	Expected Earning for the Next Five Years (B6): 10% increase every fall semester
7	Total Estimated Salaries of all Additional Human Resources per annum (B7): One Year= $2200 * 140$ (contact hours) = 0.308 Million
8	Cost of Additional Laboratory Equipment/Tools (B8): Nil
9	Cost of Additional Classrooms (B9): Nil
10	Cost of Additional Books, Subscription & Memberships to on-line Sites/Repositories (B10): 10000
11	Off-Site rental Expenses and Cost of other Fixtures (B11): Nil
12	Miscellaneous Expenses required for Starting the Program (B12): <i>Existing classes in the campus are available for utilization. The program will be advertised in the existing advertisement budget. However, utility expenses for the first year will be as follows:</i> $15000 * 20$ (Students) *2 (Semesters)= 0.6 Million
13	Annual Recurring Expenditures in Subsequent Years (B13): $0.308 + 0.6 = .908$ Million
14	Total Cost of the Programme (B14): 0.918 Million
15	Net Cost of the Programme (B15): 0.918 Million
16	Net Earnings in First Year (B16): $1.2 - 0.918 = 0.282$ Million
17	Projected Annual Gross Earning in Subsequent Years (B 17): 1.2 million rupees per annum , will differ with intake
18	Projected Annual Net Earning in Subsequent Years: $1.2 - 0.918 = 0.282$ Million

DIPLOMA IN SERVICES LAW**COURSE 1****LAW ON APPOINTMENT IN CIVIL SERVICES**

- i. Definition of terms in civil services u/s 2 of CSA 1973 and u/s 2 of PCSA 1974.
- ii. Terms and Conditions of civil servant under Civil Servant Act (Federal & Provincial).
- iii. Civil Servants (appointments promotion and transfer) Rule 1973.
- iv. Punjab Civil Servant (Ratio of requirements rules) 1973.
- v. Initial appointment to civil posts (relaxation of upper age limit) rules 1993 & Punjab CS Recruitment Rule 1976.
- vi. Government Servant (application for service and posts) rules 1966.

COURSE 2
INTRODUCTION TO LEGAL ISSUES IN CIVIL SERVICES

i.**RECRUITMENT AND APPOINTMENTS**

Appointment/appointment letter(Charge report), Appointment Ban, Appointment Date, Appointment Extension, Appointment Female, Appointment Fresh, Illegal Appointment, Appointment Mode, Appointment Policy, Appointment Political, Appointment Regular / Regularisation ,Appointment Temporary, Appointment Tenure, Appointment Terms, Appointment Transfer, Appointment Vacancy, Ban on recruitment, Recruitment, Age limit / relaxation, Interview, Temporary Employee, Temporary Post, Deputation &Appointment u/s 10 CSA.1973, Contractual Appointment, Appointment quota of disable person, Tenure

ii.**LEAVE ISSUES:-**

Leave, leave due, Leave Earned, Leave Ex-Pakistan, Leave Extraordinary, Leave Forced, Leave Medical, Leave Vacancy, Absence, Seamans leave, Maternity leave.

iii.**ALLOWANCES & BENEFITS:-**

a. Allowances, Allowance hill, Allowance house rent, Allowance medical, Allowance Orderly, Allowance Secretariat, Allowance Special Judicial, Back Benefits, Advance Increment, Administration, Advertisement, Secretariat Allowance, Withdrawal Allowances, teaching Allowance.

iv.**ACR:-**

Accommodation, ACR, ACR Advance remarks ,ACR Average, Adverse remarks.

v.**PROMOTION & PROBATION:-**

a. Promotion, Promotion Acting Charge, Promotion Conformation, Promotion DPC, Promotion Policy, Promotion Officiating, Promotion Out-of-turn, Promotion Performa, Probation, Selection Boards, Selection Committee.

vi.**POST AND POSTING:-**

a. Post Abolition, Post Retrospective Creation, Post Foreign, Posting OSD, Post Regular/Ex-cadre, Post Temporary, Post Up gradation, Transfer, Posting.

vii.**PENSION:-**

a. Pension, Pension Army, Pension Benefit, Pension Disability, Pension Family.

viii.**PENALTIES:-**

a. Penalty, Penalty Forfeiture of Service, Penalty Nature, Penalty Minor, Penalty Quantum, Penalty Time, Penal Action, Anticipation.

ix.**CRIMINAL ISSUE & PUNISHMENT:-**

a. Fraud ,FIR ,Court, Defence ,Court Orders, Punishment Quantum, Double Jeopardy, Punishment (Jeopardy) Double, Punishment, Mens rea , Moral Turpitude,Conviction ,Cross Examination .

x.**CHARGE:-**

Charge Acting ,Charge Additional ,Charge Current ,Charge Same, charge replies.

xii. **Disciplinary issue:-**

a. Acquittal, Censure ,Co-accused- Fixing Responsibility, Coram non Judice ,Corruption, disciplinary proceeding, charge Sheet, Show cause, Inquiry officer, inquiry report, Minor penalty, Major Penalty.

xiii. **DEPARTMENTAL PROCEEDING & APPEAL:-**

- a. Departmental Appeal, Departmental Examination, Departmental Proceedings / Trial.
- b. Appeal, 1st Appeal, 2nd Appeal to services tribunal, Appeal addl Ground, Appellate Authority, Appeal Departmental, Appeal Leave to, Disciplinary Action, Hearing Personal.

xiv. **JURISDICTION & JUDGMENT:-**

a. Jurisdiction, Jurisdiction Courts, Jurisdiction LC / NIRC, Jurisdiction Ombudsman, Jurisdiction Proper Forum, Jurisdiction Tribunal, Judgment, Judgment Implementation, Obiter Dicta/ratio Decendi

xv. **LACHES & LIMITATION:-**

- a. Laches, Limitation
- b. **Orders:-**
- c. Orders, Orders Basic, Orders Final, Orders / Notification, Orders Oral, Orders Reason, Orders Second Orders Speaking, Orders Withdrawal.

xvi. **PAY:-**

Pay, Pay Fixation, Pay-Fixed, Pay / Allowances, Separate Structure, Pay Graded Pay Maximum, Pay of Post, Pay own scale, Pay Personal, Pay Protection, Pay Reduction Pay Scale Grade Change, Pay Special, pay contractual

xvii. **RETIREMENT:-**

Retirement, Retirement Authority, Retirement Benefit, Retirement Compulsory, Retirement Pre-Mature , Retirement Voluntary ,Retrenchment / Lay off.

xviii. **RIGHTS & RULES:-**

Right, Right Abandoned, Right Accrued, Right Fundamental, Right Legal / Statutory Right Valuable, Right Vested, Rules, fundamental &supplementary Rules, extra Code (Punjab & Federal), Rules definitions Interpretations, Rules Relaxation, Rules Retrospective, Rulemaking authority.

xix. **SALARY:-**

Salary Deduction, Salary Refund, Salary Stoppage.

xx. **SERVICE & SENIORITY:-**

- a. Selection, Selection Grade, Seniority, Service, Service Association / Trade Union ,Service Book, Service for Forfeiture ,Service of Pakistan ,Service Record.

xx. **WRITS:-**

Writ under Article 199 Constitution of Pakistan 1973,Writ Constitutional Jurisdiction, Writ of Mandamus, Writ of quo warranto

xxi. **GENERAL ISSUES:-**

Concurrent findings, Condonation delay, Contract, Date of Birth, Discrimination, Dismissal, Domicile, Duty of Administration, Locus Poenitenti ae, Locus Standi, L.P.R., Mala fides Malice ,Master -Servant, Medical Board, Medical Re-Imbursement ,Misconduct, Move over ,Notification, Negligence, O.S.D ,Pardon Past and Closed Transaction ,Policy, Political Pressure, Precedent ,Proceedings Disciplinary, Proceedings Summary, (Proceedings) Trial Criminal, Public Interest, Public Service Commission, PSC/DPC/Selection Committee Recommendations, Quasi-Judicial functions ,Quota ,Re-Employment, Regularization, Re-Instatement, Relaxation, Relief Equitable ,Relief / Injunction Intern ,Remand, Remedy, Removal from Service, Review, Review Judicial, Slavery, Show Cause, Superannuation, Supersession ,Surplus, Suspension, Tenure, Termination, Termination Retrospective ,Terms & Conditions, Time Barred, Trade Union, Training, Void Order, Withdrawal.

COURSE-3
Remedies And General Law in Civil services

Part-1: Introduction to remedies against legal issues in civil services

- i. Service Tribunal Act Federal and Provincial.
- ii. Services Tribunal Procedure Rule Provincial and Federal.
- iii. Constitutional remedies under article 202 read with 199(writ jurisdiction the constitution of Pakistan 1973).
- iv. Fundamental rights and principles of policies under part I and part II read with chapter 1,2 with article 1 to 40 the constitution of Pakistan 1973.
- v. Revised leave rules 1980
- vi. Civil servants confirmation rules 1993.
- vii. Civil servant Act 1973.
- viii. Federal and provincial ombudsman laws.
- ix. Departmental representation, appeal and review under civil servant act.
- x. Civil suits injunction and declaratory matters.

Part -2 Introduction & Relevant Provision of General Civil Services Laws.

- i. Services tribunal(qualification of the members federal and Provincial)
- ii. Esta Code & FR,SR.
- iii. Civil Servant Act (Federal & provincial).
- iv. Administrative laws (courts, tribunal)
- v. General Clauses Act 1956 & 1857
- vi. Civil Producer Code relevant provision to civil servants.
- vii. Constitution Of Pakistan 1973.
- viii. Limitation Act & Laches
- ix. Labour Laws & Courts
- x. A.D.R(Alternate Dispute Resolution)

COURSE 4
Introduction to Criminal Laws in Civil Services

- i. NAB ordinance 1999.
- ii. FIA Act & rules.
- iii. Anti-corruption Law & rules
- iv. PEEDA Act 2006.

- v. Punjab Anti -Corruption Establishment ordinance 1961
- vi. Removal from services Law
- vii. Punjab civil servants Efficiency & discipline Rules 1999.
- viii. Wafaqi Mohtasib /Ombudsman (investigation and disposal of Complaint) regulation 2003.
- ix. Complaint to Federal and Provincial wafaqi Mohtasib /Ombudsman against Civil servants & Institutions(male practice & administration).
- x. PP.C(Pakistan penal Code) & Crp.c(Criminal procedure Code)
- xi. Punjab Departmental Inquires Act 1958, punishments, representation, review. Appeal.
- xii. Criminal trial of Civil servants during service & its effects on conviction sentence & effects of punishment, acquittal from trial, suspension of sentence.
- xiii. Banking Criminal Act & Offences/Offences in respect of bank(special Court ordiance 1984
- xiv. Contempt of Court laws 2012 & Contempt Laws in High Court, Supreme Court & Tribunal Courts.
- xv. Protection Against harassment of women at the work place act 2010.

Appendage 3129

MBA Programme – Introduction of ‘Project Management’ as Specialisation

Background

In this globalized world, countries, and companies have moved to the fast track progression from functional orientation to projectized style. In Pakistan, where time is always a constraint, organizations have started multiple projects to achieve the desired goals.

At MS department, students who pursue MBA generally choose one among the following specializations.

1. Human Resource Management
2. Finance
3. Marketing

Looking at the success of MS (Project Management) and the availability of experienced faculty from the industry, project management can be offered as specialization to the postgraduate programs such as MBA and MS (MS) if approved. With the widespread job offerings under CPEC in future, students can find better opportunities in the project oriented market with an MBA degree at hand.

Roadmap of MS (Project Management) has already been approved from the ACM. Specialization courses have been selected from the roadmap (including core and electives) and proposed for specialization below.

Sr.	Course Code	Course Title	Credit Hours
1.	MSP 603	Project Human Resource & Communication Mgt.	3
2	MDP 604	Project Planning, Scheduling, and Time Mgt	3
3	MSP 605	Project Risk Mgt	3
4	MSP 606	Project Quality Mgt	3
5	MSP 631	PMO CBT (8 Weeks)	3
6	MSP 626	Project Supply Chain Mgt	3
7	MSP 623	NGO Mgt	3
8	MSP 636	Advanced Skills in Project Mgt Professionals (Class room based)	3

*Students will opt only 4 courses towards his/her major

HR Implications Nil

Financial Implications Nil

Recommendation

Project Management as specialization in MBA and MS (MS) programs is recommended for approval.

