

Minutes
of the
37th Special
Meeting of Academic Council
held on
Wed, 24th February 2021

Through VLC



Directorate of Academics

Bahria University Islamabad

Reference Designators & Terms used in this Document

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

Item Number	<p>oonn, where oo = ordinal sequence of the Academic Council Meeting. nn = serial number of Item in that meeting. Example: Item 2213 means item No 13 taken up by the 22nd ACM</p>
Decision on New Item	<p>Oonn 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'</p>
Decision on Previous Item	<p>o₂o₂(oonn) Example: Decision 22(1930) means Decision taken by the 22nd 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'.</p>
Action	<p>Authority, Entity, Official, Person, Unit, Dept, Office, etc required to implement the decision</p>
Responsibility	<p>The supra single Authority, Entity, Official, Person, etc required to:</p> <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 responsible to the Competent Authority, and the Council, for the case/issue overall /point/item he or she has been made responsible for.
Statutory Documents affected	<p>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 25th May 2015.</p>
Deadlines	<p>Any time period deadlines shall count from the date of issue of the minutes. Time period in days shall imply working days.</p>

(inside cover)

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Acronyms & Abbreviations used in this Document

AACSB	Association to Advanced Collegiate School of Business
BUAR	Bahria University Academic Rules
BUMDC	Bahria University Medical & Dental College
BUCPT	Bahria University College of Physical Therapy
CCH	Course Codes Handbook
CH	Credit Hour(s)
CE	Computer Engineering
CIS	Centre for Islamic Studies
CS	Computer Sciences
CSE	Computer & Software Engineering
DIC	Director Islamabad Campus
DIPP	Director Institute of Professional Psychology
DKC	Director Karachi Campus
DLC	Director Lahore Campus
DNIMA	Director National Institute of Maritime Affairs
DNCMP	Director National Centre for Maritime Policy Research
DS	Dental Section BUMDC
EDC	Estimated Date of Completion
EE	Electrical Engineering
EES	Earth & Environmental Sciences
EMBA	Executive Master of Business Administration
EP	Examinations Policy
ES	Engineering Sciences
FHB	Faculty Handbook
FYP	Final Year Project
HS	Health Sciences
HSS	Humanities & Social Sciences
iaw	in accordance with
IR	International Relations
MS	Management Sciences
NBEAC	National Business Education Accreditation Council
OACM	Online Academic Council Meeting
PMDC	Pakistan Medical & Dental Council
PNC	Pakistan Nursing Council
PNNC	Pakistan Navy Nursing College
PNMTS	Pakistan Navy Medical Training School
PFM	Permanent Faculty Member
PEO	Program Educational Objectives
PH	Public Health
QAL	Quranic Arabic Language
ToS	Table of Specifications
SE	Software Engineering
SHB	Students Handbook
SCM	Supply Chain Management
T&N	Telecom & Networking
URD	User Requirements Document
VFM	Visiting Faculty Member

Attendance**BUHO****Present**

1. Vice Admiral Kaleem Shaukat HI(M) (Retd)	Rector	In Chair
2. Rear Admiral Nasir Mahmood HI(M) (Retd)	Pro-Rector (RIC)	Member
3. Rear Admiral Habib Ur Rehman HI(M) (Retd)	Pro-Rector (Acad)	Member
4. Cdre Shafqat Azad SI (M), S.Bt (Retd)	Registrar	Member
5. Cdre Shahid Azmat Wain SI (M) (Retd)	Director LC	Member
6. Dr Habib ur Rehman Asim	Advisor (Islamic Studies)	Member
7. Dr. Atif Raza Jafri	Dean (ES)	Member
8. Dr. Adam Saud	Dean (H & SS)	Member
9. Dr. Ali Imtiaz	Dean (MS)	Member
10. Cdre Asim Raza SI(M) (Retd)	Controller of Exams	Member
11. Dr. Riaz Ahmed	Dir Academics	Member & Secy
12. Cdre M Mateen Ur Rehman SI(M) (Retd)	Dir Admissions	Member
13. Brig Asif Ali Asif (Retd)	Dir Health Sciences	Member
14. Cdre Tahir Javed SI (M) (Retd)	Dir Admin	Member
15. Dr. Shehzad Khalid	Dir R&D/ORIC	Member
16. Mr Fazal Wahab	Dir DQA	Member
17. Mr. Khalid Mumtaz	Dir LDC	Member

In Attendance

18. Ms. Sundal Mufti	Dir Student Affairs
19. Dr. Asim A Awan	Dir Marketing
20. Mr Rizwan Aamir	Dir IT
21. Dr M Awais Mehmood	Dir IO
22. Captain Azhar Iqbal PN (Retd)	Dy. Registrar (Academics)
23. Cdr Amer Abdullah PN (Retd)	Dy. Director (Academics) (UG)
24. Cdr Mahmood Ahmed Shaikh PN (Retd)	Dy. Registrar (Regulations)

BUIC**Present**

25. Rear Admiral Naveed Ahmad Rizvi HI(M) (Retd)	DG BUIC	Member
26. Senior Prof Dr Syed Abdul Siraj	HOD (Media Studies)	Member
27. Associate Prof. Dr Awais Majeed	HOD (SE)	Member
28. Associate Prof. Dr Muhammad Muzammal	HOD (CS)	Member
29. Associate Prof. Dr Said Akbar Khan	HOD (EES)	Member
30. Senior Assistant Prof Dr Muhammad Umer Hayat	HOD (HSS)	Member
31. Senior Assistant Prof Dr. Shahzad Hassan	HOD (CE)	Member
32. Senior Assistant Prof Dr. Noshi Iram Zaman	HOD (PP)	Member
33. Senior Assistant Prof Ms Malieka Farah Deebea	HOD (Law)	Member
34. Senior Assistant Prof Dr Junaid Imtiaz	HOD (EE)	Member
35. Dr. Syed Muhammad Shahid Tirmazi	HOD (IS)	Member

In Attendance

36. Mr. Abid Ali Butt	Senior Lecture (Media Studies Department)
37. Ms. Asia Ashfaq	Cluster Head (Anthropology)

BUKC**Present**

38. Vice Admiral Khawaja Ghazanfar Hussain HI(M) (Retd)	DG	Member
39. Cdre Muzammil Hussain SI(M), SE (Retd)	Director	Member
40. Prof. Dr. Bashir Ahmad	Principal (BBS)	Member
41. Senior Associate Prof Dr Sohaib Ahmed	Principal (SEAS)	Member
42. Dr. Oyoon A Razzaq	Principal BH3S	Member
43. Dr. Osama Rehman	HOD (SE)	Member
44. Dr. Salma Hamza	HOD (E& ES)	Member

45. Engr. Dr. Najam M Amin	HOD (EE)	Member
46. Dr Naveed R Khan	HOD (MS)	Member
47. Engr.Dr Syed Safdar Ali Rizvi	HOD (CS)	Member
48. Dr.Shoaib Mughal	HOD (CE)	Member
49. Dr. Talat Sharafat Rehmani	HOD (H&SS)	Member
50. Dr. Asif Inam	HOD (Maritime Sciences)	Member
51. Dr. Sayma Zia	HOD (BS)	Member
52. Senior Lecturer Mah-e-Darakhshan	HOD (Media Studies)	Member

In Attendance

53. Dr. Waqar Uddin	DD (Academics)	
54. Cdr Sajjid Hussain PN	Chief Instructor PNSL	
55. Lt Cdr Dr. Malik Mamoon Munir PN	Training Coordinator Officer PNSL	
56. Ms. Erum Shafiq	AD (QA)	

BULC

Present

57. Associate Prof Dr. Urooj Sadiq	HOD (PP)	Member
58. Senior Asstt Prof Dr. Khawaja Qasim Maqbool	HOD (CS&IT)	Member
59. Assistant Prof Dr. Muhammad Ahmad	HOD (MS)	Member

BUMDC

Present

60. Vice Admiral Khalid Amin HI(M) (Retd)	DG	Member
61. Prof. Dr. Ambreen Usmani	Dean HS/Principal	Member
62. Prof. Dr. Khalid Mustafa	Vice Principal (Med)	Member
63. Dr. Kulsoom Fatima	Vice Principal (DS)	Member
64. Dr. Khalid Aziz	Vice Principal (DPT)	Member
65. Dr. Mahreen Lateef	HOD (MDRL/Secy PGP)	Member

In Attendance

66. Prof. Iram Sadiqa	Professor of Physiology	
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IPP

Present

67. Prof Dr Zainab Hussain Bhutto	Dean PP/ Principal	Member
68. Dr. Kiran Bashir Ahmed	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 10:30 hrs with recitation from the Holy Quran and continued till 1630 hrs. The meeting recessed for lunch and prayer at 1300 hrs and resumed proceedings at 1400 hrs.
2. The Honorable Rector welcomed all the participants and emphasized upon the significance of the HEC Undergraduate Education Policy 2020 and the requirement of suitable implementation leading to achieving the purpose of quality education at BU.

Item 3701: Revision of Roadmaps of UG Programs for implementation of HEC Undergraduate Education Policy 2020

Sponsor: All Deans

Referral Authority: All Faculties Board of Studies

Summary of the Case

3. Upon receipt of “HEC Undergraduate Education Policy 2020” vide letter No. 1-32/PERU/UGE Policy/HEC/20/18 dated 12th August 2020, a presentation was held at BU through VLC on 21st August 2020 to discuss salient features of subject Policy, which was attended by all CUs. In concluding remarks, the honorable Rector directed to all concerned for in-depth review and workout modalities through respective DBOS / FBOS for adoption of said Policy.

4. Accordingly, respective Deans were requested to forward recommendations of FBOS as agenda point for inclusion in 36th ACM related to HEC Undergraduate Policy 2020 by 26th Oct 2020. Later, with the permission of honorable Rector, HEC Undergraduate Policy was excluded from 36th ACM agenda due large volume of the Policy agenda and need for further deliberation prior adoption at BU.

5. Subsequently, a meeting was held at BUHO through VLC on 23rd November 2020, chaired by Pro-Rector (Academics), to deliberate subject Policy. It was decided there in that Program-wise/School-wise details of queries relating to new Undergraduate Policy, requiring clarifications from HEC, would be consolidated for onward submission to HEC through QA Dte. Moreover, revised roadmaps in respect of all related Programs (where applicable) would be finalized by respective Faculties and forwarded to Acad Dte within stipulated timeframe, for consideration as agenda for a Special meeting of BU Academic Council.

6. In the same regard, another meeting was held at BUHO through VLC on 29th January 2021, chaired by Pro-Rector (Academics), where all Deans presented respective roadmaps as per HEC Undergraduate Policy. It was then decided that revised/updated roadmaps of all related Programs in light of held discussion would be finalized and forwarded to Academics Directorate by 16th Feb 2021 for 37th (Special) ACM. Further, points raised during the Meeting as well as received from Dean (HS) and Associate Dean (MS), requiring referral to HEC for clarification of said Policy, were forwarded to QA Dte on 1st Feb 2021.

7. Roadmaps of UG Programs forwarded by respective Faculties for deliberation are placed at in relevant Annexes of **Appendage 3701**; as follows:

a. Faculty of Health Sciences	—	Annex A
b. Faculty of Professional Psychology	—	Annex B
c. Faculty of Humanities and Social Sciences	—	Annex C
d. Faculty of Engineering Sciences	—	Annex E
e. Faculty of Management Sciences	—	Annex D

Discussion

8. All revised Roadmaps were presented by respective Deans during the 37th (Special) ACM. Alignments required in terms of HEC Undergraduate Education Policy 2020 and specific distribution of course work under the broad heading of *General Education Requirement*, *Disciplinary Requirement* and *Practical Learning Requirement* were evaluated and deliberated threadbare. Need for error free implementation of the Roadmaps was also emphasized by the participants. The Chair directed respective stakeholders to ensure suitable alignments in proposed Roadmaps, leading to achieving the purpose of quality education as well as true implementation of BU UG Policy 2020. A standard

format for alignment of all UG programs in accordance with said Policy was accordingly shared with all stakeholders.

Decision 3701

9. Following revisions in the Roadmaps as per **Appendage 3701** were approved by 37th (Special) ACM, for alignment with HEC Undergraduate Policy 2020; subject to separate approval for timeline to adopt the amended Roadmaps (to be processed separately at later date):

- a. **Faculty of Health Sciences**
 - (1) Medical Laboratory Technology
 - (2) Doctor of Physical Therapy
- b. **Faculty of Professional Psychology.** Bachelor of Science in Psychology
- c. **Faculty of Humanities and Social Sciences**
 - (1) Bachelor of Social Sciences (International Relations)
 - (2) Bachelor of Social Sciences (Development Studies)
 - (3) Bachelor of Social Sciences (Anthropology)
 - (4) Bachelor of Science in Public Health
 - (5) Bachelor of Science in Media Studies
 - (6) Bachelor of Science in TV Broadcasting & Digital Media
 - (7) Bachelor of Science in English
 - (8) Bachelor of Law
- d. **Faculty of Engineering Sciences**
 - (1) Bachelor of Science in Environmental Sciences
 - (2) Bachelor of Science in Geology
 - (3) Bachelor of Science in Geophysics
 - (4) Bachelor of Science in Geoscience
- e. **Faculty of Management Sciences**
 - (1) Bachelor of Business Administration
 - (2) Bachelor of Science in Accounting and Finance
 - (3) Bachelor of Science in Economics and Finance
 - (4) Bachelor of Science in Economics
 - (5) Bachelor of Science in Supply Chain Management
 - (6) Bachelor of Science in Maritime Business & Management

10. Course Titles, Course Codes and Course Outlines of new/ amended courses contained in revised Roadmaps are to be processed separately by respective Departments for ACM approval.