Appendage 3130

New Programme Proposal MS Management Sciences at BULC

Summary / Background

MS department is offering BBA, MBA, and MS (Project Management). Approval of launching PhD (Management Sciences) in Fall 18 is still awaited from HEC.

At present our most successful Program is MSPM 1.5 Yrs with increasing number of students over the years. However, strength of students in other programs is bare minimum. In order to increase the student body in MS Department, various new academic opportunities were deliberated.

For the purposeful running of PhD (Management Sciences) program, it is envisaged that MS (Management Sciences) program should be introduced that may enact as nursery for future PhD admissions. Although a total of 5 badges of MS (PM) have already been passed out yet only 10 per cent of the students pursue research based module and the majority choose project based module. This preference may be because of the project based nature of the program itself or the job which students are already doing. Contrarily, the students in MS (MS) program are more inclined towards research.

Except BBA, all other programs in the MS department are being offered on the weekend. In order to avoid cannibalization, MS (MS) will be offered as evening program. The duration of MS (MS) program in Universities located close to our vicinity is 2 YRS. In order to create differentiation, the duration of MS (MS) will be curtailed to 1.5 Years. If approved, project management and Entrepreneurship will also be offered as specialization.

HR Implications: 1 x Naib Qasid

PFMs from MS department and VFM from industry will be engaged in this program.

Financial Implications: 0.62 M profit

Discussion

HOD MS BULC recommended this program to be launched in Fall-18. Dean asked for the feasibility and outlines of the courses. HOD responded those are being worked out. The house was of the view that those should be tabled for discussion. HOD HSS BUKC highlighted that the same program has been approved for MS BUIC and BUKC, if there was no change in outline of the program, the same could be processed further. That would be easy to get it through in the ACM. The house agreed to that; HOD HSS BUKC shall provide necessary details to HOD MS BULC for the purpose.

Decision

HOD MS BULC shall prepare the case on similar lines as prepared earlier. The feasibility of the program shall be forwarded to Dean Management and SS by 6 March 2018. However, the point approved for ACM.

A. ACADEMIC DETAILS	
1	Faculty/Department: Department of Management Sciences
2	Name of the Programme: MS (Management Sciences)
3	Mission of the Programme: To produce graduates with managerial & research expertise
4	Objectives of the Programme: To enhance students' knowledge in the management specializations (HRM, Finance, Marketing) and develop research skills
5	<p>Outcomes of the Programme:</p> <ul style="list-style-type: none"> ▪ The program will equip students with the in depth knowledge of business theories, beliefs and values in various fields ▪ The students will be trained with independent research skills with the help of modern tools and softwares
6	<p>Rationale for the Programme:</p> <ul style="list-style-type: none"> ▪ At present our most successful Program is MSPM 1.5 Yrs with increasing number of students over the years. However, strength of students in other programs is bare minimum. In order to increase the student body in MS Department, various new academic opportunities were deliberated. ▪ MS (MS) program was selected especially with respect to its research oriented nature and enactment as nursery for PhD admissions in future (NOC for PhD in Management is awaited from HEC). ▪ Although our MSPM graduates are equally eligible to apply for PhD but there are a few challenges. It has been observed that 90 per cent of the MSPM students opt project module rather than research module. Those 10 per cent who opt research module, only one or two among them desire to pursue PhD.
7	<p>Brief Description of the Programme: MS (MS) is a 30 credit hours (18 months) program that develops students' knowledge and skills various management domains (HRM, Marketing, Finance). It aspires students to develop critical thinking capabilities and research skills.</p>
8	Duration: 1.5 Years
9	Venue(s): On Site
10	Programme Scheduling Format: Evening/Weekend Semester System (3 semesters for a complete cycle)
11	Proposed Date of Commencement: Fall 2018
12	Mode of Study/Examination: As per BU rules
13	Additional Faculty Member(s) Required: <i>Visiting Faculty members from industry (MS/Mphil/MBA) and academia (PhD/Ms/Mphil/MBA)</i>
14	Additional Skilled-Worker(s) Required: 1 Naib Qasid
15	Additional Classroom(s) required: Nil
16	Additional Requirement for Laboratories: Nil
17	Additional Requirement for Books, Subscriptions, Memberships to Online Research Sites/ Repositories: Nil
18	<p>Minimum Entry Level:</p> <ul style="list-style-type: none"> ▪ 16 years of relevant education from HEC recognized educational universities/HEIs ▪ Candidates with any Business/Management Sciences/Commerce background
19	<p>Admission Criteria:</p> <ul style="list-style-type: none"> ▪ CGPA 2.50 or above in the final degree, on hand, if degree obtained from a CGPA based system.

- Minimum 50% marks if degree obtained from a non-CGPA program.
- Must pass Bahria University Admission Test.

And / Or

- NTS-GAT Gen with 50 % marks obtained in less than two years prior to admission

(policies of HEC shall apply as amended from time to time)

20	Additional/Different Examination Requirement <i>As per BU exam policy</i>
21	Number of Admissions Expected for First Intake: <i>10 to 15 students</i>
22	Number of Admissions Planned/Expected for Subsequent Intakes: <i>10% increase every Fall semester</i>
23	Referred by FBOS: <i>(FBOS conducted on 1st March, 2018 - Item No 1723)</i>
24	Complete Plan of Studies, inclusive of complete Roadmap: <i>BULC will follow the approved roadmap of MS (MS) being run at BUIC and BUKC</i>
25	Course Outlines, Descriptions, Pre-Requisites & Readings <i>The course titles and codes will be the same as being offered in BUIC and BUKC. MS departments in other two campuses will be requested to share course outlines as reference. Changes/improvements will be incorporated.</i>

B. FINANCIAL DETAILS

1	Source of Funding: <i>BU (Fully)</i>
2	Degree Duration: Annual or Semester System: <i>1.5 Years/Semester system/Semester: 3</i>
3	Total Number of Credit Hours: <i>33</i>
4	Expected fee to be charged based on Cost & Benefits Analysis: <i>Expected fee to be charged for one complete cycle: 3.84 Million</i>
5	Expected Earning from first two Intakes (B5): <i>3.84 Million (for complete cycle)</i>
6	Expected Earning for the Next Five Years (B6): <i>10% increase every fall semester</i>
7	Total Estimated Salaries of all Additional Human Resources per annum (B7): <i>2.45 Million (for Faculty) + 0.31 (Naib Qasid) = 2.76</i>
8	Cost of Additional Laboratory Equipment/Tools (B8): <i>Nil</i>
9	Cost of Additional Classrooms (B9): <i>Nil</i>
10	Cost of Additional Books, Subscription & Memberships to on-line Sites/Repositories (B10): <i>Nil</i>
11	Off-Site rental Expenses and Cost of other Fixtures (B11): <i>Nil</i>
12	Miscellaneous Expenses required for Starting the Program (B12): <i>Utility expense: 15000*3*15=0.675; Program will be advertised in the existing budget</i>
13	Annual Recurring Expenditures in Subsequent Years (B13): <i>Recurring Expense (Every Cycle): 2.45+.31+.675=3.44</i>
14	Total Cost of the Programme (B14): <i>3.44 Million</i>
15	Net Cost of the Programme (B15): <i>3.44 Million</i>
16	Net Earnings in First Year (B16): <i>3.84-3.44= 0.40 Million</i>
17	Projected Annual Gross Earning in Subsequent Years (B 17): <i>3.8 Million</i>
18	Projected Annual Net Earning in Subsequent Years: <i>0.4 Million</i>

Appendage 3131**Trimester MBA Programmes at BUKC – Conversation to Bi-Semester****Background/Discussion**

A letter on the subject from HEC has been received. According to the letter HEC has taken a serious note of the universities offering programs in all the three semesters and directed to such universities to stop such programs.

As a HEC compliant university, we need to enforce semester system (bi-annual) in weekend program. For the purpose, the weekend program running as trimester should be converted into bi-annual at BUKC. Accordingly, our weekend program needs to be designed to spread over three days (Friday, Saturday and Sunday) with five courses in each semester instead of two days (Saturday & Sunday having four courses/semester) and will be offered in Spring and Fall only and there will be no offering in spring. Revised roadmap is attached for ready reference (Annexure 1).

Recommendations:

It is submitted that the trimester may be allowed to convert and offer into semester system (Bi-annual) instead of Trimester from Fall 2018.

MBA 1.5**Semester-1:**

S.NO	Course Code	Subject	CH
1	MGT 662	Strategic Management	3
2	FIN 611	Corporate Finance	3
3	MKT 600	Contemporary Issues in Business	3
4	MKT 653	Corporate Leadership and Social Responsibility	3
5		Specialization I	3

Semester-2:

S.NO	Course Code	Subject	CH
1	MGT 626	Project Management	3
2		Specialization II	3
3		Specialization III	3
4	MGT 655	Business Decision Modeling	3
5	RMT 697	Dissertation (Proposal Development)	2
		Internship	

Semester-3:

S.NO	Course Code	Subject	CH
1	RMT 698	Dissertation (Thesis Write-up and Defense)	4
2		Specialization IV	3

MBA-2 Years (60 Credit Hours)**Semester-1:**

S.NO	Course Code	Subject	CH
1	MKT 522	Marketing Management	3
2	ACC 501	Financial Accounting	3
3	MGT 501	Theories and Practices of Management	3
4	BCM 512	Business Communication	3
5	QTM 503	Stats & Math For Management	3

Semester-2:

S.NO	Course Code	Subject	CH
1	MGT 541	Human Resource Management	3
2	ACC 503	Cost and Managerial Accounting	3
3	ECO 520	Economics	3
4	FIN 502	Financial Management	3
5	MIS 510	E-Commerce	1.5
6	SCM 510	Supply Chain Management	1.5

Semester-3:

S.NO	Course Code	Subject	CH
1	MGT 662	Strategic Management	3
2	RMT 620	Methods in Business Research	3
3	SDW 696	Dissertation-1(Proposal Development)	3
4		Specialization I	3
5		Specialization II	3

Semester-4:

S.NO	Course Code	Subject	CH
1	MGT 531	Project Management	1.5
2	MGT 532	Corporate Leadership and Social Responsibility	1.5
3		Specialization III	3
4		Specialization IV	3
5		Entrepreneurship	3
6	SDW 698	Dissertation (Thesis Composition)	3

60

MBA-3.5 Years (96 Credit Hours):**Semester-1:**

S.NO	Course Code	Subject	CH
1	ACC 501	Financial Accounting	3
2	BEN 511	Business English	3
3	MGT 50	Theories and Practices of Management	3
4	MKT 510	Principles of Marketing	3
5	QTM 501	Business Quantitative Techniques	3

Semester-2:

S.NO	Course Code	Subject	CH
1	BCM 512	Business Communication	3
2	ACC 503	Cost and Managerial Accounting	3
3	ECO 520	Economics	3

4	MKT 522	Marketing Management	3
5	FIN 501	Business Finance	3

Semester-3:

1.	Course Code	Subject	CH
2.	FIN 502	Financial Management	3
3.	MGT 530	Organizational Behavior	3
4.	SCM 610	Supply Chain Management	3
5.	MGT 508	Corporate Law	3
6.	QTM 502	Statistical Inference	3

Semester-4:

S.NO	Course Code	Subject	CH
1	MKT 640	Entrepreneurship	3
2	MGT 541	Human Resource Management	3
3	MGT 630	International Business Analysis	3
4	RMT 620	Methods in Business Research	3
5	RMT 621	Operations Research	3

Semester-5:

S.NO	Course Code	Subject	CH
1	MGT 662	Strategic management	3
2	FIN 611	Corporate Finance	3
3	MGT 600	Contemporary Issues in Business	3
4	MGT 653	Corporate Leadership and Social Responsibilities	3
		Specialization I	3

Semester-6:

S.NO	Course Code	Subject	CH
1	MGT 626	Project Management	3
2		Specialization II	3
3		Specialization III	3
4	MGT 655	Business Decision Modeling	3
5	RMT 697	Dissertation (Proposal Development)	2
		Internship	

Semester-7:

S.NO	Course Code	Subject	CH
1		Specialization IV	3
2	RMT 698	Dissertation (Thesis Write-up and Defense)	4

Appendage 3132

Duration of Final Exam for Engineering & Computer Sciences Departments – Undergrad Programs

1. Background

In Engineering Sciences (Engineering & Computer Sciences), the weightage of midterm exam is 20% and final exam is 50% while the durations are 1.5 hours and 2 hours respectively. In final exam, merely half an hour is provided to students for 30 marks extra paper as compared to midterm.

This segregation is irrational and faculty & students most of the time cannot include / attempt the full paper due to shortage of time. The faculty has to set lengthy paper of 50 marks due to unbalanced marks division or time distribution.

The distribution and duration of the exams is key aspect for academic evaluation of the program. This is further emphasized in the Outcome Based Education (OBE) that has been adopted by BU – Engineering Programs.

2. Recommendation

The duration of undergrad final exams in the engineering & computer sciences departments (BS-CS, BS-IT, BCE, BEE, BSE) may be changed to 2.5 hours (150 minutes) w.e.f. Fall'2018.

The FBoS of Engineering Sciences unanimously recommended the agenda item.

- | | |
|---|------------------|
| 3. Establishments/HR Effect if any | NIL. |
| 4. Financial Effect | May apply |

Appendage 3133

Title: Increase in the Visiting Courses for Permanent Faculty Members for Weekend programs

Discussion:

BUIC is offering SEVEN MS programs on weekend.

HR Implications:

Nil

Financial Implications:

Nil

Recommendations:

MS Faculty be allowed to teach 2nd Visiting course on payment for ONLY Weekend programs

Appendage 3134

Title: Revision of N-1 Policy for Payment of MBA Thesis / Projects Honorarium to the Supervisors

Discussion:

MBA students are required to undertake Project / Thesis in their last semester, which are supervised by the permanent and visiting faculty members. As per existing policy (policy of N-1) of the university, approved vide 23rd ACM, Faculty members are not paid honorarium for their First MBA Thesis/Project supervision and honorarium is paid for supervising each thesis thereafter. This practice is discouraging faculty members to supervise the MBA theses/projects, as according to the existing rules, if any faculty member supervises only one Thesis/project, he is not paid for that thesis/project. It is pertinent to mention here that in other departments of the University; honoraria are paid to the Faculty members for each thesis supervised @ BU approved rates. In the MS department, Faculty members supervising the MS students are also paid for all the theses supervised during the semester.

Keeping in view the practices of other departments of the university, it is proposed that the honorarium may be paid to the Faculty Members for supervision of all the theses/projects w.e.f. Spring-2018 Semester.

HR Implications:

Nil

Financial Implications:

Rs. 800,000/ per annum additional BU expenditure

Recommendations:

Revision of N-1 Policy for Payment of MBA Thesis / Projects Honorarium to the Supervisors

Appendage 3135

Plugging the Roadmaps Gap for Students Repeating Courses – Comparative Equivalence of Existing or Substitute Courses

Background

Students who fail or drop courses in past or join after unfreezing the semester are facing difficulty in choosing the subjects because of the revisions in roadmap. Therefore, department may have some substitute and equivalent courses for such students. This will facilitate the departments in offering courses as substitute to the courses which have been eliminated/replaced in earlier revised roadmap. Such courses were identified in 2012 through 18th ACM held on May 23 & 24. Now after a gap of about five years, there is an emergent need to further identify substitute/equivalent courses to facilitate the department and students. Some substitute/equivalent courses are suggested in **annexure**.

Financial Implications: Nil

HR Implications: Nil

Discussion

Sponsors of the point explained the difficulty, the department faces when students of old semesters come for assistance. Dean M&SS & SS agreed to the existence of problem and asked comments from the campuses to help reach a solution. Different options like alternative instead of substitute came about. The house suggested that efforts should be made to offer the courses which are as much closer to the previous courses as substitute/alternatives.

Recommendations:

Hence, it is recommended that the agenda item may be discussed and approved by the worthy house.

Annexure

EQUIVALENCE COURSES (3 CR each)

ROADMAP BEFORE FALL 2016	ROADMAP EFFECTIVE FALL 2016	Equivalent/ Substitute
English-1	Functional English	Equivalent
Business Maths -II	Business Mathematics II / Numeracy Skills	Equivalent
Islamic Studies	Islamic Socio-Economic Studies	Equivalent
English - II	English Writing Skills	Equivalent
Introduction to Sociology	Sociology	Equivalent
Oral Communication	Oral Communication (Public Speaking)	Equivalent
Statistical Inference	Statistical Inference and Quantitative Research	Equivalent

Psychology	Social and Psychological Development	Equivalent
Development Economics	Theories of Globalization	Substitute
Theories of Personalities	Self Management	Equivalent
Personal & Professional Development	Corporate skills	Equivalent
Negotiation & Conflict Management	Analysis of Pakistan Industries	Substitute
Entrepreneurial Finance	Corporate Finance	Substitute
People & Organization	Business Decision Modelling	Substitute
Leadership	Corporate Leadership & Social Responsibilities	Equivalent

Appendage 3136

MBA Programme - Students Earning ‘C’ Grade in Thesis may Repeat the Thesis

Summary/Background

Securing lower grades like ‘D’ or ‘C’ in MBA thesis, in fact, decreases over all CGPA even of a student who secures As and Bs in other subjects. In case of failure or low grades in course work/subject, students get chance to repeat/improve their grades. The same opportunity may be allowed to thesis receiving low graders also to improve student/s’ CGPA. Permission to repeat the low graders in thesis may also decrease the dropout rate.

Financial Implications: Nil

HR Implications: Nil

Discussion

The point was discussed in combined meeting of FBOS of all campuses of Bahria University. The input was obtained from all the campuses. Dean remarked that the case to be seen in the light of MBA Thesis Rules. There was a consensus that the point may be taken to the ACM for its approval.

Recommendations:

Hence, it is recommended that the agenda item may be approved by the worthy house.

Appendage 3137

Common Examination Paper for Multiple Sections taught by Different Teachers – Rule be Reviewed

The single examination paper system was introduced to standardize the course outlines, teaching and evaluations of the same courses being taught by multiple teachers in different sections. However, in practice this system for last two years has revealed that the examination papers which are finalized by the consensus of the teachers of a subject ends up at the minimum rigor required for the course. In this scenario, the teachers who are teaching complete course outlines and wanted to take the students at higher level of subjects' understanding are compromising with the lower contributors in question setting. Hence, there is a need to revisit the single paper practice and find some other alternatives of single paper in order to ensure the standards of teaching and examining the students.

Discussion

The point was discussed in combined meeting of FBOS of all campuses of Bahria University. The input was obtained from all the campuses. Dean M&SS&SS constituted a committee as under to work further and submit the report to Dean.

Dr. Mustaghis-Ur-Rehman, BUKC
Dr. Azhar Ahmad, BUIC
Dr. Ali Saeed, BUIC
Dr. Muhammad Ahmed, BULC
Dr. Bashir Ahmad, BUKC

The committee discussed the point and recommended the following:

- a. Single paper should be revisited and modified the system to make it more effective
- b. Each faculty teaching the same course will be submitting their individual paper and from these papers, one question paper will be submitted to the examination department by the HOD in consultation with the cluster head concerned
- c. Paper should be moderated inter – campuses

Recommendation:

In the light of the above house may discuss the point and decide.

Appendage 3138

Business School at BUKC – Creation from Existing MS Dept

Background

Presently the departments of management sciences at BU have become as big as a moderate size of universities by itself. For example, BUIC and BUKC is having 3000 and 2600 students respectively. Lahore campus' management department is a new start up and it is in its establishment phase. Despite this big number, opportunity of further expansion exists for all the three MS department of BU, provided, it further diversify its offerings in relevant and allied field of study. The size of the department demands set up of business school in each campus of BU as lately departments are taken as subject wise units instead of second tier faculty units in a university. Examples, in this reference are numerous. However, the case of IBA at its time of inception, LUMS (SDBS), CBM at IoBM, KUBS at KU and KSBL are important to mention here. Besides, NBEAC is also using regularly the term "Business School" instead of Department of Management Sciences". BU strategic plan Basically, a business school may offer programs in various allied subjects, such as accounting, administration, strategy, economics, entrepreneurship, finance, human resource management, management science, management information systems, international business, logistics, marketing, organizational psychology, organizational behavior, public relations, research methods and real estate among others with greater administrative and financial autonomy.

Besides, in this competitive academic world, school's concept is much attractive and suitable for further expansion and development of universities.

Establishment of Business School is also a provision in BU Strategic Plan under its Goal 1, Objective 4, Action 3 till the year 2020. However, till this date, any formal step has not been taken so far at the BU level.

Financial Implications: Once approved the concept of business school, financial estimation can be submitted.

HR Implications: New hiring at the faculty and administrative levels will be the requirements.

Discussion

HOD MS BUKC highlighted the point. MS BUIC explained its history when it was brought under discussion previously as well. There was a consensus that the point should be taken to the ACM for the approval of concept constituting committee to make a feasibility report for the BU Business School's proposal in all the three campuses.

Recommendation

Hence, it is recommended that the agenda item may be discussed and approved by the worthy house.

Appendage 3139

Implementation of the “Pakistan Bar Council Legal Education Rules, 2015” as Amended

Department of Law BUIC always emphasized the strict compliance of the Pakistan Bar Council Legal Education Rules 2015 (the “Rules”) in the true letter and spirit since the inception of the Department. The Rules are collectively applicable on the Universities imparting legal education and/or their affiliated law colleges, if any, and the external degree programs. Therefore, the consolidated set of Rules and amendments jointly applicable and deal with all prevailing LLB and LLM level programs.

The amended provisions, *inter alia*, encompass the following main areas;

- a) Admission to LLB class (Rule 4)
- b) Number of Students in a Class (Rule 5)
- c) Library (Rule 8)
- d) Timings and Days of Classes (Rule 10)
- e) Examinations (Rule 12)
- f) Legal Education at the Level of LLM (Rule 13)
- g) Faculty Members (Rule 13-A)
- h) Recognition of Universities and Degree awarding institutions (Rule 15-16)
- i) Derecognition of Universities/Degree awarding institutions
- j) Affiliation of Law colleges (Building and allied facilities) (Rule 25)
- k) Nominee on Governing Body (Rule 33)
- l) Conduct of International/External/Distance Learning Programs of Foreign Universities (Rule 39)

Amendments:

There are total 13 above mentioned amendments made in the Rules. A detailed overview of the amended/revised provisions is made and the following points are discernible.

(Amendments are indicated in *Italic*)

Amendment No. 1

Admission to LLB class (Rule 4).

The Rule 04 has been amended and renumbered.

4 [(v)] The University or the law college will furnish complete list of students admitted to LL.B. programme, to the Pakistan Bar Council within one month of admission with necessary particulars of each student for registration with the Pakistan Bar Council alongwith registration fee of each student @ Rs. 1000/-”.

Implication on BU:

At the time of the admission of the students in Fall and Spring Semester 2018-19 the necessary particulars of each student for registration with the Pakistan Bar Council along with registration fee of each student @ Rs. 1000/-" will be submitted.

Amendment No.2

Number of Students in a Class (Rule 5)

The Rule 5 is amended which reads as follows;

(i) A Section of a Class in a Faculty of Law/Law Department/ Law College shall not be of more than [50] students.

(ii) The total number of students admitted in 1st year LL.B. in any case shall not accede 100. However, in special circumstances, the Committee in case of main campus of a University, may allow admission of students to 1st year LL.B. not acceding 150 keeping in view infrastructure and facilities available in main campus of the concerned University.]

Implication on BU:

The section of the class is increased from 35 to 50. BU is already in compliance with the subject clause. However, the amendment is flexible in terms of increasing the total No. of students from 100 to 150 in the first year of LLB keeping in view the infrastructure and facilities available. Therefore, keeping in mind the total no. of applicant each semester BU may consider increasing the sections from Fall 2018.

Amendment No. 3

Library (Rule 8)

BU is already in compliance with the subject amendment.

Amendment No. 4

Timings and Days of Classes (Rule 10)

BU is already in compliance with the subject amendment.

Amendment No. 5

Examinations (Rule 12)

BU is already in compliance with the subject amendment.

Amendment No. 6

Legal Education at the Level of LLM (Rule 13)

Rule 13 inter alia provides

The duration of LL.M. programme shall be of 2 years and no University/Degree Awarding Institution shall admit more than 20 students for LL.M. programme in an academic year and will furnish complete list of students so admitted to the Pakistan Bar Council within one month of admission with necessary particulars of each student for registration with the Pakistan Bar Council alongwith registration fee of each student @ Rs. 2000/-]

Implication on BU:

The amendment has improved the provision and made it flexible by deleting the para pertaining to the authority of PBC for the Accreditation of the PhD.