Action Required	Action by	Responsibility of
Implementation of the Decision	All Principals/All HoDs Controller of Examinations Director Admissions Director IT	All Deans
Statutory Documents affected:	Updating of CCH, Prospectus, CMS and BU Website.	

11. The Chair thanked all participants for their whole headed participation and directed all concerned to ensure complete accuracy in revised Roadmaps for smooth implementation as and when the timeline for the same is approved by the Academic Council.

Dated: 21 May 2021

ASIM RAZA SI(M)
Commodore (Retd)
Director Academics
Secy Academic Council

**Revision of Roadmaps of UG Programs for implementation of HEC
Undergraduate Education Policy 2020**

FACULTY OF HEALTH SCIENCES

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BS MLT****Faculty: Health Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	CSK 105	Communication Skills	3 + 0	1 Cr hr added
		PES 111	Physical Education & Sports	3 + 0	1 Course added
		HPH 101	Human Physiology I	2 + 1	No change
		HPH 107	Human Physiology II	2 + 1	No change
		BSC 103	Behavioral Science	3 + 0	1 Cr hr added
		MSC 109	Medical Sociology	2 + 1	1 Cr hr added
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 106	English I	3 + 0	1 Cr hr added
		ENG 112	English II	3 + 0	1 Cr hr added
		ENG 206	English III	3 + 0	1 Course added
		COM 104	Computer studies	2 + 1	1 Cr hr added
		BSS 110	Biostatistics	2 + 1	1 Cr hr added
Civilizational courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	PKS 205	Pak Studies	3 + 0	1 Cr hr added
		IST 204	Islamic Studies	3 + 0	1 Cr hr added

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses	HMT 203	Hematology I	2 + 1	Same as previous
	DMB 209	Diagnostic Microbiology I	2 + 1	Same as previous
	HMT 210	Hematology II	2 + 1	Same as previous
	CPT 211	Chemical Pathology	2 + 1	Same as previous
	HPT 212	Histopathology	1 + 1	1 Cr Hr deleted due to extra detailed content and to balance semester load
	CVM 302	Clinical Virology & Mycology	2 + 1	Same as previous
	DMB 303	Diagnostic Microbiology I	2 + 1	Same as previous
	CPT 304	Clinical Pathology	2 + 1	Same as previous
	MLI 307	Medical Lab Instrumentation	2 + 1	Same as previous
	CPS 308	Clinical Parasitology	2 + 1	Same as previous
	IAS 309	Immunology and serology	2 + 1	Same as previous
	BLB 310	Blood Banking	2 + 1	Same as previous

	MLM 401	Medical Laboratory Management Skills	3 + 0	Same as previous
	FIC 402	Fundamental of infection control	2 + 1	Same as previous
	SDB 403	Systematic Diagnostic Bacteriology	2 + 1	Course omitted due to content overlapping and essential contents incorporated in Diagnostic Microbiology.
	CAC 404	Cytology and Cytogenetics	2 + 1	Same as previous
	WPD 301	WBCS and Platelets Disorders	2 + 1	Course omitted due to content overlapping and essential contents incorporated in hematology II.
Lab/Field work/ Thesis	RPT 406	Research Project	6	Same as previous
	SMR 408	Seminar	1+0	Same as previous

c. Optional

<i>Sub-Category</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
Optional Courses	HAT 102	Human Anatomy-I	2+1	1 Cr Hr deleted
	HAT 108	Human Anatomy -II	2+1	1 Cr Hr deleted
	MBC 201	Medical Biochemistry -I	2+1	Same as previous
	GPT 202	General Pathology-I	2+1	Same as previous
	MBC 207	Medical Biochemistry -II	2+1	Same as previous
	GPT 208	General Pathology-II	2+1	Same as previous

d. Distribution:

<i>Sub-Category</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>	<i>Remarks (Existing or new course, CHs added, etc.)</i>
Distribution Courses	HGN 311	Human Genetics	2+1	Same as previous
	GPH 312	General Pharmacology-II	2+1	Same as previous
	MCB 405	Research Methodology	3 +0	Same as previous
	BTC 408	Biotechnology	2+1	Same as previous
	BIN 409	Bioinformatics	2+1	Same as previous
	EPD 410	Epidemiology	2+0	Same as previous
	GPH 305	General Pharmacology-I	2+1	Same as previous
	MCB 306	Molecular Biology	2+1	Same as previous

e. Practical Learning Requirements

Category		Weeks/Hours
Internship (9 weeks)	INT 411	9 weeks
Practical Learning Lab* (4 contact hrs per week)		
	Youth Club	(4 contact hrs per week) in 1 st semester
	Sports	(4 contact hrs per week) in 2 nd semester

* Weekly planned PLL activities for the semester

Program Summary:

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	44	130			
Revised (as per new HEC Policy 2020)	44	131	9 weeks	(4 contact hrs per week)I & II semester	

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: BS MLT****Faculty: Health Science****Semester 1:**

<i>S #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			Theory	Lab		
1.	HPH 101	Human Physiology-I	2	1	Natural Science (1)	Same as previous
2.	HAT 102	Human Anatomy-I	2	1	*Optional (1)	1 Cr Hr deleted
3.	BSC 103	Behavioral Sciences	3	0	Social Sciences (1)	1 Cr Hr added
4.	COM 104	Computer Studies	2	1	Quantitative Reasoning (1)	1 Cr Hr added
5.	CSK 105	Communication Skills	3	0	Arts & humanities (1)	1 Cr Hr added
6.	ENG 106	English - I	3	0	Expository Writing (1)	1 Cr Hr added
	Total Credit Hours		15	3		
7	Practical Learning Lab (4 contact hours per week)					

* Optional: These are introductory courses in different disciplines that are offered by department, which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

Semester 2:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			Theory	Lab		
1	HPH 107	Human Physiology -II	2	1	Natural Science (2)	Same as previous
2	HAT 108	Human Anatomy -II	2	1	Optional (2)	Same as previous
3	MSC 109	Medical Sociology	2	1	Social Sciences (2)	1 Cr Hr added
4	BSS 110	Biostatistics	2	1	Quantitative Reasoning (2)	1 Cr Hr added
5	PES 111	Physical Education & Sports	3	0	Arts & Humanities (2)	1 Course added
6	ENG 112	English -II	3	0	Expository Writing (2)	1 Cr Hr added
	Total Credit Hours		14	4		
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	MBC 201	Medical Biochemistry -I	2	1	Optional (3)	Same as previous
2	GPT 202	General Pathology-I	2	1	Optional (4)	Same as previous
3	HMT 203	Hematology – I	2	1	Major (1)	Same as previous
4	IST 204	Islamic Studies	3	0	Religious Studies	1 Cr hr added
5	PKS 205	Pakistan Studies	3	0	Pak Studies	1 Cr hr added
6	ENG 206	English -III	3	0	Expository Writing (3)	1 Course added
Total Credit Hours			15	3		
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	MBC 207	Medical Biochemistry -II	2	1	Optional (5)	Same as previous
2	GPT 208	General Pathology-II	2	1	Optional (6)	Same as previous
3	DMB 209	Diagnostic Microbiology-I	2	1	Major (2)	Same as previous
4	HMT 210	Hematology –II	2	1	Major (3)	Same as previous
5	CPT 211	Chemical Pathology	2	1	Major (4)	Same as previous
6	HPT 212	Histopathology	1	1	Major (5)	1 Cr hr deleted
Total Credit Hours			11	6		
7	Practical Learning Lab (4 contact hours per week)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	CVM 302	Clinical Virology and Mycology	2	1	Major (7)	Same as previous
2	DMB 303	Diagnostic Microbiology-II	2	1	Major (8)	Same as previous
3	CPT 304	Clinical Pathology	2	1	Major (9)	Same as previous
4	GPH 305	General Pharmacology-I	2	1	Distribution	Same as previous
5	MCB 306	Molecular Biology	2	1	Distribution	Same as previous
Total credit Hours			10	5		

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or new course, CHs added, etc.)
			Theory	Lab		
1	MLI 307	Medical Lab Instrumentation	2	1	Major (10)	Same as previous
2	CPS 308	Clinical Parasitology	2	1	Major (11)	Same as previous
3	IAS 309	Immunology and serology	2	1	Major (12)	Same as previous
4	HGN 311	Human Genetics	2	1	Distribution (3)	Same as previous
5	GPH 312	General Pharmacology-II	2	1	Distribution (4)	Same as previous
Total Credit Hours			10	5		

Semester 7:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MLM 401	Medical Laboratory Management Skills	3	0	Major (13)	Same as previous
2	FIC 402	Fundamental of infection control	2	1	Major(14)	Same as previous
3	CAC 404	Cytology and Cytogenetics	2	1	Major (15)	Same as previous
4	BLB 310	Blood Banking	2	1	Major (16)	Same as previous
5	MCB 405	Research Methodology	3	0	Distribution (5)	Same as previous
Total Credit Hours			12	3		

Semester 8:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or new course, CHs added, etc.)
			Theory	Lab		
1	RPT 406	Research Project	6		Major (17)	Same as previous
2	SMR 407	Seminar	1	0		Same as previous
3	BTC 408	Biotechnology	2	1	Distribution (6)	Same as previous
4	BIN 409	Bioinformatics	2	1	Distribution (7)	Same as previous
5	EPD 410	Epidemiology	2	0	Distribution (8)	Same as previous
6	INT 411	Internship (9 week)			Practical learning Component	
		Total Credit Hours	13	2		

Program Summary:

Total Courses	Total Credit Hours
44	131

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: DPT****Faculty: Health Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	CMS 105	Communication Skills	3 + 0	1 new course added
		PPL 111	Professional Practice	3+ 0	1 Cr hr added
		MEP 208	Medical Physics	2+1	No change
		HEW 112	Health & Wellness	3+0	1 Cr hr added
		BPE 205	Behavioral Science	3+ 0	1 Cr hr added
		SOC 103	Sociology	3 + 0	1 Cr hr added
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 104	English I	3 + 0	No change
		ENG 110	English II	3 + 0	No change
		ENG 201	English III	3 + 0	No change
		ITC 106	Introduction To Computer	2 + 1	No change
		BST 210	Biostatistics I	3 + 0	No change
Civilizational courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	PST 109	Pak Studies	3 + 0	1 Cr hr added
		ISL 206	Islamic Studies	3 + 0	1 Cr hr added

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses	KNS 202	KINESIOLOGY-I	2 + 1	Same as previous
	KNS 209	KINESIOLOGY-II	2 + 1	Same as previous
	BIE 212	BIOMECHANICS & ERGONOMICS-I	2 + 0	1 Cr Hr deleted to balance semester load
	BIE 304	BIOMECHANICS & ERGONOMICS-II	2 + 1	Same as previous
	EPY 211	EXERCISE PHYSIOLOGY	2+1	Same as previous
	PAE 303	PHYSICAL AGENT & ELECTROTHERAPY-I	2+1	Same as previous
	PAE 310	PHYSICAL AGENT & ELECTROTHERAPY-II	2+1	Same as previous
	TET 307	THERAPEUTIC EXERCISES & TECHNIQUES	2 + 1	Same as previous
	MPT 404	MUSCULOSKELETAL PHYSICAL THERAPY	2 + 1	Same as previous

	EBP 502	EVIDENCE BASED PRACTICE	2 + 1	Same as previous
	NPT 409	NEUROLOGICAL PHYSICAL THERAPY	2 + 1	Same as previous
	EPT 411	EMERGENCY PROCEDURES & PRIMARY CARE IN PHYSICAL THERAPY	2 + 1	Course omitted due to content overlapping and essential contents incorporated in surgery, medicine, musculoskeletal physical therapy & neurological physical therapy.
	CPT 501	CARDIOPULMONARY PHYSICAL THERAPY	2 + 1	Same as previous
	PRO 411	PROSTHETICS & ORTHOTICS	2 + 0	Same as previous
	CDD 503	CLINICAL DECISION MAKING & DIFFERENTIAL DIAGNOSIS	3+ 0	Course omitted due to content overlapping and essential contents incorporated in supervised clinical practice III,IV,V,VI.
	MAT 410	MANUAL THERAPY	2 + 1	Same as previous
	IPT 506	INTEGUMENTARY PHYSICAL THERAPY	2 + 0	Same as previous
	OGT 508	OBSTETRICS & GYNAECOLOGY PHYSICAL THERAPY	2 + 0	Same as previous
	PET 509	PAEDIATRIC PHYSICAL THERAPY	2 + 0	Same as previous
	GGT 510	GERONTOLOGY & GERIATRIC PHYSICAL THERAPY	2 + 0	Same as previous
	SPT 504	SPORTS PHYSICAL THERAPY	2 + 0	Same as previous
	SCP 306	SUPERVISED CLINICAL PRACTICE-I	0+2	1 Cr Hr deleted to balance semester load
	SCP 312	SUPERVISED CLINICAL PRACTICE-II	0+2	1 Cr Hr deleted to balance semester load
	SCP 406	SUPERVISED CLINICAL PRACTICE-III	0+3	Same as previous
	SCP 412	SUPERVISED CLINICAL PRACTICE-IV	0+3	Same as previous
	SCP 505	SUPERVISED CLINICAL PRACTICE-V	0+3	Same as previous
	SCP 511	SUPERVISED CLINICAL PRACTICE-VI	0+4	Same as previous
Lab/Field work/ Thesis	REP 507	RESEARCH PROJECT	0+6	Same as previous

c. Optional

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Optional Courses	ANT 101	ANATOMY-I	2 + 1	1 Cr Hr deleted to balance semester load
	ANT 107	ANATOMY -II	2+1	1 Cr Hr deleted to balance semester load
	ANT 203	ANATOMY -III	2+1	Same as previous
	ANT 207	ANATOMY -IV	2+1	Same as previous
	PHY 102	PHYSIOLOGY-I	2+1	Same as previous
	PHY 108	PHYSIOLOGY-II	2+1	Same as previous
	PHY 204	PHYSIOLOGY-III	2+1	Same as previous
	BIO 305	BIOCHEMISTRY-I	2+1	Same as previous
	BIO 311	BIOCHEMISTRY-II	2+1	Same as previous
	MBG 212	MOLECULAR BIOLOGY & GENETICS	2+0	Course omitted due to non-essential contents for DPT.
	PAM 301	PATHOLOGY & MICROBIOLOGY-I	2+1	Same as previous
	PAM 308	PATHOLOGY & MICROBIOLOGY-II	2+1	Same as previous
	BST 311	BIostatistics-II	3+0	Course omitted due to content overlapping and to balance semester load
	PHT 302	PHARMACOLOGY-I	2+0	Same as previous
	PHT 309	PHARMACOLOGY-II	2+0	Same as previous
	MED 401	MEDICINE-I	3+0	Same as previous
	MED 407	MEDICINE-II	3+0	Same as previous
	SUG 402	SURGERY-I	3+0	Same as previous
	SUG 408	SURGERY-II	3+0	Same as previous
	RDI 403	RADIOLOGY & Diagnostic Imaging	2+1	Same as previous

d. Distribution

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Distribution Courses	SRM 503	SCIENTIFIC INQUIRY & RESEARCH METHODOLOGY	2+1	Same as previous
	CMR 405	COMMUNITY MEDICINE & REHABILITATION	2+0	1 Cr Hr deleted to balance semester load

e. Practical Learning Requirements

Category		Weeks/Hours
Internship I Community services (8 weeks)		8Weeks
Practical Learning Lab* (4 contact hrs per week)		
	Youth Club	(4 contact hrs per week) in 1st semester
	Sports	(4 contact hrs per week) in 2nd semester

* Weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	62	175	8 Weeks		
Revised (as per new HEC Policy 2020)	59	169	8 Weeks	(4 contact hrs per week)I & II semester	

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: DPT****Faculty: Health Science****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1.	ANT 101	ANATOMY-I	2	1	*Optional (1)	1 Cr Hr deleted to balance semester load
2.	PHY 102	PHYSIOLOGY-I	2	1	Optional (2)	No change
3.	SOC 103	Sociology	3	0	Social Sciences (1)	1 Cr hr added
4.	ENG 104	English I	3	0	Expository Writing (1)	No change
5.	CMS 105	Communication Skills	3	0	Arts & humanities (1)	1 new course added
6.	ITC 106	Introduction To Computer	2	1	Quantitative Reasoning (1)	No change
Total Credit Hours			15	3		
7	Practical Learning Lab (4 contact hours per week)					

* Optional: These are introductory courses in different disciplines that are offered by department, which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ANT 107	ANATOMY –II	2	1	Optional (3)	1 Cr Hr deleted to balance semester load
2	PHY 108	PHYSIOLOGY-II	2	1	Optional (4)	No change
3	PST 109	Pak Studies	3	0	Pak Studies (Civilizational courses) (1)	1 Cr hr added
4	ENG 110	English II	3	0	Expository Writing (2)	No change
5	PPL 111	Professional Practice	3	0	Arts & Humanities (2)	1 Cr hr added
6	HEW 112	HEALTH & WELLNESS	3	0	Natural Science (1)	1 Cr hr added
Total Credit Hours			16	2		
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	ENG 201	ENGLISH III	3	0	Expository Writing (3)	No change
2	KNS 202	KINESIOLOGY-I	2	1	Major (Disciplinary) (1)	No change
3	ANT 203	ANATOMY -III	2	1	Optional (5)	No change
4	PHY 204	PHYSIOLOGY-III	2	1	Optional (6)	No change
5	BPE 205	BEHAVIORAL SCIENCE	3	0	Social Sciences (2)	1 Cr hr added
6	ISL 206	ISLAMIC STUDIES	3	0	Islamic or Religious Studies (Civilizational courses) (1)	1 Cr hr added
Total Credit Hours			15	3		
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	ANT 207	ANATOMY -IV	2	1	Optional (7)	Same as previous
2	MEP 208	MEDICAL PHYSICS	2	1	Natural Sciences (2)	No change
3	KNS 209	KINESIOLOGY-II	2	1	Major (Disciplinary) (3)	Same as previous
4	BST 210	BIOSTATISTICS	3	0	Quantitative Reasoning (2)	Same as previous
5	EPY 211	EXERCISE PHYSIOLOGY	2	1	Major (Disciplinary) (2)	Same as previous
6	BIE 212	BIOMECHANICS & ERGONOMICS-I	2	0	Major (Disciplinary) (4)	1 Cr Hr deleted to balance semester load
Total Credit Hours			13	4		
7	Practical Learning Lab (4 contact hours per week)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	PAM 301	PATHOLOGY & MICROBIOLOGY-I	2	1	Optional (9)	Same as previous
2	PHT 302	PHARMACOLOGY-I	2	0	Optional (10)	Same as previous
3	PAE 303	PHYSICAL AGENT & ELECTROTHERAPY-I	2	1	Major (<i>Disciplinary</i>) (6)	Same as previous
4	BIE 304	BIOMECHANICS & ERGONOMICS-II	2	1	Major (<i>Disciplinary</i>) (5)	Same as previous
5	BIO 305	BIOCHEMISTRY-I	2	0	Optional (8)	Same as previous
6	SCP 306	SUPERVISED CLINICAL PRACTICE-I	0	2	Major (<i>Disciplinary</i>) (7)	1 Cr Hr deleted to balance semester load
Total credit Hours			10	5		

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	TET 307	THERAPEUTIC EXERCISES & TECHNIQUES	2	1	Major (<i>Disciplinary</i>) (8)	Same as previous
2	PAM 308	PATHOLOGY & MICROBIOLOGY-II	2	1	Optional (11)	Same as previous
3	PHT 309	PHARMACOLOGY-II	2	0	Optional (12)	Same as previous
4	PAE 310	PHYSICAL AGENT & ELECTROTHERAPY-II	2	1	Major (<i>Disciplinary</i>) (9)	Same as previous
5	BIO 311	BIOCHEMISTRY-II	2	1	Optional (13)	Same as previous
6	SCP 312	SUPERVISED CLINICAL PRACTICE-II	0	2	Major (<i>Disciplinary</i>) (10)	Cr Hr deleted to balance semester load
Total Credit Hours			10	6		

Semester 7:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MED 401	MEDICINE-I	3	0	Optional (14)	Same as previous
2	SUG 402	SURGERY-I	3	0	Optional (15)	Same as previous
3	RDI 403	RADIOLOGY &DIAGNOSTIC IMAGING	2	1	Optional (16)	Same as previous
4	MPT 404	MUSCULOSKELETAL PHYSICAL THERAPY	2	1	Major (<i>Disciplinary</i>) (11)	Same as previous
5	CMR 405	COMMUNITY MEDICINE & REHABILITATION	2	0	Distribution courses (1)	Cr Hr deleted to balance semester load
6	SCP 406	SUPERVISED CLINICAL PRACTICE-III	0	3	Major (<i>Disciplinary</i>) (12)	Same as previous
Total Credit Hours			12	5		

Semester 8:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or new course, CHs added, etc.)
			Theory	Lab		
1	MED 407	MEDICINE-II	3	0	Optional (17)	Same as previous
2	SUG 408	SURGERY-II	3	0	Optional (18)	Same as previous
3	NPT 409	NEUROLOGICAL PHYSICAL THERAPY	2	1	Major (<i>Disciplinary</i>) (13)	Same as previous
4	MAT 410	MANUAL THERAPY	2	1	Major (<i>Disciplinary</i>) (14)	Same as previous
5	PRO 411	PROSTHETICS & ORTHOTICS	2	0	Major (<i>Disciplinary</i>) (15)	Same as previous
6	SCP 412	SUPERVISED CLINICAL PRACTICE-IV	0	3	Major (<i>Disciplinary</i>) (16)	Same as previous
Total Credit Hours			12	5		

Semester 9:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	CPT 501	CARDIOPUMONARY PHYSICAL THERAPY	2	1	Major (Disciplinary) (17)	Same as previous
2	EBP 502	EVIDENCE BASED PRACTICE	2	1	Major (Disciplinary) (19)	Same as previous
3	SRM 503	SCIENTIFIC INQUIRY & RESEARCH METHODOLOGY	2	1	Distribution courses (2)	Same as previous
4	SPT 504	SPORTS PHYSICAL THERAPY	2	0	Major (Disciplinary) (20)	Same as previous
5	SCP 505	SUPERVISED CLINICAL PRACTICE-V	0	3	Major (Disciplinary) (21)	Same as previous
6	IPT 506	INTEGUMENTARY PHYSICAL THERAPY	2	0	Major (Disciplinary) (18)	Same as previous
		Total Credit Hours	10	7		

Semester 10:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	REP 507	RESEARCH PROJECT	0	6	Lab/Field work/ Thesis	Same as previous
2	OGT 508	OBSTETRICS & GYNAECOLOGY PHYSICAL THERAPY	2	0	Major (Disciplinary) (22)	Same as previous
3	PET 509	PAEDIATRIC PHYSICAL THERAPY	2	0	Major (Disciplinary) (23)	Same as previous
4	GGT 510	GERONTOLOGY & GERIATRIC PHYSICAL THERAPY	2	0	Major (Disciplinary) (24)	Same as previous
5	SCP 511	SUPERVISED CLINICAL PRACTICE-VI	0	4	Major (Disciplinary) (25)	Same as previous
		Total Credit Hours	6	10		

Program Summary:

Total Courses	Total Credit Hours
59	169

Note: One year house job in at least 250 bedded hospital for DPT graduates is mandatory by HEC.

FACULTY OF PROFESSIONAL PSYCHOLOGY

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BS (Psychology)****Faculty: Professional Psychology****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Natural Sciences (2) Social Sciences (2) Art & Humanities (2)	18	ENV 100	Fundamental to Biology	3	
		NEU 332	Neurological Basis of Behavior	3	
		DST 301	Introduction to Microeconomics	3	
		DST 302	Introduction to Macroeconomics	3	
		HSS 111	Introduction to International Relations	3	
		IRS 524	Analysis of Pakistan's Foreign Policy	3	
		ANT 102	Anthropological Theories	3	
		ANT 110	Applied Anthropology	3	
		DST 310	Poverty Alleviation – Contending Approaches	3	
		DST 303	Theories of Development – Contending Perspectives	3	
		IRS 516	Role of Non State Actors in International Relations	3	
		IRS 536	Politics of Human Rights	3	
		ANT 202	Anthropology of Beliefs and Rituals	3	
		ANT 206	Urban Anthropology	3	
		MED 107	Introduction to Mass Communication	3	
		MED 204	Introduction to Advertising and Public Relations	3	
		ENG 103	Introduction to Literature I	3	
		ENG 203	Introduction to Literature II	3	
		MED 111	Photography	3	
		MED 308	Video Editing	3	
		ENG 104	Introduction to Linguistics	3	
		ENG 520	English for Specific Purpose	3	

Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 103	English I	3	
		ENG 104	English II	3	
		BES 102	Creative Writing	3	
		BES 101	Introduction to Computers	3	
		MAT 105	Mathematics	3	
Civilizational Courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 101	Pakistan Studies	3	
		ISL 101	Islamic Studies	3	

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses Major Courses	PSY 107	Introduction to Psychology	3	
	SOP 105	Introduction to Social Psychology	3	
	HIS 209	History & Schools of Psychology	3	
	PER 219	Theories of Personality	3	
	EXP 216	Experimental Psychology	3	
	PRC 222	Psychological Practicum	3	
	MHP 325	Mental Health & Psychopathology – I	3	
	LSP 320	Psychology of Lifespan	3	
	POS 327	Positive Psychology	3	
	TES 328	Psychological Testing – I	6	
	COG 326	Cognitive Psychology	3	
	MHP 331	Mental Health & Psychopathology – II	3	
	COU 343	Counseling	3	
	CLI 333	Clinical Psychology	2	
	TES 334	Psychological Testing – II	6	
	RES 437	Research Methodology - I	3	
	EDU 442	Educational Psychology	2	
	RES 446	Research Methodology – II	3	
	ORG 454	Organizational Psychology	2	
Elective Courses	TEL 438	Teaching & Learning	3	
	COB 439	Consumer Behavior	3	

	PCC 440	Psychology of Cross Cultural Differences	3	
	CLP 441	Clinical Pharmacology	3	
	HIV 443	Counseling for HIV/AIDS and STIs	3	
	CHP 444	Child Psychology	3	
	PSM 445	Psychology of Motivation	3	
	MPY 439	Maritime Psychology	3	
	COP 447	Community Psychology	3	
	PSC 448	Psychology of Special Children	3	
	FRP 456	Forensic Psychology	3	
	ENV 449	Environmental Psychology	3	
	IPP 450	Islamic Approaches to Psychology and Psychotherapy	3	
	PSL 451	Psychology of Leadership	3	
	GRD 452	Group Dynamic	3	
	HTP 457	Health Psychology	3	
	ABA 453	Applied Behavior Analysis	3	
	SEP 458	Sports and Exercise Psychology	3	
	ENG 232	Oral Communication	3	
	MAT 305	Statistics	3	
	STA 330	Statistical Tools for Social Sciences	3	
Lab/Field work/ Thesis	RES 455	Research Thesis	4	

c. Practical Learning Requirements

Practical Learning Requirements	Category		Weeks/Hours		
	Internship		02 Credit Hours		
	Practical Learning Lab* (4 contact hrs per week)				
		Entrepreneurship	Participation in a PLL extracurricular activity as recommended by the Institution – This may include but is not limited to the Non-credited Community Support Program.		
		Youth Club			
		Sports	Students will also be encouraged to participate in different campus and sports activities (through SSC).		
			Further, as per 37 th Special ACM decision, a committee will be formed to elaborate/suggest avenues for the completion of PLL hours per week.		

* weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	46	132	02 Credit Hours	-	
Revised (as per new HEC Policy 2020)	45	132	02 Credit Hours	04 Hours Per Week	

Revision of Semester-wise roadmap in accordance with HEC UG Policy 2020**Program: BS (Psychology)****Faculty: Professional Psychology****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 103	English I	03	-	Expository Writing (1)	Existing
2	PAK 101	Pakistan Studies	03	-	Civilization Knowledge (1)	Existing
3	BES 101	Introduction to Computers	03	-	Quantitative Reasoning (1)	Existing
4	PSY 107	Introduction to Psychology	03	-	Major (1)	Existing
5		Gen I A Choose between 1 of 3 streams: Developmental Studies / International Relations / Anthropology	03	-	Social Science (1) DST 301 Introduction to Microeconomics / HSS 111 Introduction to International Relations / ANT 102 Anthropological Theories	New
6		Gen I B Choose between 1 of 2 streams: Media Studies / English	03	-	Arts and Humanities (1) MED 107 Introduction to Mass Communication / ENG 103 Introduction to Literature I	New
Total Credit Hours			18			
Practical Learning Lab (04 contact hours per week)						

* Optional: These are introductory courses in different disciplines that are offered by department which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 104	English II	03	-	Expository Writing (2)	Existing
2	ISL 101	Islamic Studies	03	-	Civilization Knowledge (2)	Existing

3	ENV 100	Fundamental of Biology	03	-	Natural Sciences (1)	Existing
4	SOP 105	Introduction to Social Psychology	03	-	Major (2)	Existing
5		Gen II A Continuation of the choice in Gen I A between 1 of 3 streams: Developmental Studies / International Relations / Anthropology	03	-	Social Sciences (2) DST 302 Introduction to Macroeconomics / IRS 524 Analysis of Pakistan's Foreign Policy / ANT 110 Applied Anthropology	New
6		Gen II B Continuation of the choice in Gen I A between 1 of 2 streams: Media Studies / English	03	-	Arts and Humanities (2) MED 204 Introduction to Advertising and Public Relations / ENG 203 Introduction to Literature II	New
Total Credit Hours			18			
Practical Learning Lab (04 contact hours per week)						

Semester 3:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 232	Oral Communication	03	-	Distribution (1)	Existing
2	MAT 105	Mathematics	03	-	Quantitative Reasoning (1)	Existing
3	HIS 209	History & School of Psychology	03	-	Major (3)	Existing
4	PER 219	Theories of Personality	03	-	Major (4)	New
5		Minor I-A Choose between 1 of 3 streams: Developmental Studies / International	03	-	Minor (1) DST 310 Poverty Alleviation – Contending Approaches / IRS 516 Role of Non State Actors in International	New

		Relations / Anthropology			Relations / ANT 202 Anthropology of Beliefs and Rituals	
6		Minor I-B Choose between 1 of 2 streams: Media Studies / English	03	-	Minor (2) MED 111 Photography / ENG 104 Introduction to Linguistics	New
Total Credit Hours			18			
Practical Learning Lab (04 contact hours per week)						

Semester 4:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	BES 102	Creative Writing	03	-	Expository Writing (3)	Existing
2	NEU 232	Neurological Basis of Behavior	03	-	Natural Science (2)	Existing
3	EXP 216	Experimental Psychology	02	01	Major (5)	New
4	PRC 222	Psychological Practicum	02	01	Major (6)	Existing
5		Minor II-A Continuation of the choice in Minor I A between 1 of 3 streams: Developmental Studies / International Relations / Anthropology	03	-	Minor (3) DST 303 Theories of Development – Contending Perspectives / IRS 536 Politics of Human Rights / ANT 206 Urban Anthropology	New
6		Minor II-B Continuation of the choice in Minor I B between 1 of 2 streams: Media Studies / English	03	-	Minor (4) MED 308 Video Editing / ENG 520 English for Specific Purpose	New
Total Credit Hours			18			
Practical Learning Lab (04 contact hours per week)						

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or new course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	MAT 305	Statistics	03	-	Distribution (2)	Existing
2	MHP 325	Mental Health & Psychopathology – I	03	-	Major (7)	Existing
3	LSP 320	Psychology of Lifespan	03	-	Major (8)	Existing
4	POS 327	Positive Psychology	03	-	Major (9)	Existing
5	TES 328	Psychological Testing – I	-	03	Major (10)	Existing
6	COG 326	Cognitive Psychology	03	-	Major (11)	Existing
Total Credit Hours			18			

Semester 6:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	STA 330	Statistical Tools for Social Sciences	03	-	Distribution (3)	Existing
2	MHP 331	Mental Health & Psychopathology – II	03	-	Major (12)	Existing
3	COU 343	Counseling	03	-	Major (13)	Existing
4	CLI 333	Clinical Psychology	02	-	Major (14)	Existing
5	TES 334	Psychological Testing – II	-	03	Major (15)	Existing
Total			14			

Semester 7:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	INT 436	Internship	-	02	Practical Learning Requirement	Existing
2	RES 437	Research Methodology – I	03		Major (16)	Existing
3	EDU 442	Educational Psychology	02		Major (17)	Existing
Elective Courses : Choose One						
4	TEL 438	Teaching & Learning	03	-	Distribution (4)	Existing
	COB 439	Consumer Behavior				Existing
	PCC 440	Psychology of Cross Cultural Difference				Existing
	CLP 441	Clinical Pharmacology				Existing
Elective Courses: Choose One						
5	HIV 443	Counseling for HIV/AIDS and STIs	03	-	Distribution (5)	Existing
	CHP 444	Child Psychology				Existing
	PSM 445	Psychology of Motivation				Existing
	MPY 439	Maritime Psychology				Existing
Total			13			

Semester 8:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	RES 446	Research Methodology – II	03		Major (18)	Existing
2	ORG 454	Organizational Psychology	02		Major (19)	Existing
3	RES 455	Research Thesis	04		Major (20)	Existing
Elective Courses: Choose One						
4	COP 447	Community Psychology	03	-		Existing

	PSC 448	Psychology of Special Children			Distribution (6)	Existing
	FRP 456	Forensic Psychology				Existing
	ENV 449	Environmental Psychology				Existing
	IPP 450	Islamic Approaches to Psychology and Psychotherapy				Existing
Elective Courses: Choose One						
5	PSL 451	Psychological of Leadership	03	-	Distribution (7)	Existing
	GRD 452	Group Dynamic				Existing
	HTP 457	Health Psychology				Existing
	ABA 453	Applied Behavioral Analysis				Existing
	SEP 458	Sports and Exercise Psychology				Existing
Total			15			

Program Summary:

Total Courses	Total Credit Hours
45	132

FACULTY OF HUMANITIES AND SOCIAL SCIENCES

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BSS (IR)****Faculty: Humanities and Social Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	HSS 115	Introduction to Media Studies	03	Existing
		HSS 102	Introduction to Philosophy	03	Existing
		ENV 105	Introduction to Environmental Sciences	03	Existing
		MAT 105	Mathematics	03	New
		HSS 107	Introduction to Psychology	03	Existing
		HSS 112	Introduction to Political Science	03	Existing
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 103	English-I	03	Existing
		ENG 105	English-II	03	Existing
		ENG 105	Oral Communication	03	Existing
		BES 101	Introduction to Computers	03	Existing
		MAT 205	Statistics	03	New
Civilizational Courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 101	Pakistan Studies	03	Existing (01 CH added)
		ISL 101	Islamic Studies	03	Existing (01 CH added)

b. *Disciplinary Requirement*

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses (Major Courses)	IRS 301	Theories of International Relations	3	Existing
	IRS 307	International Relations Since 1945	3	Existing
	IRS 308	International Organizations	3	Existing
	IRS 309	International Law	3	Existing
	IRS 403	Theories of Globalization	3	Existing
	IRS 314	Diplomacy	3	Existing
	IRS 313	Foreign Policy Analysis	3	Existing
	IRS 319	Government & Politics in Pakistan	3	Existing
	IRS 310	Foreign Policy of Great Powers	3	Existing
	IRS 401	Human Rights & Global Politics	3	Existing
	IRS 402	Global Environmental Politics	3	Existing
	IRS 410	Conflict & Conflict Resolution	3	Existing
	IRS 417	Arms Control & Disarmament	3	Existing
	IRS 323	Comparative Political System	3	Existing
	IRS 311	American Foreign Policy	3	Existing
	IRS 404	Issues in North South Relations	3	Existing
	IRS 408	International Terrorism	3	Existing
	IRS 315	Politics of Developing Nations	3	Existing
	IRS 411	Religion & Politics	3	Existing
	IRS 412	Theories of Nationalism	3	Existing
	IRS 413	Democratic Transitions: Issues & Challenges	3	Existing
	IRS 321	Politics of Development	3	Existing
	IRS 322	International Financial Institutions	3	Existing
	IRS 415	Global Governance & Development	3	Existing
	IRS 416	Politics of Social Welfare	3	Existing
	IRS 312	The Muslim World & International Politics	3	Existing

	IRS 330	Geo-Political Structure of the World	3	Existing
Minor Courses	IRS 405	International Politics of South Asia	3	Existing
	IRS 406	International Politics of Central Asia	3	Existing
	IRS 325	State & Society of South Asia	3	Existing
	IRS 320	Government & Politics in Central Asia	3	Existing
	IRS 407	International Politics of Southeast Asia	3	Existing
	IRS 326	American Government & Politics	3	Existing
	IRS 327	Politics in European Union	3	Existing
	IRA 328	Government & Politics in Middle East	3	Existing
Lab/Field work/ Thesis	RES 300	Review of Literature & Research Proposal	3	Existing
	RES 400	Data Collection & Seminars	3	Existing
	RES 500	Research Paper, Writing & Defense	3	Existing

c. **Distribution Courses**

Category	Course Code	Course Title	Credit Hours	Remarks
Distribution Courses	HSS 201	Introduction to Anthropology	3	Existing
	BES 106	Research Methodology	3	Existing
	HSS 110	Introduction to Development Studies	3	Existing
	HSS 202	Introduction to Sociology	3	Existing
	IRS 409	Strategic Studies	3	Existing
	IRS 303	Global Political Economy	3	Existing
Total			18	

d. **Practical Learning Requirements**

Category			Weeks	Credit Hours	
Practical Learning Requirements	Internship		09 weeks	02	Existing
	Practical Learning Lab* (4 contact hrs per week)	CSP	40		
		Entrepreneurship			
		Youth Club			
		Sports			

* weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	44	132	2 (Included in total CHs)	NA	-
Revised (as per new HEC Policy 2020)	44	134	2 (included in total CHs)	40 hours of mandatory Community Support Program (CSP) considered as PLL	

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: BSS (IR)****Faculty: Humanities and Social Sciences****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 103	English-I	3		Expository Writing (1)	Existing
2	ENV 105	Introduction to Environmental Sciences	3		Natural Sciences (1)	Existing
3	HSS 107	Introduction to Psychology	3		Social Science (1)	Existing
4	BES 101	Introduction to Computers	3		Quantitative Reasoning (1)	Existing
5	HSS 115	Introduction to Media Studies	3		Arts and Humanities (1)	Existing
6	HSS 201	Introduction to Anthropology	3		Distribution (1)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 104	English-II	3		Expository Writing (2)	Existing
2	MAT 105	Mathematics	3		Natural Sciences (2)	New
3	HSS112	Introduction to Political Science	3		Social Science (2)	Existing
4	PAK 101	Pakistan Studies	3		Pakistan Studies	Existing
5	HSS 102	Introduction to Philosophy	3		Arts and Humanities (2)	Existing
6	BES 106	Research Methodology	3		Distribution (2)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	ENG 105	Oral Communication	3		Expository Writing (3)	Existing
2	MAT 205	Statistics	3		Quantitative Reasoning (2)	New
3	ISL 101	Islamic Studies	3		Islamic/Religious Studies	Existing
4	HSS 110	Introduction to Development Studies	3		Distribution (3)	Existing
5	HSS 111	Introduction to International Relations	3		Major	Existing
6	HSS 202	Introduction to Sociology	3		Distribution (4)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	IRS 301	Theories of International Relations	3		Major	Existing
2	IRS 307	International Relations Since 1945	3		Major	Existing
3	IRS 314	Diplomacy	3		Major	Existing
4	IRS 302	Foreign Policy of Pakistan	3		Major	Existing
5	IRS 313	Foreign Policy Analysis	3		Major	Existing
6	IRS 409	Strategic Studies	3		Distribution (5)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	IRS 303	Global Political Economy	3		Distribution (6)	Existing
2	IRS 403	Theories of Globalization	3		Major	Existing
3	IRS 309	International Law	3		Major	Existing
4	IRS 308	International Organizations	3		Major	Existing
5	IRS 330	Geo-Political Structure of the World	3		Major	Existing
Total			15			

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	IRS 311	American Foreign Policy	3		Major	Existing
2	IRS 417	Arms Control & Disarmament	3		Major	Existing
3	IRS 411	Religion & Politics	3		Major	Existing
4	IRS 323	Comparative Political System	3		Major	Existing
5	IRS 319	Government & Politics in Pakistan	3		Major	Existing
Total			15			

Semester 7:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	IRS 310	Foreign Policy of Great Powers	3		Major	Existing
2	IRS 412	Theories of Nationalism	3		Major	Existing
3	IRS 405	International Politics of South Asia	3		Minor	Existing

4	IRS 406	International Politics of Central Asia	3		Minor	Existing
5	IRS 408	International Terrorism	3		Major	Existing
Total			15			