BU is already in compliance with respect to number of students. The duration of LL.M. programme is also 2 years. However, the BU is required to comply in respect of furnishing the complete list of students so admitted to PBC within one month of admission with necessary particulars for registration with PBC. Registration fee will be charged for each student @ Rs. 2000/- from Fall-Spring 2018-19.

Amendment No. 7

Faculty Members (Rule 13-A)

Implication on BU

BU is already in full compliance with the subject addition in the Rules

Amendment No.8

Recognition of Universities and Degree Awarding Institutions (Rule 15)

Not Applicable

Amendment No. 9

Recognition of Universities and Degree Awarding Institutions (Rule 16)

Not Applicable.

Amendment No. 10

Derecognition of Universities/Degree Awarding Institutions (Rule 21)

The word “inspection” is deleted in the subject amendment.

Amendment No. 11

Affiliation of Law Colleges (Building and allied facilities) (Rule 25)

Not Applicable.

Amendment No. 12

Nominee on Governing Body (Rule 33)

Not Applicable.

Amendment No. 13

Conduct of International/External/Distance Learning Programs of Foreign Universities (Rule 39)

Not Applicable.

Appendage 3140**List of Electives****BBA/MBA**

- a) MKT 696 Strategic Brand Management
- b) MKT 697 International Retailing and Franchising
- c) MKT 698 Management of Multinational Corporations
- d) HRM 693 Corporate Governance
- e) HRM 694 Leadership and Team Dynamics
- f) HRM 695 Business Policy and Strategic Management
- g) ENT 620 Change and Innovation Management
- h) ENT 621 Management of Family Businesses
- i) HRM 696 Cross cultural issues in Business

MS(PM)

- a) MSPM 629 Entrepreneurship
- b) MKT 696 Strategic Brand Management

Course outlines**COURSE INFORMATON**

Course Title	<i>Code</i>	<i>Semester</i>	<i>Cr Hr</i>
Strategic Brand Management	MKT 696	Fall/Spring	3+0

Prerequisites

Language of Instruction	English
Course Type	Elective
Course Coordinator	
Instructors	
Assistants	
Goals	The objective of this course is to present theory and practice in brand management from a strategic viewpoint.

Content	Basic concepts and definitions in brands and brand management; brand equity concept; brand positioning; choosing brand elements to build brand equity; designing marketing programs to build brand equity; integrating marketing communications to build brand equity; brand
Learning Outcomes	
	Defines basic concepts in brand management.
	Identifies branding activities that need to be performed during the market entry phase of a product.
	Develops applications in the brand positioning process.
	Identifies brand elements to create brand equity.
	Defines criteria used in measuring brand equity.

Teaching Methods

1: Lecture, 2: Question-Answer, 3: Discussion, 4: Exercise and Practice, 5: Demonstration, 6: Guided Application, 7: Role Playing, 8: Work Group, 9: Simulation, 10: Brain Storming, 11: Six Thinking Hats, 12: Case Study, 13: Laboratory/Workshop/Field Application, 14: Self Study, 15: Problem Solving, 16: Project-Based Learning

COURSE CONTENT		
Week	Topics	Study Materials
1	Overview of brand management	Text Book
2	Should you brand?	Text Book
3	Measuring brand equity	Text Book
4	Brand identity decoding & revitalization	Text Book
5	Building and borrowing brand identity	Text Book
6	Global brand expansion	Text Book
7	MIDTERM EXAM	Text Book
8	Brand extensions	Text Book
9	Product portfolio & merchandising	Text Book
10	Brand Licensing	Text Book
11	Branding strategies for low-income consumers	Text Book

12	Group presentations	Text Book
13	Group presentations	Text Book
14	FINAL EXAM	Text Book

RECOMMENDED SOURCES

Textbook	Strategic Brand Management (3rd Edition), Kevin Lane Keller, Prentice Hall, 2007
Additional Resources	

COURSE'S CONTRIBUTION TO PROGRAM

No	Program Learning Outcomes	Contribution				
		1	2	3	4	5

1	Interprets his/her world, country, society and himself/herself; demonstrates awareness of the ethical issues, social rights, values and responsibilities towards others and self.					
2	Makes use of not only his/her own discipline but related fields as well; develops an interdisciplinary approach and practice.					
3	Evaluates the developments and trends in science and technology; shows personal and institutional					
4	Communicates his/her opinions effectively using oral, written, graphic and technological means; fluently explains his/her perspective in English.					
5	Assumes responsibility in individual and collective settings; solves problems both as an individual and a member or leader of a team.					
6	Outlines the major global actors, conditions and dynamics in the globalized world and international milieu.		X			
7	Makes use of methods and tools required to effectively collect and analyze data.			X		
8	Adapts himself/herself to complex and ever-changing conditions in a global world.				X	
9	Relates the national and international legal framework that regulates the national and international activities in the field to					

10	Evaluates the essential body of knowledge in the management discipline (functions of management, organization theory, policy and strategy, information technology and operations management, human resource management, accounting, finance, marketing, economics, and a systems approach).	X
11	Analyzes the organizational environment, defines business processes, and identifies relationships among system	X
12	Conceptualizes and formulates innovative solutions to business problems.	X
13	Applies current management theories, and identifies and makes use of the appropriate management tools and techniques for developing business strategies and making	X
14	Makes use of common computer technologies employed in business management.	

COURSE INFORMATION

Course Title	Code	Semester	Cr Hr
International Retailing and	MKT	Fall/Spring	3 + 0

Prerequisites

Language of Instruction	English
Course Type	Elective
Course Coordinator	
Instructors	
Assistants	
Goals	The aim of this course is to help students grasp the process of internationalization of retailing and provide them a viewpoint about the opportunities and threats sounding retailing and franchising businesses. It is expected that, at the end of the course, students will be

Content	Internationalization process of retailing, opportunities and threats in international retailing, entry modes and strategies of foreign international retailers, franchising and its effects on the development of retail business, franchisor-franchisee relationships, franchising types, merchandising, communications, pricing and location issues in retailing and franchising.
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Learning Outcomes

Defines main retailing operations and the factors that increase international retailing.

Explains international retailing strategies and foreign market entry methods.

Chooses suitable locations for international retailing and franchising operations.

Adapts the local retailing and franchising marketing mix to international markets.

Teaching Methods:

1: Lecture, 2: Question-Answer, 3: Discussion, 4: Exercise and Practice, 5: Demonstration, 6: Guided Application, 7: Role Playing, 8: Work Group, 9: Simulation, 10: Brain Storming, 11: Six Thinking Hats, 12: Case Study, 13:

Laboratory/Workshop/Field Application, 14: Self Study, 15: Problem

Assessment Methods: A: Testing, B: Oral Exam, C: Homework, D: Project/Design, E: Portfolio, F: Performance Task

COURSE CONTENT

Week Topics	Study Materials
1 Introduction to International Retailing	
2 Retail Internationalization: Evolution of Theory and	
3 Internationalization: Interpreting the Movies	
4 International Sourcing: Patterns and Trends	

5	<i>The Legislatives Environment as a Measure of Attractiveness for Internationalization</i>	
6	<i>International Market Appraisal and Positioning</i>	
7	Market Innovation and Internationalization	
8	Midterm	
9	Direct Franchising	
10	Development Agreements	
11	Master Franchise Agreements	
12	Negotiating the International Master Franchise	
13	Other Forms of International Franchise Agreements	
14	International Joint Venture Arrangements	

RECOMMENDED SOURCES	
Textbook	Sternquist, B. (2007) International Retailing, 2 nd edition, Fairchild Publications.
Additional	

COURSE'S CONTRIBUTION TO PROGRAM					
No	Program Learning Outcomes	Contribution			
		1	2	3	4
1	Defines and applies the essential body of knowledge in the international trade discipline (economic theories and applications, international business, international law, etc.) including, business administration, and international logistics management.				x
2	Develops effective international trade strategies, designs measures to support the corporate mission and business				x
3	Identifies the uncertainties and risks in international trade and designs measures to mitigate these risks.				
4	Evaluates critically the empirical applications of international trade and identifies and analyses the problems in international trade.				

5	Finds solutions to international trade problems to develop business performance.	x
6	Outlines the major global actors, conditions and dynamics in the globalized world and international environment.	
7	Relates the national and international legal framework that regulates the national and international activities in the field	x
8	Makes use of methods and tools required to effectively collect and analyze data in his/her area.	
9	Assumes responsibility in individual and collective settings; solves problems both as an individual and a member or leader	x
10	Uses common computer technologies employed in international	
11	Adapts himself/herself to complex and ever-changing conditions in a global	x
12	Makes use of not only his/her own discipline but related fields as well; develops an interdisciplinary approach and practice.	x
13	Interprets his/her world, country, society and himself/herself; demonstrates awareness of the ethical issues, social rights,	
14	Evaluates the developments and trends in science and technology; shows personal and institutional entrepreneurship	
15	Communicates his/her opinions effectively using oral, written, graphic and technological means; fluently explains his/her perspective in English.	x

COURSE INFORMATION

Course Title	Code	Semester	Cr Hr	
Management of Multinational Corporations	MKT 698	Fall/Spring	3+0	

Language of Instruction	English
Course Type	Elective
Course Coordinator	
Instructors	
Assistants	

Goals	The primary aim of this course is to inform students about the organization structures and management practices in international firms. Another aim is to create awareness about what disparities cultural differences create, particularly in the management of multinational corporations.
Content	Organizational and individual behaviors, structures and management practices in multinationals and in business situations involving cross cultural interaction, management of cultural differences, theories that relate culture to behavior in management, organizational design, negotiation processes, and communications in cross-cultural management.

Learning Outcomes

Explains the organizational structures of international firms and compares them with those of domestic firms.

Defines the different concepts regarding the management of multinationals.

Analyzes the effects of culture and cultural differences on environmental analysis, strategy formulation, strategic decision making and strategy implementation in international firms and particularly in multinational corporations.

Interprets the impacts of culture and cultural differences on communication and negotiation processes.

Teaching

Methods:

1: Lecture, 2: Question-Answer, 3: Discussion, 4: Exercises and Applications, 5: Demonstration, 6: Guided Application, 7: Role Playing, 8: Work Group, 9: Simulation, 10: Brain Storming, 11: Six Thinking Hats, 12: Case Study, 13: Laboratory/Workshop/Field Application, 14: Self Study, 15: Problem Solving, 16: Project-based Learning

Assessment

Methods:

A: Testing, B: Oral Exam, C: Homework, D: Project/Design, E: Portfolio, F: Performance Task

COURSE CONTENT

Week	Topics	Study Materials
1	Multinational Management in a Changing World	
2	Culture and Multinational Management	
3	The Institutional Context of Multinational Management	
4	Managing Ethics and Social Responsibility Challenges in Multinational	
5	Strategic Management in the Multinational Companies	
6	Multinational and Participation Strategies: Content and	
7	Small Business and International Entrepreneurship	
8	Mid-Term	
9	Organizational Design	
10	International Strategic Alliances	
11	Multinational E-Commerce	
12	International Human Resource Management	
13	Motivation in Multinational Companies	
14	Leadership and Management Behaviors in Multinational	

RECOMMENDED SOURCES

Textbook	Cullen, J. B., and Parboteeah, K. P. (2011). <i>Multinational Management</i> (5 th Edition). Florence, KY: Cengage.
Additional	

COURSE'S CONTRIBUTION TO PROGRAM						
No	Program Learning Outcomes	Contribution				
		1	2	3	4	5
1	Defines and applies the essential body of knowledge in the international trade discipline (economic theories and applications, international business, international law, etc.) including, business administration, and international logistics management.			x		
2	Develops effective international trade strategies, designs measures to support the corporate mission and business objectives.		x			
3	Identifies the uncertainties and risks in international trade and designs measures to mitigate these risks.			x		
4	Evaluates critically the empirical applications of international trade and identifies and analyses the problems in international trade.					
5	Finds solutions to international trade problems to develop business performance.					
6	Outlines the major global actors, conditions and dynamics in the globalized world and international environment.	x				
7	Relates the national and international legal framework that regulates the national and international activities in the field to his/her work in the field.					
8	Makes use of methods and tools required to effectively collect and analyze data in his/her area.					
9	Assumes responsibility in individual and collective settings; solves problems both as an individual and a member or leader of a team.	x				
10	Uses common computer technologies employed in international					
11	Adapts himself/herself to complex and ever-changing conditions in a global	x				
12	Makes use of not only his/her own discipline but related fields as well; develops an interdisciplinary approach and practice.					
13	Interprets his/her world, country, society and himself/herself; demonstrates awareness of the ethical issues, social rights, values and responsibilities towards others and self.					
14	Evaluates the developments and trends in science and technology; shows personal and institutional entrepreneurship					

15	Communicates his/her opinions effectively using oral, written, graphic and technological means; fluently explains his/her perspective in English.	x				
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COURSE INFORMATION

Course Title	Code	Semester	Cr Hr
Corporate Governance	HRM 693	Fall/Spring	3+0

Prerequisites

Language of Instruction	English
Course Type	Elective
Course Coordinator	
Instructors	
Assistants	
Goals	The goals of this course are to discuss various dimensions of business- society relationships and to draw attention to corporate governance issues and dimensions such as transparency, objectivity, and professionalism.
Content	Corporation and corporate governance; roles, rights and responsibilities of owners, board of directors, managers and employees; relationship of ethics and management; honesty, transparency and professionalism in management; international corporate governance; practices in Turkey and around the world.

Learning Outcomes

Defines various types of relationships among business and other parts of society.

Will be able to predict possible outcomes of managerial decisions.

Explains concepts of rights, duties, and responsibilities.

Develops appreciation for concepts of honesty, integrity, and transparency.

Teaching Methods:	1: Lecture, 2: Question-Answer, 3: Discussion, 4: Exercise and Practice, 5: Demonstration, 6: Guided Application, 7: Role Playing, 8: Work Group, 9: Simulation, 10: Brain Storming, 11: Six Thinking Hats, 12: Case Study, 13: Laboratory/Workshop/Field Application, 14: Self Study, 15: Problem Solving, 16: Project-Based Learning
Assessment Methods:	A: Testing, B: Oral Exam, C: Homework, D: Project/Design, E: Portfolio, F: Performance Task

COURSE CONTENT

Week Topics	Study Materials
1 Introduction	Text Book
2 Corporations and corporate governance	Text Book
3 Shareholders and ownership	Text Book
4 Directors and monitoring	Text Book
5 Management and performance	Text Book
6 Employees and employment contract	Text Book
7 MIDTERM EXAM	Text Book
8 International corporate governance	Text Book
9 Corporate governance in Pakistan	Text Book
10 Cases: Corporations in crisis	Text Book
11 Cases: Best practices around the world	Text Book
12 Team presentations	Text Book
13 Team presentations	Text Book
14 FINAL EXAM	Text Book

RECOMMENDED SOURCES

Textbook	Robert A.G. Monks and Nell Minow, Corporate Governance, Blackwell, 2 nd ed
Additional	

COURSE'S CONTRIBUTION TO PROGRAM					
No	Program Learning Outcomes	Contribution			
		1	2	3	4
1	Interprets his/her world, country, society and himself/herself; Demonstrates awareness of the ethical issues, social rights, values and responsibilities towards others and self.				X
2	Makes use of not only his/her own discipline but related fields as well; develops an interdisciplinary approach and practice.				X
3	Evaluates the developments and trends in science and technology; shows personal and institutional				X
4	Communicates his/her opinions effectively using oral, written, graphic and technological means; fluently explains his/her perspective in English.				X
5	Assumes responsibility in individual and collective settings; solves problems both as an individual and a member or leader of a team.				X
6	Outlines the major global actors, conditions and dynamics in the globalized world and international milieu.				X
7	Makes use of methods and tools required to effectively collect and analyze data.				X
8	Adapts himself/herself to complex and ever-changing conditions in a global world.				X
9	Relates the national and international legal framework that regulates the national and international activities in the field to				X
10	Evaluates the essential body of knowledge in the management discipline (functions of management, organization theory, policy and strategy, information technology and operations management, human resource management, accounting, finance, marketing, economics, and a systems approach).				X
11	Analyzes the organizational environment, defines business processes, and identifies relationships among system				X
12	Conceptualizes and formulates innovative solutions to business problems.				X

13	Applies current management theories, and identifies and makes use of the appropriate management tools and techniques for developing business strategies and making				X
14	Makes use of common computer technologies employed in business management.		X		

COURSE INFORMATION

Course Title	Code	Semester	Cr Hr	
Leadership and Team Dynamics	HRM 694	Spring/Fall	3+0	

Language of Instruction	English
Course Type	Elective
Course Coordinator	
Instructors	
Assistants	
Goals	This course aims to inform students about leadership and team dynamics, and to increase their awareness on effective leadership and team skills.
Content	Theories, concepts, and practical issues in leadership; how individuals work together; team building and team leading; effective leadership and team skills; leadership in various organizational settings and at different organizational levels; leader and follower perspectives and behaviors; leadership traits; leading change; delegation and empowerment; influence and power; attitudes and motivation; team decision making; conflict resolution strategies; meeting management.

Learning Outcomes
Explains leadership theories.
Tells the importance of leadership in organizations.
Defines the principles of effective leadership.

Evaluates team dynamics and how to be effective team leaders/players.

Distinguishes among different leadership styles and applications.

Teaching Methods:	1: Lecture, 2: Question-Answer, 3: Discussion, 4: Exercise and Practice, 5: Demonstration, 6: Guided Application, 7: Role Playing, 8: Work Group, 9: Simulation, 10: Brain Storming, 11: Six Thinking Hats, 12: Case Study, 13: Laboratory/Workshop/Field Application, 14: Self Study, 15: Problem Solving, 16: Project-Based Learning
Assessment Methods:	A: Testing, B: Oral Exam, C: Homework, D: Project/Design, E: Portfolio, F: Performance Task

COURSE CONTENT

Week Topics	Study Materials
1 Introduction to leadership and team dynamics	Text Book
2 Leadership theories	Text Book
3 Setting up a team	Text Book
4 Cooperation and competition	Text Book
5 Communication	Text Book
6 Managing conflict	Text Book
7 Power and social influence	Text Book
8 MIDTERM EXAM	Text Book
9 Decision making	Text Book
10 Problem solving and creativity	Text Book
11 Team and organizational culture and diversity	Text Book
12 Virtual teams	Text Book
13 Evaluating and rewarding teams	Text Book
14 FINAL EXAM	Text Book

RECOMMENDED SOURCES

Textbook	Group Dynamics for Teams, 3 rd ed., Daniel J. Levi, Sage, 2010
Additional	

COURSE'S CONTRIBUTION TO PROGRAM					
No	Program Learning Outcomes	Contribution			
		1	2	3	4
1	Interprets his/her world, country, society and himself/herself; demonstrates awareness of the ethical issues, social rights,			X	
2	Makes use of not only his/her own discipline but related fields as well;				
3	Evaluates the developments and trends in science and technology; shows personal and institutional			X	
4	Communicates his/her opinions effectively using oral, written, graphic and technological means; fluently explains his/her perspective in English.		X		
5	Assumes responsibility in individual and collective settings; solves problems both as an individual and a member or leader of a team.			X	
6	Outlines the major global actors, conditions and dynamics in the globalized world and international milieu.				
7	Makes use of methods and tools required to effectively collect and analyze data.				
8	Adapts himself/herself to complex and ever-changing conditions in a global world.				
9	Relates the national and international legal framework that regulates the national and international activities in the field to				
10	Evaluates the essential body of knowledge in the management discipline (functions of management, organization theory, policy and strategy, information technology and operations management, human resource management, accounting, finance, marketing, economics, and a systems approach).			X	
11	Analyzes the organizational environment, defines business processes, and identifies relationships among system			X	
12	Conceptualizes and formulates innovative solutions to business problems.				

13	Applies current management theories, and identifies and makes use of the appropriate management tools and techniques for developing business strategies and making	X		
14	Makes use of common computer technologies employed in business management.			

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION				
Activities	Quantity	Duration (Hour)	Total Workload	
Classes	14	3	42	
Weekly Readings	12	4	48	
Project/Homework	3	6	18	
Exam Preparation	2	20	40	
Total Work Load				148
Total Work Load / 30				4.9
ECTS Credit of the course				5

COURSE INFORMATION

Course Title	Code	Semester	Cr Hr	
Business Policy and Strategic Management	HRM 695	Fall/Spring	3+0	

Language of Instruction	English
Course Type	Elective
Course Coordinator	
Instructors	
Assistants	
Goals	This course aims to introduce the strategic management approach, and to convey the implementation approaches of corporate competitive strategies and business unit strategies through case studies.

Content	The strategic management framework; vision and mission formulation; external/ environmental analysis, defining opportunities and threats; internal/organizational analysis, defining strengths and weaknesses; goal/objective setting; tools for strategy formulation; strategy evaluation and choice; study of the organizational systems and processes used to establish overall
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Learning Outcomes	Defines the basic concepts of strategic management.
	Analyzes the external and internal environment of an organization.
	Explains the importance of vision, mission, main objectives and strategies for the competitiveness of firms.
	Evaluates organizational structures and systems that are compatible with strategies.
	Chooses the most suitable strategies regarding the business environment among different competitive and business unit strategies.

Teaching**Methods:**

1: Lecture, 2: Question-Answer, 3: Discussion, 4: Exercise and Practice, 5: Demonstration, 6: Guided Application, 7: Role Playing, 8: Work Group, 9: Simulation, 10: Brain Storming, 11: Six Thinking Hats, 12: Case Study, 13: Laboratory/Workshop/Field Application, 14: Self Study, 15: Problem Solving, 16: Project-Based Learning

Assessment Methods:	A: Testing, B: Oral Exam, C: Homework, D: Project/Design, E: Portfolio, F: Performance Task
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COURSE CONTENT

Week	Topics	Study Materials
1	Basic Concepts of Strategic Management	Text Book
2	Environmental Scanning and Industry Analysis	Text Book
3	Internal Scanning: Organizational Analysis	Text Book
4	Strategy Formulation: Situation Analysis and Business	Text Book

5	Strategy Formulation: Corporate Strategy	Text Book
6	Strategy Formulation: Functional Strategy & Strategic Choice	Text Book
7	MIDTERM EXAM	Text Book
8	Strategy Implementation: Organizing for Action	Text Book
9	Strategy Implementation: Staffing & Directing	Text Book
10	Evaluation & Control	Text Book
11	Corporate Governance	Text Book
12	Business Ethics/Social Responsibility/Environmental Sustainability	Text Book
13	Global/international Issues in Strategic Management	Text Book
14	FINAL EXAM	Text Book

RECOMMENDED SOURCES

Textbook	Strategic Management & Business, Wheelen, T. L., and Hunger, D. L.
Additional	

COURSE'S CONTRIBUTION TO PROGRAM

No	Program Learning Outcomes	Contribution	1	2	3	4	5
1	Interprets his/her world, country, society and himself/herself; demonstrates awareness of the ethical issues, social rights, values and responsibilities towards others and self.		X				
2	Makes use of not only his/her own discipline but related fields as well; develops an interdisciplinary approach and practice.		X				
3	Evaluates the developments and trends in science and technology; shows personal and institutional				X		
4	Communicates his/her opinions effectively using oral, written, graphic and technological means; fluently explains his/her perspective in English.			X			
5	Assumes responsibility in individual and collective settings; solves problems both as an individual and a member or leader of a team.					X	

6	Outlines the major global actors, conditions and dynamics in the globalized world and international milieu.	X
7	Makes use of methods and tools required to effectively collect and analyze data.	
8	Adapts himself/herself to complex and ever-changing conditions in a global world.	X
9	Relates the national and international legal framework that regulates the national and international activities in the field to his/her work in the field.	X
10	Evaluates the essential body of knowledge in the management discipline (functions of management, organization theory, policy and strategy, information technology and operations management, human resource management, accounting, finance, marketing, economics, and a systems approach).	X
11	Analyzes the organizational environment, defines business processes, and identifies relationships among system	X
12	Conceptualizes and formulates innovative solutions to business problems.	X
13	Applies current management theories, and identifies and makes use of the appropriate management tools and techniques for developing business strategies and making	X
14	Makes use of common computer technologies employed in business management.	