Semester 8:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	IRS 418	China in International Politics	3		Majors	Existing
2	IRS 401	Human Rights & Global Politics	3		Majors	Existing
3	IRS 328	Government & Politics in the Middle East	3		Minor	Existing
4	IRS 407	International Politics of Southeast Asia	3		Minor	Existing
5	IRS 410	Conflict & Conflict Resolution	3		Major	Existing
Total			15			

Program Summary:

Total Courses	Total Credit Hours
44	134 (Internship 02 CR)

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BSS (Development Studies)****Faculty: Humanities & Social Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	HSS 115	Introduction to Media Studies	03	Existing
		HSS 102	Introduction to Philosophy	03	Existing
		ENV 105	Introduction to Environmental Sciences	03	Existing
		MAT 105	Mathematics	03	New
		HSS 107	Introduction to Psychology	03	Existing
		HSS 112	Introduction to Political Science	03	Existing
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 103	English-I	03	Existing
		ENG 105	English-II	03	Existing
		ENG 105	Oral Communication	03	Existing
		BES 101	Introduction to Computers	03	Existing
		MAT 205	Statistics	03	New
Civilizational Courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 101	Pakistan Studies	03	Existing (01 CH added)
		ISL 101	Islamic Studies	03	Existing (01 CH added)

b. Disciplinary Requirement

<i>Sub-Category</i>	<i>Course code</i>	<i>Course Title</i>	<i>Credit Hours</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
Discipline Courses (Major Courses)	DST 301	Introduction to Microeconomics	3	Existing
	DST 302	Introduction to Macroeconomics	3	Existing
	DST 303	Theories of Development: Contending Perspectives	3	Existing
	HSS 400	Philosophy of Social Sciences	3	Existing
	HSS 402	Qualitative Research Methods	3	Existing
	HSS 401	Statistical Analysis of Social Data	3	Existing
	DST 312	Rural Development: Issues and Challenges	3	Existing
	DST 310	Poverty Alleviation: Contending Approaches	3	Existing
	DST 308	Sociology of Development	3	Existing
	DST 401	Sustainable Development & Livelihood Strategies	3	Existing
	DST 402	Social Development: Issues & Approaches	3	Existing
	DST 403	Civil Society & Development	3	Existing
	DST 406	Women Empowerment: Issues and Perspectives	3	Existing
	DST 410	Development Project: Planning, Appraisal & Implementation	3	Existing
	DST 411	Development Project: Monitoring & Evaluation	3	Existing
	DST 404	Global Development Experiments	3	Existing
	DST 405	Globalization & World Development	3	Existing
	DST 407	Community Development	3	Existing
	DST 413	Law & Development	3	Existing
	DST 338	Disaster Management & Assistance	3	Existing
	DST 339	Foundation of Social Policy	3	Existing
	DST 344	Religion & Development	3	Existing
	DST 340	Human Rights & Development	3	Existing
	DST 341	Conflict and Peace	3	Existing

	DST 342	Political Paradigm in Developing Countries	3	Existing
	DST 343	Health & Development: Perspectives, Issues and Practices	3	Existing
	DST 345	Contemporary Issues in Child Protection	3	Existing
Minor Courses	DST 307	Development Economics	3	Existing
	DST 309	International Development	3	Existing
	DST 408	Development Communication	3	Existing
	DST 409	Development Policy: Processes and Institutions	3	Existing
	DST 414	Migration, Diaspora & Development	3	Existing
	DST 336	Climate change Politics, Policy & Practice	3	Existing
	DST 337	Governance, Democracy and Development in countries in transition	3	Existing
Distribution Courses	HSS 201	Introduction to Anthropology	3	Existing
	BES 106	Research Methodology	3	Existing
	HSS 111	Introduction to international relations	3	Existing
	HSS 202	Introduction to Sociology	3	Existing
	HSS 400	Philosophy of Social Sciences	3	Existing
	HSS 402	Qualitative Research Methods	3	Existing
Lab/Field work/ Thesis Thesis (Optional - 6 Credits)	RES 300	Review of Literature and Research Proposal	3	Existing
	RES 400	Data Collection and Seminars	3	Existing
	RES 500	Research Paper Writing and Defense	3	Existing

c. Practical Learning Requirements

Category			Weeks/Hours		
Practical Learning Requirements	Internship		<i>9 weeks</i>	<i>2</i>	
	Practical Learning Lab* (4 contact hrs per week)				
		Entrepreneurship			
		Youth Club			
		Sports			

* weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	44	132	2 (included in total CHs)	NA	-
Revised (as per new HEC Policy 2020)	44	134	2 (included in total CHs)	40 hours of mandatory Community Support Program (CSP) considered as PLL	-

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: BSS (Development Studies)****Faculty: Humanities & Social Sciences****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 103	English-I	3		Expository Writing (1)	Existing
2	ENV 105	Introduction to Environmental Sciences	3		Natural Sciences (1)	Existing
3	HSS 107	Introduction to Psychology	3		Social Science (1)	Existing
4	BES 101	Introduction to Computers	3		Quantitative Reasoning (1)	Existing
5	HSS 115	Introduction to Media Studies	3		Arts and Humanities (1)	Existing
6	HSS 201	Introduction to Anthropology	3		Distribution (1)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 104	English-II	3		Expository Writing (2)	Existing
2	MAT 105	Mathematics	3		Natural Sciences (2)	New
3	HSS112	Introduction to Political Science	3		Social Science (2)	Existing
4	PAK 101	Pakistan Studies	3		Pakistan Studies	Existing
5	HSS 102	Introduction to Philosophy	3		Arts and Humanities (2)	Existing
6	BES 106	Research Methodology	3		Distribution (2)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 105	Oral Communication	3		Expository Writing (3)	Existing
2	MAT 205	Statistics	3		Quantitative Reasoning (2)	New
3	ISL 101	Islamic Studies	3		Islamic/Religious Studies	Existing (01 CH Added)
4	HSS 110	Introduction to Development Studies	3		Major (1)	Existing
5	HSS 111	Introduction to International Relations	3		Distribution (3)	Existing
6	HSS 202	Introduction to Sociology	3		Distribution (4)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	HSS 400	Philosophy of Social Sciences	3		Distribution (5)	Existing
2	DST 310	Poverty Alleviation: Contending Approaches	3		Foundation	Existing
3	DST 301	Introduction to Microeconomics	3		Foundation	Existing
4	DST 303	Theories of Development: Contending Perspectives	3		Foundation	Existing
5	HSS 402	Qualitative Research Methods	3		Distribution (6)	Existing
6	DST 312	Rural Development: Issues and Challenges	3		Major	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	DST 302	Introduction to Macroeconomics	3		Major	Existing
2	DST 339	Foundation of Social Policy	3		Major	Existing
3	DST 343	Health and Development: Perspectives, Issues and Challenges	3		Major	Existing
4	HSS 401	Statistical Analysis of Social Data	3		Major	Existing
5	DST 410	Development Project: Planning, Appraisal, and Implementation	3		Major	Existing
Total			15			

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	DST 338	Disaster Management and Assistance	3		Major	Existing
2	DST 345	Contemporary Issues in Child Protection	3		Major	Existing
3	DST 411	Development Project: Monitoring and Evaluation	3		Major	Existing
4	DST 413	Law and Development	3		Major	Existing
5	DST 405	Globalization and World Development	3		Major	Existing
Total			15			

Semester 7:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	DST 401	Sustainable Development and Livelihood Strategies	3		Major	Existing
2	DST 408	Development Communication	3		Minor	Existing
3	DST 341	Conflict and Peace	3		Major	Existing
4	DST 307	Development Economics	3		Minor	Existing
5	DST 340	Human Rights and Development	3		Major	Existing
Total			15			

Semester 8:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	DST 403	Civil Society and Development	3		Major	Existing
2	DST 414	Migration, Diaspora, and Development	3		Minor	Existing
3	DST 337	Governance, Democracy and Development in countries in transition	3		Minor	Existing
4	DST 336	Climate Change Politics, Policy and Practice.	3		Minor	Existing
5	DST 406	Women Empowerment: Issues and Perspectives	3		Major	Existing
Total			15			

Program Summary:

Total Courses	Total Credit Hours
44	134 (Internship 02 CR)

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BSS (Anthropology)****Faculty: Humanities & Social Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	HSS 115	Introduction to Media Studies	03	Existing
		HSS 102	Introduction to Philosophy	03	Existing
		ENV 105	Introduction to Environmental Sciences	03	Existing
		MAT 105	Mathematics	03	New
		HSS 107	Introduction to Psychology	03	Existing
		HSS 112	Introduction to Political Science	03	Existing
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 103	English-I	03	Existing
		ENG 105	English-II	03	Existing
		ENG 105	Oral Communication	03	Existing
		BES 101	Introduction to Computers	03	Existing
		MAT 205	Statistics	03	New
Civilizational courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 101	Pakistan Studies	03 (01 CH Added)	Existing
		ISL 101	Ethics/ Islamic Studies	03 (01 CH Added)	Existing

<i>Sub-Category</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
Distribution Courses	BES 106	Research Methodology	3	Existing
	HSS 110	Introduction to Development Studies	3	Existing
	HSS 111	Introduction to International Relations	3	Existing
	HSS 202	Introduction to Sociology	3	Existing
	ANT 103	Ethnographic Research Methods	3	Existing
	ANT 108	Social & Cultural Change	3	Existing

b. Disciplinary Requirement

<i>Sub-Category</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
Discipline Courses Major Courses	HSS 201	Introduction to Anthropology	3	Existing
	ANT 102	Anthropological Theories	3	Existing
	ANT 103	Ethnographic Research Methods	3	Existing
	ANT 105	Physical Anthropology	3	Existing
	ANT 106	Archaeological Anthropology	3	Existing
	ANT 107	Linguistic Anthropology	3	Existing
	ANT 108	Social & Cultural Change	3	Existing
	ANT 109	Ethnology of Pakistan	3	Existing
	ANT 110	Applied Anthropology	3	Existing
	ANT 104	Kinship & Social Organization	3	Existing
	ANT 201	Economic Anthropology	3	Existing
	ANT 202	Anthropology of Beliefs & Rituals	3	Existing
	ANT 203	Medical Anthropology	3	Existing
	ANT 204	Environmental Anthropology	3	Existing
	ANT 205	Political Anthropology	3	Existing
	ANT 206	Urban Anthropology	3	Existing
	ANT 207	Anthropology of Globalization	3	Existing

	ANT 208	Epistemology of Ethnographic Research	3	Existing
	ANT 209	Anthropology of Development	3	Existing
	ANT 324	Gender & Society	3	Existing
	ANT 329	Anthropology of Crimes & Criminality	3	Existing
	ANT 330	Anthropology of Media	3	Existing
	ANT 325	Anthropology of Peace & Conflict	3	Existing
	ANT 326	Myths and Folklore	3	Existing
	ANT 305	Anthropology of Science & Technology	3	Existing
	ANT 316	Anthropology of South Asia	3	Existing
	ANT 317	Anthropology of Education & Learning	3	Existing
	ANT 318	Psychological Anthropology	3	Existing
	ANT 319	Sociolinguistics	3	Existing
	ANT 309	Migration & Diaspora	3	Existing
	ANT 320	Asian Civilizations	3	Existing
	RES 300	Review of Literature & Research Proposal		Existing
	RES 400	Data Collection & Seminars		Existing
	RES 500	Research Paper Writing & Defense		Existing
Minor Courses	ANT 301	Visual Anthropology	3	Existing
	ANT 302	Ethnomusicology	3	Existing
	ANT 303	Public Health	3	Existing
	ANT 304	Ethno medicine	3	Existing
	ANT 306	Anthropology of Cyberspace	3	Existing
	ANT 307	Legal Anthropology	3	Existing
	ANT 308	Anthropology of Public Policy	3	Existing
	ANT 310	Corporate Anthropology	3	Existing
	ANT 311	Anthropology of Food	3	Existing
	ANT 312	Political Ecology	3	Existing
	ANT 313	Anthropology of Anthropocene	3	Existing
	ANT 314	Disasters & Displacement	3	Existing
	ANT 321	Museum Anthropology	3	Existing
	ANT 322	Forensic Anthropology	3	Existing
	ANT 323	Anthropology of Islam	3	Existing
	ANT 327	Ethnicity, Nationality & Identity	3	Existing
	ANT 328	Anthropology of Art	3	Existing

c. Practical Learning Requirements

Category			Weeks/Hours		
Practical Learning Requirements	Internship		<i>9 weeks</i>	<i>02</i>	
	Practical Learning Lab* (4 contact hrs per week)				
		Entrepreneurship			
		Youth Club			
		Sports			

* weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	44	132	02 (included in CH)	NA	-
Revised (as per new HEC Policy 2020)	44	134	2 (included in total CHs)	40 hours of mandatory Community Support Program (CSP) are considered as PLL	-