COURSE INFORMATION

Course Title	Code	Semester	Credit Hr
Change and Innovation Management	ENT 620	Fall/Spring	3+0

Language of Instruction	English
Course Type	Elective
Course Coordinator	
Instructors	

Assistants	
Goals	The goals of this course are to convey the basic concepts and theories on change management, and to provide information on effective
Content	Core concepts in change management; drivers of change, diagnosing the need for change; types of change; process models of change; organizational inertia and resistance to change; implementation strategies and managing the transition; the role of leadership in change

Learning Outcomes	Teaching Methods	Assessment Methods
Will recognize basic concepts in change	1, 3	A, B, C
Will grasp the factors affecting change and drivers of change.	1, 3	A, B, C
Will distinguish between different change types and models.	1, 2, 3, 12	A, B, C
Will recognize the role and importance of leadership and team management in managing change.	1, 2, 3, 12	A, B, C
Will diagnose problems related to management of the organizational change process.	1, 2, 3, 12	A, B, C
Will suggest solutions to problems related to management of the organizational change process.	1, 2, 3, 16	A, B, C, D

Teaching Methods:	1: Lecture, 2: Question-Answer, 3: Discussion, 4: Exercise and Practice, 5: Demonstration, 6: Guided Application, 7: Role Playing, 8: Work Group, 9: Simulation, 10: Brain Storming, 11: Six Thinking Hats, 12: Case Study, 13: Laboratory/Workshop/Field Application, 14: Self Study, 15: Problem Solving, 16: Project-Based Learning
Assessment Methods:	A: Testing, B: Oral Exam, C: Homework, D: Project/Design, E: Portfolio, F: Performance Task

COURSE CONTENT		
Week	Topics	Study Materials
1	The Nature of Change	Textbook

2	Drivers of Change	Textbook
3	Diagnosing the Need for Change	Textbook
4	Types of Change	Textbook
5	Process Models of Change	Textbook
6	Organizational Inertia and Resistance to Change	Textbook
7	Mid-term	
8	Implementation Strategies and Managing the Transition	Textbook
9	The Role of Leadership in Change Management	Textbook
10	Stakeholder Management in Organizational Change	Textbook
11	The Role of Team Management in Change Management	Textbook
12	Restructuring for Strategic Gain: Mergers& Acquisitions	Textbook
13	Merging Groups: Combining People for Effective Performance	Textbook
14	Reviewing Change	Textbook

RECOMMENDED SOURCES

Textbook	Hayes, J. (2010). <i>The Theory and Practice of Change Management</i> . Basingstoke, Hampshire: Palgrave Macmillan.
Additional	

MATERIAL SHARING

Documents	
Assignments	
Exams	

COURSE'S CONTRIBUTION TO PROGRAM		Contribution				
No	Program Learning Outcomes		1	2	3	4
1	Students should demonstrate their knowledge of the essential body of knowledge in business management (functions of management: organization theory: policy and strategy: information, technology and operations management; human capital management; accounting; finance; marketing;					
2	Students should understand the main actors, challenges and dynamics of the global business environment.	X				
3	Students should have the awareness of the legal framework that shapes the boundaries of business.					
4	Students should be able to analyze an organizational environment, understand business processes, identify relationships among system components, correctly diagnose		X			
5	Students should be able to conceptualize and formulate innovative solutions to not-clearly defined business problems.			X		
6	Students should be able to apply the current theories and employ the appropriate management tools and techniques for making business decisions.		X			
7	Students should be able to select and effectively utilize available resources to collect and analyze data, and draw					
8	Students should be able to use common computer technologies employed in business management.					
9	Students should be able to understand the importance of adaptability and to make managerial decisions in a complex,	X				
10	Students should be able to effectively communicate in writing or orally with individuals from diverse backgrounds.					
11	Students should be able to appreciate and recognize contributions of individuals from diverse backgrounds, and should be able to effectively communicate, positively contribute and work as a team member.	X				
12	Students should demonstrate awareness and understanding of the ethical standards for self and in the business					

13	Students should demonstrate awareness and understanding of active citizenship and social responsibility of the business management profession.				
14	Students should understand the importance of lifelong learning to maintain personal and professional development.				

COURSE INFORMATION

Course Title	<i>Code</i>	<i>Semester</i>	<i>Cr Hrs</i>
Management of Family Businesses	ENT 621	Fall/Spring	3+0

Language of	English
Course Level	Graduate
Course Type	Elective
Course	
Instructors	
Assistants	
Goals	The purpose of this course is to make owners of family owned companies, employees, consultants or future generations aware of the strengths and weaknesses of the family business and thus to provide and support these organizations' sustainability.
Content	Relationship between family and business in family businesses; types of family businesses; strong and weak sides of family businesses; institutionalization processes in family businesses and corporate structures; mission and vision of the family and the business; strategic planning in family businesses; succession planning; organizational culture and human resource management in family businesses.
Learning Outcomes	
Will define the basic concepts and elements of the management of family businesses.	
Will explain the differences between the basic concepts and elements of family business management.	
Will diagnose factors that cause success and failure of family business management.	
Will define the process of institutionalization in family businesses.	

Will play an active role in the resolution of conflict in the management of family business.

Teaching Methods:

1: Lecture, 2: Question-Answer, 3: Discussion, 4: Exercise and Practice, 5: Demonstration, 6: Guided Application, 7: Role Playing, 8: Work Group, 9: Simulation, 10: Brain Storming, 11: Six Thinking Hats, 12: Case Study, 13: Laboratory/Workshop/Field Application, 14: Self Study, 15: Problem

Assessment Methods:	Solving, 16: Project-Based Learning A: Testing, B: Oral Exam, C: Homework, D: Project/Design, E: Portfolio, F: Performance Task
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COURSE CONTENT

Week	Topics	Materials
1	What is a Family Business?	Text Book
2	The main problems encountered by Family Businesses.	Text Book
3	Problem solving suggestions to Family Businesses.	Text Book
4	Family Constitution.	Text Book
5	To work with professional managers.	Text Book
6	Preparing the next generation.	Text Book
7	Case studies.	Text Book
8	Midterm Exam	
9	The concept of trust and confidence in Family Businesses.	Text Book
10	Family Business Governance: Growth, Board of Directors, Institutionalization, Family Council.	Text Book
11	Family Culture, Corporate Culture.	Text Book
12	Strategic Management in Family Firms.	Text Book
13	The Future of Family Businesses: Change, Innovation and	Text Book
14	Presentation	

RECOMMENDED SOURCES

Textbook	Ernesto J. Poza, Family Business, 3th ed., 2010, OH: South-Western Cengage Learning.
Additional	

COURSE'S CONTRIBUTION TO PROGRAM						
No	Program Learning Outcomes	Contribution				
		1	2	3	4	5
1	Students should demonstrate their knowledge of the essential body of knowledge in business management (functions of management: organization theory; policy and strategy; information, technology and operations management; human capital management; accounting; finance; marketing; economics; and an integrated perspective).					X
2	Students should understand the main actors, challenges and dynamics of the global business environment.					
3	Students should have the awareness of the legal framework that shapes the boundaries of business.				X	
4	Students should be able to analyze an organizational environment, understand business processes, identify relationships among system components, correctly diagnose underlying problems, and produce alternatives for managerial decisions.				X	
5	Students should be able to conceptualize and formulate innovative solutions to not-clearly defined business problems.				X	
6	Students should be able to apply the current theories and employ the appropriate management tools and techniques for making business decisions.				X	
7	Students should be able to select and effectively utilize available resources to collect and analyze data, and draw appropriate conclusions from their research.					
8	Students should be able to use common computer technologies employed in business management.					
9	Students should be able to understand the importance of adaptability and to make managerial decisions in a complex, rapidly evolving global business environment.					
10	Students should be able to effectively communicate in writing or orally with individuals from diverse backgrounds.					
11	Students should be able to appreciate and recognize contributions of individuals from diverse backgrounds, and should be able to effectively communicate, positively contribute and work as a team member.					
12	Students should demonstrate awareness and understanding of the ethical standards for self and in the business management profession.				X	
13	Students should demonstrate awareness and understanding of active citizenship and social responsibility of the business management profession.				X	
14	Students should understand the importance of lifelong learning to maintain personal and professional development.				X	

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION			
Activities	Quantity	Duration (Hour)	Total Workload (Hour)
Lectures	14	3	42
Midterm	1	30	30
Assignments	10	4	40
Project	2	25	50
Presentation	1	3	3
Final	1	40	40
Total Work Load			205
Total			6,83
ECTS			7

COURSE INFORMATION

Course Title	Code	Semester	Cr Hr
Cross-Cultural Issues in Business	HRM 696	Fall/Spring	3+0
Language of Instruction	English		
Course Type	Elective		
Course Coordinator			
Instructors			
Assistants			
Goals	The aim of this course is to inform students about the effects of culture and cultural differences on company strategies, work values, and management practices. Another aim is to help students comprehend how cultural differences affect strategic decision making process and interpersonal relationships,		
Content	Cultural issues and their implications on the strategic decision making process of firms.		

Learning Outcomes

- Explains how culture and cultural differences affect the formulation of company strategies.
- Analyzes the effects of culture and cultural differences on work values, leadership approaches, and motivation processes.
- Examines the effects of culture and cultural differences on processes such as teamwork and conflict management in which interpersonal relationships play an important role.
- Discusses the differences culture and cultural differences create in human resource practices.

Teaching Methods:	1: Lecture, 2: Question-Answer, 3: Discussion, 4: Exercises and Applications, 5: Demonstration, 6: Guided Application, 7: Role Playing, 8: Work Group, 9: Simulation, 10: Brain Storming, 11: Six Thinking Hats, 12: Case Study, 13: Laboratory/Workshop/Field Application, 14: Self Study, 15: Problem Solving, 16: Project-based Learning
Assessment Methods:	A: Testing, B: Oral Exam, C: Homework, D: Project/Design, E: Portfolio, F: Performance Task

COURSE CONTENT

Week Topics	Study Materials
1 Course Introduction and Cross-Cultures Effectiveness	
2 Global Mindset	
3 BAFA/BAFA(a cross-cultural exercise)	
4 Cultural Dimension	
5 Mapping/Bridging/Integrating	
6 Acting like a Cross-Cultural Expert	
7 Mid-Term	
8 Managing Global Teams and Networks	
9 Executing Global Strategy	
10 Selecting and Developing Global Managers	
11 Managing Change in Global Organizations	

12	Leading Change as an Expatriate	
13	Competing with Integrity in Global Business	
14	Competing with Integrity in Global Business II	

RECOMMENDED SOURCES

Textbook	Lane, H. W., Maznevski, M., Deetz, J., and DiStefano, J. (2009). International Management Behavior: Leading with a
Additional	

COURSE'S CONTRIBUTION TO PROGRAM

No	Program Learning Outcomes	Contribution				
		1	2	3	4	5
1	Defines and applies the essential body of knowledge in the international trade discipline (economic theories and applications, international business, international law, etc.) including, business administration, and international logistics management.				x	
2	Develops effective international trade strategies, designs measures to support the corporate mission and business objectives.			x		
3	Identifies the uncertainties and risks in international trade and designs measures to mitigate these risks.		x			
4	Evaluates critically the empirical applications of international trade and identifies and analyses the problems in international trade.			x		
5	Finds solutions to international trade problems to develop business performance.				x	
6	Outlines the major global actors, conditions and dynamics in the globalized world and international environment.			x		
7	Relates the national and international legal framework that regulates the national and international activities in the field to his/her work in the field.				x	
8	Makes use of methods and tools required to effectively collect and analyze data in his/her area.					
9	Assumes responsibility in individual and collective settings; solves problems both as an individual and a member or leader of a team.					

10	Uses common computer technologies employed in international				
11	Adapts himself/herself to complex and ever-changing conditions in a global World.		x		
12	Makes use of not only his/her own discipline but related fields as well; develops an interdisciplinary approach and practice.	x			
13	Interprets his/her world, country, society and himself/herself; demonstrates awareness of the ethical issues, social rights,		x		
14	Evaluates the developments and trends in science and technology; shows personal and institutional entrepreneurship				
15	Communicates his/her opinions effectively using oral, written, graphic and technological means; fluently explains his/her perspective in English.	x			

COURSE INFORMATION

Course Title	Code	Semester	Cr Hr	
Entrepreneurship	MSPM 629	Fall/Spring	3+0	

Prerequisites

Language of Instruction	English
Course Level	Postgraduate
Course Type	Elective
Course Coordinator	
Instructors	
Assistants	
Goals	The goals of this course are to present the entrepreneurial process, to draw attention to the opportunities and challenges in starting up businesses, and to discuss managerial issues specific

Content	Entrepreneurship concepts and perspectives; entrepreneurship process: idea generation, feasibility analysis, business plan and strategy, organization design, building new venture team, financing, protecting intellectual property; implementing new business plans; innovation and organizational change in existing organizations; creating new markets; operational challenges and opportunities; development and management of family businesses; lifecycles of family businesses; succession and transition to professional management; examples from entrepreneurial successes and failures.
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Learning Outcomes

Explains the technical, legal and organizational preparation required for establishing a business.