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: BSS (Anthropology)****Faculty: Humanities & Social Sciences****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 103	English-I	3		Expository Writing (1)	Existing
2	ENV 105	Introduction to Environmental Sciences	3		Natural Sciences (1)	Existing
3	HSS 107	Introduction to Psychology	3		Social Science (1)	Existing
4	BES 101	Introduction to Computers	3		Quantitative Reasoning (1)	Existing
5	HSS 115	Introduction to Media Studies	3		Arts and Humanities (1)	Existing
6	HSS 201	Introduction to Anthropology	3		Major	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Optional: These are introductory courses in different disciplines that are offered by department which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 104	English-II	3		Expository Writing (2)	Existing
2	MAT 105	Mathematics	3		Natural Sciences (2)	New Course
3	HSS112	Introduction to Political Science	3		Social Science (2)	Existing
4	PAK 101	Pakistan Studies	3		Pakistan Studies	Existing (01 CH Added)
5	HSS 102	Introduction to Philosophy	3		Arts and Humanities (2)	Existing
6	BES 106	Research Methodology	3		Distribution 1	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	ENG 105	Oral Communication	3		Expository Writing (3)	Existing
2	MAT205	Statistics	3		Quantitative Reasoning (2)	New
3	ISL 101	Islamic Studies	3		Islamic/Religious Studies	Existing
4	HSS 110	Introduction to Development Studies	3		Distribution 2	Existing
5	HSS 111	Introduction to International Relations	3		Distribution 3	Existing
6	HSS 202	Introduction to Sociology	3		Distribution 4	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	ANT 102	Anthropological Theories	3		Major	Existing
2	ANT 103	Ethnographic Research Methods	3		Distribution 5	Existing
3	ANT 105	Physical Anthropology	3		Major	Existing
4	ANT 108	Social & Cultural Change	3		Distribution 6	Existing
5	ANT 203	Medical Anthropology	3		Major	Existing
6	ANT 204	Environmental Anthropology	3		Major	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ANT 105	Archaeological Anthropology	3		Major	Existing
2	ANT 107	Linguistic Anthropology	3		Major	Existing
3	ANT 109	Ethnology of Pakistan	3		Major	Existing
4	ANT 110	Applied Anthropology	3		Major	Existing
5	ANT 324	Gender & Society	3		Major	Existing
Total			15			

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ANT 205	Political Anthropology	3		Major	Existing
2	ANT 329	Anthropology of Crimes & Criminality	3		Major	Existing
3	ANT 206	Urban Anthropology	3		Major	Existing
4	ANT 330	Anthropology of Media	3		Major	Existing
5	ANT 309	Migration & Diaspora	3		Major	Existing
Total			15			

Semester 7:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ANT 201	Economic Anthropology	3		Major	Existing
2	ANT 104	Kinship & Social Organization	3		Major	Existing
3	ANT 314	Disasters & Displacement	3		Minor	Existing

4	ANT 308	Anthropology of Public Policy	3		Minor	Existing
5	ANT 207	Anthropology of Globalization	3		Major	Existing
Total			15			

Semester 8:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ANT 209	Anthropology of Development	3		Major	Existing
2	ANT 316	Anthropology of South Asia	3		Major	Existing
3	ANT 323	Anthropology of Islam	3		Minor	Existing
4	ANT 327	Ethnicity, Nationality & Identity	3		Minor	Existing
5	ANT 317	Anthropology of Education & Learning	3		Major	Existing
Total			15			

Program Summary:

Total Courses	Total Credit Hours
44	134 (Internship 02 CR)

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BS Public Health****Faculty: Humanities & Social Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	HSS 115	Introduction to Media Studies	03	New
		HSS 105	Introduction to philosophy	03	New
		ENV 105	Intro to Environment science	03	New
		MAT205	Mathematics	03	New
		HSS 107	Introduction to psychology	03	New
		HSS 112	Introduction to political science	03	New
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 103	English-I	03	Existing
		ENG 104	English-II	03	Existing
		ENG 201	English-III	03	Existing
		BCM 109	Basic Computer Skills	03	Existing
		MAT 205	Statistics	03	Existing
Civilizational Courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 101	Pakistan Studies	03	01 CH Added
		ISL 101	Ethics/Islamic Studies	03	01 CH Added
Distribution Courses	6	POD 214	Population Dynamics	03	Existing
		PET 216	Professional Ethics	03	Existing
		SHD 111	Sociology of Health & Disease	03	Existing
		ANT 324	Gender & Society	03	Existing
		MAP 113	Medical Anthropology	03	Existing
		LSB 110	Life Sciences Biology	03	Existing

b. Disciplinary Requirement

Sub-Category	Course Title	Course Code	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses	Personal Hygiene	PHY 118	03	Existing
	Community Nutrition	CNT 323	03	Existing
	Basic Epidemiology	BEP 220	03	Existing
	Basic Biostatistics	BBI 221	03	Existing
	Health Promotion, Advocacy & Social Mobilization	PAS 222	03	Existing
	Mental Health	MHL 427	03	Existing
	Community Pediatrics	CPD 324	03	Existing
	Reproductive Health	RPH 325	03	Existing
	Fundamental Principles of Infectious Disease	FIN 328	03	Existing
	Communicable Disease Epidemiology	CDE 329	03	Existing
	Research Methodology	REM 435	03	Existing
	District Health Management	DHM 333	03	Existing
	Non-Communicable Disease Epidemiology	NCE 330	03	Existing
	Health Planning	HLP 332	03	Existing
	Microbiology	MIB 436	03	Existing
	Entomology	ETL 437	03	Existing
	Health Professional Education	HPE 334	03	Existing
	Parasitology	PAR 438	03	Existing
	Health Policy and Management	HPM 331	03	Existing
	Applied Epidemiology	AEP 447	03	Existing
	Primary Health Care	PHC 215	03	Existing
	Health Information System	HIS 444	03	Existing
	Disaster Management	DSM 443	03	Existing
	Health Project Management	HPM 445	03	Existing
	Adolescent and Sexual Health	ASH 446	03	Existing
Lab/Field work/ Thesis	Research Project Planning	RSP 441	03	Existing
	Research Project Implementation	RSI 442	03	Existing

c. Practical Learning Requirements

Category			Weeks/Hours		
Practical Learning Requirements	Internship		<i>9 weeks</i>	<i>0</i>	
	Practical Learning Lab* (4 contact hrs per week)				
		Entrepreneurship			
		Youth Club			
		Sports			

* weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	45	133	NA	NA	NIL
Revised (as per new HEC Policy 2020)	44	132	Non-Credited/0 CH <i>(after 05th semester as per internship manual)</i>	40 hours of mandatory Community Support Program (CSP) are considered as PLL	-

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: BS Public Health****Faculty: Humanities & Social Sciences****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 103	English-I	03		Expository Writing (1)	Existing
2	ENV 105	Intro to Environment science	03		Natural Sciences (1)	New
3	HSS 112	Introduction to political science	03		Social Sciences (1)	New
4	BCM 109	Basic Computer Skills	03		Quantitative Reasoning (1)	Existing
5	MAP 113	Medical Anthropology	03		Distribution (1)	Existing
6	HSS 105	Introduction to Philosophy			Arts & Humanities	New
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Optional: These are introductory courses in different disciplines that are offered by department which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 104	English-II	03		Expository Writing (2)	Existing
2	PAK 101	Pakistan Studies	03	-	Pakistan Studies	Existing (01 CH Added)
3	HSS 107	Introduction to psychology	03		Social Sciences (2)	New
4	MAT 205	Statistics	03		Quantitative Reasoning (2)	New
5	PET 216	Professional Ethics	03		Distribution (2)	Existing
6	HSS 115	Introduction to Media Studies	03		Arts & Humanities	New
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	ENG 201	English-III	03		Expository Writing (3)	Existing
2	MAT205	Mathematics	03		Natural Sciences (2)	New
3	ISL 101	Ethics/Islamic Studies	03		Islamic/Religious Studies	Existing (01 CH Added)
4	POD 214	Population Dynamics	03		Distribution (3)	Existing
5	SHD 111	Sociology of Health & Disease	03		Distribution (4)	Existing
6	ANT 324	Gender & Society	03		Distribution (5)	New
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	PHY 118	Personal Hygiene	03		Foundation Course-I	Existing
2	CNT 323	Community Nutrition	03		Foundation Course-II	Existing
3	BEP 220	Basic Epidemiology	03		Foundation Course-III	Existing
4	BBI 221	Basic Biostatistics	03		Foundation Course-IV	Existing
5	PAS 222	Health Promotion, Advocacy & Social Mobilization	03		Foundation Course-V	Existing
6	LSB 110	Life Sciences Biology	03		Distribution (6)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MHL 427	Mental Health	03	-	Foundation Course-VI	Existing
2	CPD 324	Community Pediatrics	03	-	Foundation Course-VII	Existing
3	RPH 325	Reproductive Health	03	-	Foundation Course-VIII	Existing
4	FIN 328	Fundamental Principles of Infectious Disease	03	-	Major-I	Existing
5	CDE 329	Communicable Disease Epidemiology	03	-	Major-II	Existing
Total			15			

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	NCE 330	Non-Communicable Disease Epidemiology	03	-	Major-V	Existing
2	HLP 332	Health Planning	03	-	Major-VI	Existing
3	MIB 436	Microbiology	03	-	Major-VII	Existing
4	HPE 334	Health Professional Education	03	-	Major-IX	Existing
5	PAR 438	Parasitology	03	-	Major-X	Existing
Total			15			

Semester 7:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	HPM 331	Health Policy and Management	03	-	Major-XI	Existing
2	RSP 441	Research Project Planning	03 (offered as Thesis)	-	Thesis	Existing
3	HIS 444	Health Information System	03	-	Minor-I	Existing
4	PHC 215	Primary Health Care	03	-	Major-XIII	Existing
5	ETL 437	Entomology	03	-	Major-VIII	Existing
Total			15			

Semester 8:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	AEP 447	Applied Epidemiology	03	-	Major-XII	Existing
2	RSI 552	Research Project Implementation	03 (offered as thesis)	-	Thesis	Existing
3	HPM 445	Health Project Management	03	-	Minor-III	Existing
4	ASH 446	Adolescent and Sexual Health	03	-	Minor-IV	Existing
5	DHM 333	District Health Management	03	-	Major-IV	Existing
						Existing
Total			15			

Program Summary:

Total Courses	Total Credit Hours
44	132

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: Bachelor of Science in Media Studies****Faculty: Humanities and Social Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	MED 122	Introduction to Fashion Designing	3	New
		MED 212	Philosophy	3	Existing
		ENV 105	Intro to Environmental Sciences	3	New
		MAT 105	Mathematics	3	Existing
		MED 108	Sociology	3	Existing
		MED 207	Social Psychology	3	Existing
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 106	Functional English	3	Existing
		ENG 104	Writing & Presentation Skill	3	Existing
		MED 202	Functional Urdu	3	Existing
		MED 109	Computer Skills for Mass Communication	3	Existing
		MAT 205	Statistics	3	Existing
Civilizational courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 101	Pak Studies	3	Existing (1 CH added)
		ISL 101 / SOC 360	Islamic Studies / Ethics	3	Existing (1 CH added)

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Distribution Courses	MED 211	Introduction to Broadcast Media	03	Existing
	MED 206	Current Affairs	03	Existing
	MED 208	Introduction to Digital Media	03	Existing
	MED 307	Elements of Advertising	03	Existing
	MED 403	Media Ethics and Laws	03	Existing

	MED 404	Development and Support Communication	03	Existing
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b. Disciplinary Requirement

<i>Sub-Category</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
Discipline Courses	MED 107	Introduction to Mass Communication	3	Existing
	MED 113	Intro to Film Studies	3	Existing
	MED 204	Introduction to Advertising and Public Relations	3	Existing
	MED 206	Current Affairs	3	Existing
	MED 211	Introduction to Broadcast Media	3	Existing
	MED 303	Mass Communication Theory	3	Existing
	MED 307	Elements of Advertising	3	Existing
	MED 304	Research Methods	3	Existing
	MED 403	Media Ethics and Laws	3	Existing
	MED 404	Development Support Communications	3	Existing
	MED 111	Photography	3	Existing
	MED 209	Journalistic Language	3	Existing
	MED 214	Graphic Design	3	Existing
	MED 208	Introduction to Digital Media	3	Existing
	MED 210	News Writing and Reporting	3	Existing
	MED 301	Sub-Editing and Page Designing	3	Existing
	MED 305	Script Writing and Editing	3	Existing
	MED 302	Feature, Column and Editorial Writing	3	Existing
	MED 306	Photo Journalism	3	Existing
	MED 401	On-line Journalism	3	Existing
		Elective 1	3	Existing
		Elective 2	3	Existing
		Elective 3	3	Existing
		Elective 4	3	Existing
		Elective 5	3	Existing
		Elective 6	3	Existing
		Elective 7	3	Existing
		Elective 8	3	Existing

c. Practical Learning Requirements

Category			Weeks	Hours	Remarks
Practical Learning Requirements	Internship		9 weeks	0 Chs	
	Practical Learning Lab* (4 contact hrs per week)				
		Entrepreneurship			
		Youth Club			
		Sports			
		Media Lab*	4 hours / week for 4 semesters	4 hours / week for 4 semesters	New Proposed Area

* Weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	46	136	6 weeks 0 chs		
Revised (as per new HEC Policy 2020)	45	135	9 weeks 0 chs	4 hours / week for 4 semesters	

Revision of Semester-wise roadmap in accordance with HEC UG Policy 2020**Program: Bachelor of Science in Media Studies****Faculty: Social Sciences & Humanities****Semester 1**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 106	Functional English	3		Expository Writing (1)	Existing
2	PAK 102	Pakistan Studies	3		Civilization (1)	Existing (1 CH Added)
3	MED 122	Introduction to Fashion Designing	3		Arts and Humanities (1)	New
4	MED 107	Introduction to Mass Communication	3		Major (1)	Existing
5	MED 109	Computer Skills for Mass Communication	1	2	Quantitative Reasoning (1)	Existing
6	MED 111	Photography	1	2	Major (2)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 2

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MED 102	Writing and Presentation Skills	3		Expository Writing (2)	Existing
2	ENV 105	Intro to Environmental Sciences	3		Natural Sciences (1)	New
3	MED 108	Sociology	3		Social Science (1)	Existing
4	ISL 102 / SOC 360	Islamic Studies / Ethics	3		Civilization (2)	Existing (1 CH Added)
5	MED 113	Intro to Film Studies	3		Major (3)	Existing
6	MED 214	Graphic Design	02	01	Major (4)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	MED 202	Functional Urdu	3		Expository Writing (3)	Existing
2	MED 212	Philosophy	3		Arts and Humanities (2)	Existing
3	MED 207	Social Psychology	3		Social Sciences (2)	Existing
4	MAT 105	Mathematics	3		Natural Sciences (2)	Existing
5	MED 211	Introduction to Broadcast Media	3		Distribution 1	Existing
6	MAT 205	Statistics	3		Quantitative Reasoning (02)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Note:

1. 13 Gen-Ed Courses are completed in first 3 Semesters as required by HEC.

Semester 4

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	MED 204	Introduction to Advertising and Public Relations	3		Major (05)	Existing
2	MED 206	Current Affairs	3		Distribution 2	Existing
3	MED 208	Introduction to Digital Media	3		Distribution 3	Existing
4	MED 210	News Writing and Reporting	3		Major (06)	Existing
5	MED 209	Journalistic Language	3		Major (07)	Existing
6		Elective	3		Major 8	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Students are eligible for a non-credited 9 weeks Internship after 4th Semester.

* Any Student, who fails to complete all Gen Ed courses till 4th Semester will not be promoted to 5th Semester.

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MED 301	Sub-Editing and Page Designing	2	1	Major (9)	Existing
2	MED 302	Mass Communication Theory	3		Major (10)	Existing
3	MED 305	Script Writing and Editing	3		Major (11)	Existing
4	MED 403	Elective-2	3		Major 12	Existing
5	MED 307	Elements of Advertising	3		Distribution 4	Existing
6		Elective 3	3		Major 13	Existing
Total			18			

Semester 6

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MED 302	Feature, Column & Editorial Writing	3		Major (14)	Existing
2	MED 304	Research Methods	3		Major (15)	Existing
3	MED 306	Photojournalism	1	2	Major (16)	Existing
4	MED	Major (E)	3		Major (17)	Existing
5	MED	Major (E)	3		Major (18)	Existing
Total			15			

Semester 7

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	MED 401	Online Journalism	3		Major (19)	Existing
2	MED 403	Media Ethics and Laws	3		Distribution 05	Existing
3		Major (E)	3		Major 20	Existing
4		Specialization 1	3		Minor 1	Existing
5		Specialization 2	3		Minor 2	Existing
Total			15			

Semester 8

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	MED 402	Research Report/ Final Project/ Research Article	3		Major (21)	Existing
2	MED 404	Development and Support Communication	3		Distribution 6	Existing
3		Major (E)	3		Major (22)	Existing
4		Specialization 3	3		Minor 3	Existing
5		Specialization 4	3		Minor 4	Existing
Total			15			

Distribution Courses 6 Courses =18 Credit Hours
Introduction to Broadcast Media
Current Affairs
Elements of Advertising
Media Law & Ethics
Development Support Communication
Introduction to Digital Media

Program Summary:

Total Courses	Total Credit Hours
45	135

List of Major Courses (Elective)

		Course Codes	Subjects	Credit Hours
1	List of Courses	MED 308	Video Editing	03
2		MED 309	World Cinema	03
3		MED 311	2D Animation	03
4		MED 312	Principles of Public Relations	03
5		MED 313	Musicology	03
6		MED 314	Media, Culture and Society	03
7		MED 315	Sound Design	03
8		MED 113	Intro to Film Studies	03
9		MED 111	Media and Society	03
10		MED 213	Cinematography	03
11		MED 114	Introduction to Media Production	03
12		MED 321	Media and Politics	03
13		MED 211	Statistical Analysis of Social Data	03
14		MED 105	International Relations	03

Following New Courses are added in Electives List

01	MED 458	Media Literacy*	03
02	MED 459	Media & Globalization*	03
03	MTB 302	Process & Effects of Communication*	03
04	MTB 214	Cyber Psychology*	03
05	MTB 415	Digital Media Analytics*	03
06	MTB 104	Mass Media in Pakistan*	03
07	MTB 213	Introduction to Digital Gaming*	03

Specialization Courses (Minor Courses)

Minor (Specialization) 4 = 12 Credit Hours
Electronic Media
Print Media
Advertising and Public Relations
Media Management

4 Specializations of BS Media Studies

	Specialization	1.	Electronic Media	
		2.	Print Media	
		3.	Advertising and Public Relations	
		4.	Media Management	
	Total	4		
1. Electronic Media				
1	Electronic Media	MED 415	Television Journalism	
2		MED 416	News Writing and Production	
3		MED 417	Advanced Cinematography	
4		MED 418	Art Direction	
5		MED 419	Documentary Production	
6		MED 420	Film Direction	
7		MED 421	Motion Graphics and Compositing	
8		MED 422	Music Video Production	
9		MED 423	Product Development	
10		MED 424	Storyboarding	
2. Print Media				
1	Print Media	MED 408	Community journalism	
2		MED 409	Data journalism	
3		MED 411	Magazine Production / Magazine Program Production	
4		MED 412	Multimedia journalism	
5		MED 413	Newspaper production	
6		MED 414	Peace journalism	
3. Advertising and Public Relations				
1	Advertising and Public Relation	MED 430	Media Planning and Buying	
2		MED 431	Campaign Designing	
3		MED 432	Market Research	
4		MED 433	TVC Production	
5		MED 434	Copy Writing	
6		MED 435	Advertising Strategy and Planning	
7		MED 436	Advanced free hand drawing	
8		MED 437	2D/3D animation	
9		MED 438	Brand Management	
10		MED 439	Digital Advertising	
11		MED 440	Copy and Layout Designing	
12		MED 441	Crisis Communication and Management	
13		MED 442	Event Management	
14		MED 443	Media Management and Relations	
15		MED 444	Persuasive Writing	
16		MED 445	PR Campaign designing	

17		MED 446	Digital Public Relations	
18		MED 448	Intercultural Communication	
4. Media Management				
1	Media Management	MED 455	Media Management and Marketing	
2		MED 457	Integrated Marketing Communication	
3		MGT 130	Management	
4		HRM 353	Human Resource Management	
5		ENG 243	Business Communication Skills	

Changes / Additions proposed by Department of Media studies in the Roadmap of BS Media Studies

1. ISL 103 Islamic Studies Ethics (02 chs) has been replaced by ISL 102 (03 chs) course
2. Pak 101 Pakistan Studies (02 chs) has been replaced by Pak 102(03 chs) course
3. 1 course (Economics) has been removed from the previous roadmap.
4. 2 New Courses have been added in roadmap.
5. 07 New Courses to have been added in Electives list.
6. One additional area of BU Media Lab (News Studio & FM Radio) for Practical Learning.

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: Bachelor of Science in TV Broadcasting & Digital Media Faculty: Humanities and Social Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	MED 122	Introduction to Fashion Designing	3	New
		MED 212	Philosophy	3	Existing
		ENV 105	Intro to Environmental Sciences	3	New
		MAT 105	Mathematics	3	Existing
		MED 108	Sociology	3	Existing
		MED 207	Social Psychology	3	Existing
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 106	Functional English	3	Existing
		ENG 104	Writing & Presentation Skill	3	Existing
		MED 202	Functional Urdu	3	Existing
		MED 109	Computer Skills for Mass Communication	3	Existing
		MAT 205	Statistics	3	Existing
Civilizational Courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 101	Pak Studies	3	Existing (1 CH added)
		ISL 101 / SOC 360	Islamic Studies / Ethics	3	Existing (1 CH added)

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses (Majors)	MTB 109	Introduction to Television	03	Existing
	MED 209	Journalistic Language	03	Existing
	MED 208	Introduction to Digital Media	03	Existing
	MTB 108	News Writing & Reporting in Broadcast Journalism	03	Existing
	MED 401	Online Journalism	03	Existing
	MTB 305	Data Journalism	03	Existing
	MTB 214	Cyber Psychology (From electives)	03	Existing
	MTB 202	Theories of Mass Communications – I	03	Existing
	MTB 215	Digital Marketing & Public Relations (PR)	03	Existing
	MTB 212	Theories of Mass Communications – II	03	Existing
	MTB 301	TV Script Writing	03	Existing
	MTB 418	Mass Media Research Methods	03	Existing
	MTB 314	TV Program Production	03	Existing
	MTB 312	Set Designing	03	Existing
	MTB 309	TV News Production & Presentation	03	Existing
	MTB 419	Digital Media Literacy	03	Existing
	MED 437	2D/3D Animation	03	Existing
Lab / Field Work / Thesis / Project	MTB 402	Documentary Production	03	Existing
	MTB 401	TV Studio & Floor Management	03	Existing
	MTB 317	Videography	03	Existing
	MTB 304	Television Lighting System	03	Existing
	MTB 417	TV Post Production	03	Existing
	MTB 416	Digital Storytelling	03	Existing
	MTB 213	Introduction to Digital Gaming	03	Existing
	MTB 313	Graphic Designing & Visual Communication (from Electives)	03	Existing
	MTB 316	Web Designing	03	Existing

c. Practical Learning Requirements

Category		Weeks	Credit Hours	Remarks
Practical Learning Requirements	Internship	9 weeks	0 Chs	
	Practical Learning Lab* (4 contact hrs per week)			
	Entrepreneurship			
	Youth Club			
	Sports			
	Media Lab*	4 hours / week for 4 semesters	4 hours / week for 4 semesters	New Area

* Weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	45	135	6 weeks 2 CHs		
Revised (as per new HEC Policy 2020)	45	135	9 weeks 0 CHs	4 hours / week for 4 semesters	

Revision of Semester-wise roadmap in accordance with HEC UG Policy 2020**Program: Bachelor of Science in TV Broadcasting & Digital Media Faculty: Humanities and Social Sciences****Semester 1**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 103	Functional English - I	03		Expository Writing (1)	Existing
2	MTB 101	Computer Skills for Media	03		Quantitative Reasoning (1)	Existing
3	MTB 109	Introduction to Television	03		Major (01)	Existing
4	ENV 105	Intro to Environmental Sciences	03		Natural Sciences (1)	New
5	PAK 102	Pakistan Studies	03		Civilization (1)	1 CH has been added
6	MED 207	Social Psychology	03		Social Science (1)	New
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 2

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 104	English – II (Writing & Presentation Skills)	03		Expository Writing (2)	Existing
2	MED 208	Introduction to Digital Media	03		Major (2)	Existing
3		Introduction to Fashion Designing	03		Arts & Humanities (01)	New
4	MAT 105	Mathematics	03		Natural Science (2)	Existing
5	PAK 102 / SOC 360	Islamic Studies / Ethics	03		Civilization (2)	1 CH has been Added
6		Elective (01)	03		Major (03)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	MTB 202	Theories of Mass Communications - I	03		Major (04)	Existing
2	MED 212	Philosophy	03		Arts & Humanities (02)	New
3	MED 108	Sociology	03		Social Science (02)	New
4	MAT 205	Statistics	03		Quantitative Reasoning (02)	Existing
5	ENG 114	Communication Skills (English – III)	03		Expository Writing (03)	Existing
6		Elective (02)	03		Major (05)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Note:

1. 13 Gen-Ed Courses are completed in first 3 Semesters as required by HEC.

Semester 4

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MTB 316	Web Designing	02	01	Distribution 01	Existing
2	MED 209	Journalistic Language	03		Major 06	Existing
3	MTB 108	News Writing & Reporting in Broadcast Journalism	03		Major 07	Existing
4	MTB 212	Theories of Mass Communications - II	03		Major 08	Existing
5	MTB 215	Digital Marketing & Public Relations (PR)	03		Major 09	Existing
6	MTB 104	Elective (03) (Mass Media in Pakistan)	03		Distribution 02	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

*Any Student, who fails to complete all Gen Ed courses till 4th Semester will not be promoted to 5th Semester.

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

* Students are eligible for a non-credited 9 weeks Internship after 4th Semester.

Semester 5

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MED 403	Media Laws and Ethics	03		Distribution 3	Existing
2	MTB 314	TV Program Production	03		Major 10	Existing
3	MTB 317	Videography	02	01	Major 11	Existing
4	MTB 304	Television Lighting System	02	01	Major 12	Existing
5	MTB 305	Data Journalism	03		Major 13	Existing
6		Elective (04)	03		Major 14	Existing
Total			18			

Semester 6

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MTB 312	Set Designing	03		Major 15	Existing
2	MTB 402	Documentary Production	02	01	Major 16	Existing
3	MED 404	Development Support Communication	03		Distribution 04	Existing
4	MTB 301	TV Script Writing	03		Major 17	Existing
5	MED 448	Intercultural Communication	03		Distribution 05	Existing
Total			15			

Semester 7

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MTB 417	TV Post-Production	02	01	Major 18	Existing
2	MTB 213	Introduction to Digital Gaming	02	01	Major 19	Existing
3	MED 455	Media Management and Marketing	03		Distribution 06	Existing
4	MTB 416	Digital Storytelling	02	01	Major 20	Existing
5		Elective (05)	03		Major 21	Existing
Total			15			

Semester 8

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MTB 309	TV News Production & Presentation	03		Major 22	Existing
2	MTB 418	Mass Media Research Methods	03		Major 23	Existing
3	MTB 409	Research Project / Final Project	02	01	Major 24	Existing

4	MTB 401	TV Studio & Floor Management	02	01	Major 25	Existing
5	MTB 419	Elective (06) (Digital Media Literacy)	03		Major 26	Existing
Total			15			

* Elective courses will be offered from the Electives List of Major Courses by the department conditional to the availability of resource and expertise.