Develops a business plan and make recommendations for implementing that plan.

Defines and explains the relationships among innovation, new business development and business strategy.

Defines and explains the managerial challenges and opportunities for family businesses.

Recommends creative alternatives to problems and challenges encountered in new business ventures and family businesses.

Teaching Methods:	1: Lecture, 2: Question-Answer, 3: Discussion, 4: Exercise and Practice, 5: Demonstration, 6: Guided Application, 7: Role Playing, 8: Work Group, 9: Simulation, 10: Brain Storming, 11: Six Thinking Hats, 12: Case Study, 13: Laboratory/Workshop/Field Application, 14: Self Study, 15: Problem Solving, 16: Project-Based Learning
Assessment Methods:	A: Testing, B: Oral Exam, C: Homework, D: Project/Design, E: Portfolio, F: Performance Task

COURSE CONTENT	
Week Topics	Study Materials
1 Introduction & Course Overview	Text Book
2 Generating & Evaluating Venture Ideas	Text Book
3 Issues in Team Building	Text Book
4 Differentiating Your Product or Service	Text Book
5 The Business Plan: Structure, Content, and Change	Text Book
6 Financing New Ventures	Text Book
7 MIDTERM	Text Book
8 Crafting and Assessing Business & Revenue Model	Text Book
9 Judo Strategy	Text Book
10 Intellectual Property Strategies	Text Book
11 Managing Growth	Text Book
12 Discovery Driven Planning	Text Book
13 Franchising/Managing Fast Growth	Text Book
14 FINAL	Text Book

RECOMMENDED SOURCES	
Textbook	Entrepreneurship: Strategies and Resources, Marc Dollinger, Prentice Hall, 2002
Additional	

COURSE'S CONTRIBUTION TO PROGRAM		Contribution					
No	Program Learning Outcomes		1	2	3	4	5
1	Interprets his/her world, country, society and himself/herself; demonstrates awareness of the ethical issues, social rights, values and responsibilities towards others and self.				X		
2	Makes use of not only his/her own discipline but related fields as well; develops an interdisciplinary approach and practice.				X		

3	Evaluates the developments and trends in science and technology; shows personal and institutional	X		
4	Communicates his/her opinions effectively using oral, written, graphic and technological means; fluently explains his/her perspective in English.	X		
5	Assumes responsibility in individual and collective settings; solves problems both as an individual and a member or leader of a team.	X		
6	Outlines the major global actors, conditions and dynamics in the globalized world and international milieu.	X		
7	Makes use of methods and tools required to effectively collect and analyze data.	X		
8	Adapts himself/herself to complex and ever-changing conditions in a global world.	X		
9	Relates the national and international legal framework that regulates the national and international activities in the field to	X		
10	Evaluates the essential body of knowledge in the management discipline (functions of management, organization theory, policy and strategy, information technology and operations management, human resource management, accounting,	X		
11	Analyzes the organizational environment, defines business processes, and identifies relationships among system	X		
12	Conceptualizes and formulates innovative solutions to business problems.	X		
13	Applies current management theories, and identifies and makes use of the appropriate management tools and techniques for developing business strategies and making	X		
14	Makes use of common computer technologies employed in business management.			

Appendage 3142

AWARD OF DISTINCTION IN PROFESSIONAL EXAMINATIONS - MBBS & BDS PROGRAMS

Background to the Case:

1. In 5th FBOS meeting vide item 07 it was decided that distinction will be awarded to MBBS & BDS students whom secured 80% or above marks in each subject during Annual Professional Examinations. Although the decision was implemented but the same was not forwarded to the BU ACM for approval and inclusion in the Academic Rules 2016.

Financial Effects:

Nil

Recommendations

2. The decision of 5th FBOSOHS vide agenda item 07 mentioned below is recommended for the approval of 31st ACM and inclusion in the relevant portion of BU Academic Rules (i.e 9.6.3):

- a. Students obtaining 80% and above marks in a specific subject may be awarded with distinction in the subject.
- b. The student should have passed all the subjects of that class in annual exam.
- c. This award will be given in the convocation of the respective college.

Appendage-3144**BS GEOPHYSICS & BS ENVIRONMENTAL SCIENCES ROADMAP – REVISION OF CURRICULUM****PROGRAM COURSES**

Program	Total Courses	Core Courses	Other Courses
BS Geophysics	43 Courses (123 Cr. Hrs) 2 Field Work (6 Cr. Hrs) 1 Thesis (6 Cr. Hrs)	26 Courses (77 Cr. Hr.) 2 Electives (6 Cr. Hr.) 2 Field Work (6 Cr. Hr.) 1 Thesis (6 Cr. Hr.)	14 Courses (40 Cr. Hr.) 1 Course (Zero Cr. Hrs)
	135 Cr. Hrs	95 Cr. Hrs	40 Cr. Hrs
BS Env. Science	44 Courses (126 Cr. Hrs) 1 Field Work (3 Cr. Hrs) 1 Thesis (6 Cr. Hrs)	28 Courses (83 Cr. Hrs) 2 Electives (6 Cr. Hr.) 1 Field Work (3 Cr. Hrs) 1 Thesis (6 Cr. Hrs)	13 Courses (37 Cr. Hrs) 1 Course (Zero Cr. Hrs)
	135 Cr. Hrs	98 Cr. Hrs	37 Cr. Hrs

REVISED ROAD MAP: SUBJECT CONFIGURATIONS

Revised Road Map: Subject Configurations Semester	Total Courses BS Geophy.	Total Courses BS Env. Sci	Exactly Common Courses	Shifting / Equivalent Offering From	Shifting / Equivalent Offering
Semester-1	7 (16 cr. Hrs)	7 (16 cr. Hrs)	7 (16 Cr. Hrs)	1 Shift (from BS -2)	-
Semester-2	6 (18 Cr. Hrs)	6 (18 Cr. Hrs)	4 (12 Cr. Hrs)	1 Shift (from BS-1)	-
Semester-3	6 (18 Cr. Hrs)	6 (18 Cr. Hrs)	3 (9 Cr. Hrs)	1 Shift (from BS-4)	-
Semester-4	5 (15 Cr. Hrs)	6 (18 Cr. Hrs)	Nil	1 Shift (from BS-3)	-
Summer	1 (3 Cr. Hrs)	1 (3 Cr. Hrs)	1 (3 Cr. Hrs)	-	-
Semester-5	6 (18 Cr. Hrs)	6 (18 Cr. Hrs)	1 (3 Cr. Hrs)	Nil	-
Semester-6	5 (15 Cr. Hrs)	5 (15 Cr. Hrs)	1 (3 Cr. Hrs)	1 Shift (from BS-8)	-
Summer	1 (3 Cr. Hrs)	-	-	-	-
Semester-7	5 (14 Cr. Hrs)	5 (14 Cr. Hrs)	3 (7 Cr. Hrs)	-	-
Semester-8	3 (9 Cr. Hrs) Thesis (6 Cr. Hrs)	3 (9 Cr. Hrs) Thesis (6 Cr. Hrs)	1 (3 Cr. Hrs)	1 Shift (from BS-6)	-

DETAIL OF COURSES

	BS Geophysics	BS Env. Sciences
Core Subjects	26	28
H & SS	6	7
Computer	2	1
Math+ Stat	2+1	1+1
Chemistry+ Physics	1+1	1+1
GIS	1	1
Zero Credit Course	1 (Math)	1 (Math or Bio)
Field work	2	1
Electives	2	2
Thesis	1	1

BS GEOPHYSICS PROGRAM - REVISED ROADMAP**Semester - 1**

Course code	Course Title	Credit Hours	Combine / Different
PAK 101	Pakistan Studies	2	Combine with ES
ISL 101	Islamic Studies	2	
ENG 103	English I	3	
MAT 105	Mathematics	0	
CSC 105	Introduction to Computers	3	
PHY 101	Physics	3	
GEO 105	Physical & General Geology	3	
Total Credit Hours		16	

Semester - 2

Course code	Course Title	Credit Hours	Combine / Different
CHM 105	Chemistry	3	Combine with ES
ENG 104	English -II	3	
MAT 115	Calculus & Analytical Geometry	3	
GEO 110	Fundamental of Geography & Geomorphology	3	
GEO 115	Introduction to Geophysics	3	Different
GEO 120	Field Geology	3	
Total Credit Hours		18	

Semester – 3

Course code	Course Title	Credit Hours	Combine / Different
ENG 232	Oral Communication	3	Combine with ES
HSS 111	Introduction to IR /Humanities	3	
MAT 205	Statistics	3	

GEO 205	Structure Geology	3	Different
CSC 205	Programming Fundamentals	3	
GEO 210	Mineralogy & Crystallography	3	
	Total Credit Hours	18	

Semester – 4

Course code	Course Title	Credit Hours	
GEO 215	Sedimentology	3	Different
GEO 240	Gravity & Magnetic Exploration Techniques	3	
GEO 230	Geotectonics	3	
MAT 210	Advanced Mathematics	3	
GEO 365	Electrical & Radioactive Techniques	3	
	Total Credit Hours	15	

Semester - Summer

Course code	Course Title	Credit Hours
GEO 250	Field Work Report-1	3

Semester - 5

Course code	Course Title	Credit Hours	
GEO 326	Computing with Matlab	3	Different
GEO-325	Stratigraphy of Pakistan	3	
GEO 370	Geomagnetism& Paleomagnetism	3	
GEO 320	Marine Geology	3	
GEO 315	Igneous & Metamorphic Petrology	3	
GEO 305	Environmental Geology	3	Combine with ES
	Total Credit Hours	18	

Semester - 6

Course code	Course Title	Credit Hours	
GEO 340	Wireline logging	3	Different
GEO 350	Geology of Pakistan	3	
GEO 367	Seismic Data Acquisition & Planning	3	
GEO 345	Petroleum Geology	3	
	Elective 1	3	Combine with ES
	Total Credit Hours	15	

Courses for Elective 1

Course code	Course Title	Credit Hours
GEO 335	Earthquake Seismology	3
GEO 351	Natural Disaster Management	3
ENV 330	Environmental & Natural Resource Economics	3

Semester - Summer

Course code	Course Title	Credit Hours
GEO 375	Field Work Report-2	3

Semester - 7

Course code	Course Title	Credit Hours	
GEO 470	Seismic Data Processing	3	Different
GEO 415	Economic Geology	3	
GEO 425	Research Methodology	2	Combine with ES
GEO 420	Hydrogeology	3	
	Elective 2	3	
	Total Credit Hours	14	

Courses for Elective 2

Course code	Course Title	Credit Hours
GEO 405	Petroleum Engineering	3
GEO 436	Health, Safety and Environment	3
ENV 410	Environmental Impact Assessment	3

Semester - 8

Course code	BS Geophysics	Credit Hours	
GEO 435	GIS & Remote Sensing	3	Combine with ES
GEO 475	Seismic Data Interpretation	3	Different
GEO 445	Seismic Stratigraphy	3	
GEO 460	Thesis	6	
GEO 465	Comprehensive Viva Voce	0	
	Total Credit Hours	15	

BS ENVIRONMENTAL SCIENCES PROGRAM - REVISED ROADMAP**Semester - 1**

Course code	Course Title	Credit Hours	Combine / Different
PAK 101	Pakistan Studies	2	Combine with Geophysics
ISL 101	Islamic Studies	2	
ENG 103	English I	3	
MAT105	Mathematics OR	0	
BIO 105	Fundamentals of Biology	0	
CSC 105	Introduction to Computers	3	
PHY 101	Physics	3	
GEO 105	Physical & General Geology	3	
	Total Credit Hours	16	

Semester - 2

Course code	Course Title	Credit Hours	Combine / Different
CHM 105	Chemistry	3	Combine with Geophysics
ENG 104	English -II	3	
MAT 115	Calculus & Analytical Geometry	3	
GEO 110	Fundamental of Geography & Geomorphology	3	
ENV 105	Introduction to Environmental Sciences	3	Different
ENV 110	Environmental Biology	3	
	Total Credit Hours	18	

Semester – 3

Course code	Course Title	Credit Hours	Combine / Different
ENG 232	Oral Communication	3	Combine with Geophysics
HSS 111	Introduction to IR / Humanities	3	
MAT 205	Statistics	3	
ENV 210	Environmental Chemistry	3	
ENV 205	Fundamentals of Ecology	3	Different
ENV 230	Environmental Issues	3	
	Total Credit Hours	18	

Semester – 4

Course code	Course Title	Credit Hours	Combine / Different
ENV 215	Social Theory of Environment	3	Different
ENV 220	Environmental Microbiology	3	
ENV 225	Applied Ecology	3	
HSS 107	Introduction to Psychology	3	
ENV 236	Introduction to Climate Change	3	
ENV 245	Introduction to Oceanography	3	
	Total Credit Hours	18	

Semester - Summer

Course code	Course Title	Credit Hours	Combine / Different
ENV 240	Field Work Report-1	3	Combine with Geophysics

Semester - 5

Course code	Course Title	Credit Hours	Combine / Different
ENV 305	Environmental Monitoring	3	Different
ENV 310	Environmental Toxicology	3	
ENV 315	Environmental Management System	3	
ENV 320	Environmental Biotechnology	3	
ENV 335	Analytical Techniques in Environmental Sciences	3	
GEO 305	Environmental Geology	3	Combine with Geophysics
Total Credit Hours		18	

Semester - 6

Course code	Course Title	Credit Hours	Combine / Different
ENV 425	Occupational Health & Safety	3	Different
ENV 340	Solid Waste Management	3	
ENV 325	Environmental Engineering	3	
ENV 345	Environmental Hazard & Management	3	
Elective 1		3	Combine with Geophysics
Total Credit Hours		15	

Courses for Elective 1

Course code	Course Title	Credit Hours
GEO 335	Earthquake Seismology	3
GEO351	Natural Disaster Management	3
ENV 330	Environmental & Natural Resource Economic	3

Semester - 7

Course code	Course Title	Credit Hours	Combine / Different
ENV 405	Pollution Control Technology	3	Different
ENV 415	Natural Resource Management	3	
ENV 420	Research Methods in Environmental Sciences	2	Combine with Geophysics
GEO 420	Hydrogeology	3	
Elective 2		3	
Total Credit Hours		14	

Courses for Elective 2

Course code	Course Title	Credit Hours
GEO 405	Petroleum Engineering	3
GEO 436	Health, Safety and Environment	3
ENV 410	Environmental Impact Assessment	3

Semester - 8

Course code	Course Title	Credit Hours	Combine / Different
ENV 350	Remote Sensing and GIS for Environment	3	Combine with Geophysics
ENV 440	Energy and Environment	3	Different
ENV 430	Environmental Policies & Law	3	
ENV 435	Thesis	6	
ENV 445	Comprehensive Viva Voce	0	
	Total Credit Hours	15	

Appendage 3146

STUDENT EXCHANGE AGREEMENT BETWEEN SAPIENZA UNIVERSITY OF ROME (ITALY) AND BAHRIA UNIVERSITY (PAKISTAN) FOR A STUDENT EXCHANGE PROGRAMME

Dr. Eugenio Gaudio, Rector Sapienza University of Rome (Italy) and Vice Admiral (R) Muhammad Shafiq, Rector Bahria University (Pakistan) agree as follows:

GENERAL PRINCIPLES

This Agreement is signed by the Sapienza University of Rome (Italy) and Bahria University (Pakistan) with the aim of enhancing students' *curricula* through study experiences abroad, and of regulating the procedures of student exchange in accordance with the conditions indicated below.

PROCEDURES FOR STUDENT EXCHANGE

Art. 1: The above-mentioned Universities shall select from their own students those whom they deem suitable to take part in the study abroad programme according to pre-determined criteria.

Art. 2: The duration of the exchange should not be shorter than three months nor exceed one academic year.

The duration of the exchange as well as the conditions under which it will be proposed will be agreed upon according to the needs and requests of the parties.

Art. 3: Both institutions shall attempt to keep a reasonable balance in the number of student exchanged. With this goal in mind, they establish ... to be the maximum number of students who will be allowed to take part in the exchange during each academic year.

ATTENDANCE OF FOREIGN STUDENTS AT THE HOST UNIVERSITY

Art. 4: At the host institution, students shall be allowed to do the following:

- a. attend classes and take the prescribed exams at the end of courses taken;
- b. pursue research activities aimed at the production of a dissertation;
- c. take part in a traineeship, when this is provided for in the student degree programme.

Art. 5: The study abroad periods shall be part of the student's home institution degree programme.

Art. 6: Activities carried out during the exchange period shall be approved by the competent authorities who will establish in advance which modules belonging to the student's degree programme can be taken abroad, specifying, if possible, the name of the host institution equivalent module.

The attended courses shall be recorded as part of the student's academic career, according to the current regulations of the home institution.

At the end of the exchange period, the host institution shall issue a certificate specifying the activities which have been carried out.

Art. 7: During the exchange period in the host institution, the student shall comply with its internal regulations.

Art. 8: The persons in charge for the implementation of the exchange at Sapienza University of Rome (Italy) will be _____ and at Bahria University will be Mr. M. Awais Mehmood, Director International Office.

TUITION FEES AND ANCILLARY EXPENSES

Art. 9: Tuition fees may be paid to the home institution, students will benefit from the host institution's services such as libraries, laboratories etc. as regular students.
Students shall be responsible for paying all other expenses including visa, travel and accommodation costs.

INSURANCES

Art. 10: Students from both institutions taking part in the activities provided for by this Agreement are covered by their home universities' insurance for accidents and illnesses caused by accidents and civil liability.
Students will be asked to sign their own health insurance before departure.

EXPIRY DATE

Art. 11: This Agreement may be extended or amended at any time by mutual agreement of the parties unless either of the parties gives notice of termination at least ... months in advance.
Drawn up in Rome (Italy) & Islamabad (Pakistan) in two original copies in English language, both having the same legal validity.

Rome, _____ / _____ / _____

_____, _____ / _____ / _____

For SAPIENZA UNIVERSITY OF ROME

Rector

Dr. Eugenio Gaudio

For BAHRIA UNIVERSITY

Rector

Vice Admiral (R) Muhammad Shafiq, HI(M)

Name of the University	Sapienza University of Rome
Websites	
General website of the university	www.uniroma1.it or http://en.uniroma1.it/
Website for incoming exchange students	http://en.uniroma1.it/study-us/exchange-and-visiting-students
Academic calendar (lecture periods)	
Start / end dates - winter term	Mid/End September – December (start of academic year: 1 st semester)
Examination period(s)	September, January-February, and June-July
Start / end dates - spring term	Beginning March – June (2 nd semester)
Start / end dates - summer term	No Summer term
Admission & registration	
Admission deadline for incoming exchange students	October the 31 st for the spring term April the 30 th for the fall term
Webpage: admission procedures	http://en.uniroma1.it/study-us/visiting-and-exchange-students/bilateral-agreements/bilateral-agreements-student-mobility
Local Contact Persons	
Address	International Office Piazzale Aldo Moro, 5 - CU007 Palazzina Tumminelli 00185 Rome
Contact for incoming exchange students	Graziella Gaglione graziella.gaglione@uniroma1.it Tel.: +39 - 06 - 4969 0423 Fax: +39 - 06 - 4991 0089 skype: graziella_gaglione
Contact for outgoing exchange students	Graziella Gaglione graziella.gaglione@uniroma1.it Tel.: +39 - 06 - 4969 0423 Fax: +39 - 06 - 4991 0089 skype: graziella_gaglione
Name of the University	Bahria University
Websites	
General website of the university	www.bahria.edu.pk
Website for incoming exchange students	www.bahria.edu.pk/internationaloffice
Academic calendar (lecture periods)	
Start / end dates - spring term	1 st Week of February – 1 st Week of June (16 weeks)
Start / end dates -	Mid of June – Last week of August (8 Weeks with half course load)

summer term	
Start / end dates – fall term	1 st Week of September – 1 st Week of January (16 weeks)
Start / end dates – winter term	None
Examination period(s)	Mid terms (1 st Week of April, 1 st Week of November, Last week of July) Finals (1 st Week of June, Last week of Aug, 1 st Week of January)
Admission & registration	
Admission deadline for incoming exchange students	October the 31 st for the spring term April the 30 th for the fall term March the 1 st for Summer Semester
Webpage: admission procedures	www.bahria.edu.pk/internationaloffice
Local Contact Persons	
Address	International Office, Shangrila Road, Sector E-8, Islamabad, Pakistan
Contact for incoming exchange students	M. Awais Mehmood Director, International Office Tel: +92 51 9263422, Mob: +92 345 5184772, internationaloffice@bahria.edu.pk
Contact for outgoing exchange students	Same as above

Appendage 3147

Inclusion in SOP for Exchange of Students with Yasar University, Turkey
Grade Mapping

Yasar University		Bahria University	
Grade	GP	Grade	GP
A	4.0	A	4.0
A-	3.7	A-	3.67
B+	3.3	B+	3.33
B	3.0	B	3.0
B-	2.7	B-	2.67
C+	2.3	C+	2.33
C	2.0	C	2.0
C-	1.7	C-	1.67
D+	1.3	D+	1.33
D	1.0	D	1.00
F	0.0	F	0.0

Inclusion in SOP for Exchange of Students with Altinbas University, Turkey
Grade Mapping

Altinbas University		Bahria University	
Grade	GP	Grade	GP
AA	4.0	A	4.0
BA	3.5	A-	3.67
BB	3.0	B	3.0
CB	2.5	B-	2.67
CC	2.0	C	2.0
DC	1.5	C-	1.67
DD	1.0	D	1.00
EX, F	0	F	0.00

*Due to lesser number of grades at Altinbas University, Grade B+. C+ & D+ have been excluded because of their incompatibility with Grade Point equivalent of Altinbas University Grades

Inclusion in SOP for Exchange of Students with Izmir University of Economics, Turkey

Grade Mapping

Izmir University of Economics		Bahria University	
Grade	GP	Grade	GP
AA	4.0	A	4.0
BA	3.5	A-	3.67
BB	3.0	B	3.0
CB	2.5	B-	2.67
CC	2.0	C	2.0
DC	1.5	C-	1.67
DD	1.0	D	1.00
FD, F	0	F	0.00

**Due to lesser number of grades at Izmir University of Economics, Grade B+. C+ & D+ have been excluded because of their incompatibility with Grade Point equivalent of Izmir University of Economics Grades*

Inclusion in SOP for Exchange of Students with AIMST University, Malaysia

Grade Mapping

AIMST University		Bahria University	
Grade	GP	Grade	GP
A	4.0	A	4.0
A-	3.75	A-	3.67
B+	3.5	B+	3.33
B	3.0	B	3.0
B-	2.75	B-	2.67
C+	2.5	C+	2.33
C	2.0	C	2.0
C-	1.75	C-	1.67
D	1.0	D	1.0
F	0.0	F	0.0

**Due to lesser number of grades at AIMST University, Grade D+ has been excluded because of its incompatibility with Grade Point equivalent of AIMST University Grades*

Inclusion in SOP for Exchange of Students Yeditepe University, Turkey
Grade Mapping

Yeditepe University		Bahria University	
Grade	GP	Grade	GP
AA	4.0	A	4.0
BA	3.5	A-	3.67
BB	3.0	B	3.0
CB	2.5	B-	2.67
CC	2.0	C	2.0
DC	1.5	C-	1.67
DD	1.0	D	1.00
FF, FA	0	F	0.00

**Due to lesser number of grades at Yeditepe University, Grade B+. C+ & D+ have been excluded because of their incompatibility with Grade Point equivalent of Yeditepe University Grades*

**Inclusion in SOP for Exchange of Students with York St John University,
UK**
Grade Mapping

York St John University		Bahria University	
% Marks	GP	Grade	GP
+70%	Distinction	A	4.0
67% - 69.9%		A-	3.67
63% - 66.9%		B+	3.33
60% - 62.9%		B	3.0
57% - 59.5%		B-	2.67
53% - 56.9%		C+	2.33
50% - 52.9%		C	2.0
47% - 49.9%		C-	1.67
43% - 46.9%		D+	1.33
40% - 42.9%		D	1.00
Less than 40%	Fail	F	0.0