LIST OF ELECTIVE COURSES

S#	Course Code	Course Title	CH	Status
1	MTB 104	Mass Media in Pakistan	03	Existing
2	MED 401	Online Journalism	03	Existing
3	MED 207	Social Psychology	03	Existing
4	MTB 208	Comparing Media Systems	03	Existing
5	MTB 205	International Media Regulations	03	Existing
6	MTB 204	Writing for Internet	03	Existing
7	MED 306	Photojournalism	03	Existing
8	MED 437	2D/3D Animation	03	Existing
9	MTB 310	Television Commercial (TVC)	03	Existing
10	MTB 405	Television Program Analysis (Seminar)	03	Existing
11	MTB 410	Media Semiotics	03	Existing
12	MTB 411	Introduction to Film Making and Analysis	03	Existing
13	MTB 412	Electronic News Gathering (ENG)	03	Existing
14	MTB 413	Music Video Creation (MVC)	03	Existing
15	MTB 311	Media & Social Psychology	03	Existing

Following Courses have been moved from previous Majors list to Elective List

01	MTB 214	Cyber Psychology	03	From Majors to Electives List
02	MTB 313	Graphic Designing & Visual Communication	03	From Majors to Electives List
03	MTB 415	Digital Media Analytics	03	From Majors to Electives List
04	MTB 315	Television, Digital Media & Society	03	From Majors to Electives List
05	MED 206	Current Affairs	03	From Majors to Electives List
06	MTB 209	Evolution of Television	03	From Majors to Electives List
07	MTB 302	Process & Effects of Communication	03	From Majors to Electives List
08	MTB 404	TV & Globalization	03	From Majors to Electives List
09	MTB 403	Drama Production	03	From Majors to Electives List

Following New Courses have been added in Electives List

01	MTB 414	Film and Cinematography	03	New
02	MTB 419	Digital Media Literacy	03	New

***New _Course added in GEN Ed to meet HEC Requirement**

01	ENV 105	Introduction to Environmental Sciences	03	New
02	MED 108	Sociology	03	New
03	MED 207	Social Psychology	03	New
04	MED122	Introduction to Fashion Designing	03	New
05	MED 212	Philosophy	03	New
06	MAT 105	Mathematics	03	New

Distribution Courses

Mass Media in Pakistan	Development Support Communication	Media Management and Marketing	Intercultural Communication	Media Laws and Ethics	Web Designing
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Program Summary:

Total Courses	Total Credit Hours
45	135

**Changes / Additions proposed by Department of Media studies in the Roadmap of BS TV
Broadcasting & Digital Media**

1. ISL 103 Islamic Studies Ethics (02 chs) has been replaced by ISL 102 (03 chs) course.
2. Pak 101 Pakistan Studies (02 chs) has been replaced by PAK 102 (03 chs) course.
3. 6* New Courses have been added in the roadmap in Gen Ed category.
4. One additional area of BU Media Lab (News Studio & FM Radio) for Practical Learning.

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BS-ENGLISH****Faculty: Humanities & Social Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	HSS 102	Introduction to Philosophy	03	Existing
		HSS 115	Introduction to Media Studies	03	New Course
		MAT 105	Mathematics	03	Existing
		ENV 110	Introduction to Environmental Sciences	03	New Course
		HSS 107	Introduction to Psychology	03	Existing
		HSS 111	Introduction to IR	03	Existing
Foundational Skills courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	CLE 401	Chinese Language	03	Existing
		ENG 120	English-2	03	Existing
		ENG 207	English-3	03	Existing
		BES 204	Introduction to Computer Application	03	Existing
		QTM 212	Introduction to Statistics	03	Existing
Civilizational courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 101	Pakistan Studies	03	Existing (1 CH added)
		ISL 101	Islamic Studies	03	Existing (1 CH added)

Distribution Courses (30 CHs)	ENG 103	Introduction to Literature-I	03
	ENG 104	Introduction to Linguistics	03
	ENG 110	History of English Literature-I	03
	MGT 206	Entrepreneurship	03
	ENG 202	Morphology & Syntax-I	03
	ENG 203	Introduction to Literature-2	03
	ENG 208	Human Rights & Citizenship	03
	ENG 209	Gender Studies	03
	ENG 210	Semantics	03
	ENG 211	History of English Literature-2	03
Total		10 Courses	30 CHs

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Distribution Courses (30 CHs) (Major + Minors)	ENG 103	Introduction to Literature-I	03	Existing
	ENG 104	Introduction to Linguistics	03	Existing
	ENG 110	History of Literature-I	03	Existing
	MGT 206	Entrepreneurship	03	Existing
	ENG 202	Morphology & Syntax-I	03	Existing
	ENG 203	Introduction to Literature-2	03	Existing
	ENG 208	Human Rights & Citizenship	03	Existing
	ENG 209	Gender Studies	03	Existing
	ENG 210	Semantics	03	Existing
	ENG 211	History of English Literature-2	03	Existing
	ENG 207	Advance Academic Reading & Writing	03	Existing
	ENG 112	Phonetics and Phonology	03	Existing
	ENG 302	Literary Criticism	03	Existing
	ENG 303	Classical Poetry	03	Existing
	ENG 304	Novel (18 th -19 th century)	03	Existing
	ENG 309	Morphology & Syntax II (Linguistics I) ⁷	03	Existing
	ENG 310	Sociolinguistics (Linguistics II)	03	Existing
	ENG 305	Research Methodology	03	Existing
	ENG 306	Literary Criticism & theory	03	Existing
	ENG 307	Classics in Drama	03	Existing
	ENG 308	Romantic Poetry	03	Existing
	ENG 312	Discourse Analysis (Linguistics III) ⁸	03	Existing
	ENG 401	Contemporary Literature I	03	Existing
	ENG 402	South Asian Literature	03	Existing
	ENG 403	American/Canadian Literature	03	Existing
	ENG 404	Translational theory & literary Studies	03	Existing
		Elective I	03	Existing
		Elective II	03	Existing
	ENG 409	Contemporary Literature II	03	Existing

⁷ Linguistics I and Linguistics II will be selected from the 3 Majors courses (ENG 309, 310 and 311) offered to Linguistics students. Similarly, Literature I and Literature II will be selected from the 3 Majors courses (ENG 302,303 and 304) offered to Literature students in 5th semester.

⁸ Linguistics III will be taken out of 3 Majors (ENG 312,313 and 314) offered to linguistics students similarly, literature III will be taken out of three Majors (ENG 306, 307 and 308) offered to Literature Students in 6th Semester.

	ENG 410	Post-Colonial Literature	03	Existing
	ENG 411	Literary Discourse and Journalistic Writing	03	Existing
		Elective III	03	Existing
		Elective IV	03	Existing
	ENG 207	Advance Academic Reading & Writing	03	Existing
	ENG 112	Phonetics & Phonology	03	Existing
	ENG 305	Research Methodology	03	Existing
	ENG 309	Morphology & Syntax II	03	Existing
	ENG 310	Sociolinguistics	03	Existing
	ENG 311	Pedagogical Grammar	03	Existing
	ENG 302	Literary Criticism (Literature I)	03	Existing
	ENG 303	Classical Poetry (Literature II)	03	Existing
	ENG 312	Discourse Analysis	03	Existing
	ENG 313	Psycholinguistics	03	Existing
	ENG 314	Lexical Studies	03	Existing
	ENG 306	Literary Criticism & theory (Literature III)	03	Existing
	ENG 405	Stylistics	03	Existing
	ENG 406	Language Learning Theories	03	Existing
	ENG 407	Syllabus Designing & Testing	03	Existing
	ENG 408	TEFL-I	03	Existing
		Elective-I	03	Existing
		Elective II	03	Existing
	ENG 412	TEFL-II	03	Existing
	ENG 413	Pragmatics	03	Existing
	ENG 414	Introduction to Applied Linguistics	03	Existing
		Elective III	03	Existing
		Elective IV	03	Existing
Lab/Field work/ Thesis		Research Project	03	Existing

c. Practical Learning Requirements

Category			Weeks/Hours		
Practical Learning Requirements	Internship		9 Weeks	Non-credit	
	Practical Learning Lab* (4 contact hrs per week)				
		Entrepreneurship			
		Youth Club	Bahria Society for Professional Communication(BSPC)	English Literary Society (ELC)	Student Grooming Club (SGC)
		Sports	Sports week (BUKC)		

* Weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	45	133	6-8 weeks	Clubs , Societies & Sports	
Revised (as per new HEC Policy 2020)	45	135	9 weeks	Clubs, Societies & Sports	02 CHs added (135 CHs)

Revision of Semester-wise roadmap in accordance with HEC UG Policy 2020**Program: BS-ENGLISH****Faculty: Humanities & Social Sciences****Semester: 1 (LITERATURE AND LINGUISTICS)**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	CLE 401	Chinese Language	03		Expository Writing (EW-1)	Existing
2	HSS 107	Introduction to Psychology	03		Social Sciences (SS-I)	Existing
3	HSS 102	Introduction to Philosophy	03		Arts & Humanities (A&H-1)	Existing
4	MAT 105	Mathematics	03		Natural Sciences (NS-1)	Existing
5	ENG 104	Introduction to Linguistics	03		Distribution-1	Existing
6	BES 204	Introduction to Computer Application	03		Quantitative Reasoning (QR-1)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester: 2 (LITERATURE AND LINGUISTICS)

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 120	English Writing Skills	03		Expository Writing (EW -2)	Existing
2	ENV 110	Introduction to Environmental Sciences	03		Natural Sciences (NS-2)	New
3	HSS 111	Introduction to International Relations	03		Social Sciences (SS-2)	Existing
4	MGT 206	Entrepreneurship	03		Distribution-2	Existing
5	HSS 115	Introduction to Media Studies	03		Arts & Humanities (A&H-2)	New
6	QTM 212	Introduction to Statistics	03		Quantitative Reasoning (QR-2)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester: 3 (LITERATURE AND LINGUISTICS)

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 201	Oral Communication & Presentation Skills	03		Expository Writing (EW-3)	Existing
2	PAK 101	Pakistan Studies	03		Civilizational-1	Existing (1 CH is added)
3	ISL 101	Islamic Studies	03		Civilizational-2	Existing (1 CH is added)
4	ENG 103	Introduction to Literature-1 (Drama & Poetry)	03		Distribution-3	Existing
5	ENG 110	History of Literature-I (Medieval – Romantics)	03		Distribution-4	Existing
6	ENG 208	Human Rights & Citizenship	03		Distribution-5	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester: 4 (LITERATURE AND LINGUISTICS)

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	ENG 202	Morphology & Syntax-I	03		Distribution-6	Existing
2	ENG 207	Advance Academic Reading & Writing Skills	03		Minor -01	Existing
3	ENG 112	Phonetics and Phonology	03		Minor -02	Existing
4	HSS 209	Gender Studies	03		Distribution-7	Existing
5	ENG 203	Introduction to Literature-2 (Novel & Prose)	03		Distribution-8	Existing

6	ENG 211	History of English Literature-2 (Romantics to Present Age)	03		Distribution-9	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester: 5 (LITERATURE)

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 210	Semantics	03		Distribution -10	Existing
2	ENG 302	Literary Criticism	03		Major (01)	Existing
3	ENG 303	Classical Poetry (14-18 century)	03		Major (02)	Existing
4	ENG 304	Novel (18-19 century)	03		Major (03)	Existing
5	ENG 309	Morphology and Syntax II (Linguistics-I) ⁹	03		Minor (03) ¹⁰	Existing
6	ENG 310	Sociolinguistics (Linguistics-II)	03		Minor (04)	Existing
Total			18			

Semester: 5 (LINGUISTICS)

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 210	Semantics	03		Distribution-10	Existing
2	ENG 309	Morphology & Syntax-II	03		Major (01)	Existing
3	ENG 310	Sociolinguistics	03		Major (02)	Existing
4	ENG 311	Pedagogical Grammar	03		Major (03)	Existing
5	ENG 302	Literary Criticism (Literature-I)	03		Minor (03)	Existing

⁹ Linguistics I and Linguistics II will be selected from the 3 Majors courses (ENG 309, 310 and 311) offered to Linguistics students. Similarly, Literature I and Literature II will be selected from the 3 Majors courses (ENG 302, 303 and 304) offered to Literature students in 5th semester.

¹⁰ Students interested to specialize in English Literature or Linguistics are required to fulfill the requirement of 18 CHs. (12 CHs from Literature & 6 CHs from, Linguistics). The same process needs to be followed by the students aiming to specialize in Linguistics (12 CHS from Linguistics and 6 CHs from Literature

6	ENG 303	Classical Poetry (Literature-II)	03		Minor (04)	Existing
Total			18			

Semester 6: (LITERATURE)

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 305	Research Methodology	03		Major (04)	Existing
2	ENG 306	Literary Criticism & Theory	03		Major (5)	Existing
3	ENG 307	Classics in Drama	03		Major (6)	Existing
4	ENG 308	Romantic Poetry (19-20 th century)	03		Major (7)	Existing
5	ENG 312	Discourse Analysis (Linguistics-III) ¹¹	03		Minor (5) ¹²	Existing
Total			15			

Semester: 6 (LINGUISTICS)

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 305	Research Methodology	03		Major (4)	Existing
2	ENG 312	Discourse Analysis	03		Major (5)	Existing
3	ENG 313	Psycholinguistics	03		Major (6)	Existing
4	ENG 314	Lexical Studies	03		Major (7)	Existing
5	ENG 306	Literary Criticism and Theory (Literature-III)	03		Minor (05)	Existing
Total			15			

¹¹ Linguistics III will be taken out of 3 Majors (ENG 312,313 and 314) offered to linguistics students similarly, literature III will be taken out of three Majors (ENG 306, 307 and 308) offered to Literature Students in 6th Semester.

¹² Students interested to specialize in English Literature or Linguistics are required to fulfill the requirement of 15 CHs. (12 CHs from Literature & 3 CHs from, Linguistics). The same process needs to be followed by the students aiming to specialize in Linguistics (12 CHS from Linguistics and 3 CHs from Literature)

Semester 7: (LITERATURE¹³)

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 401	Contemporary Literature-1 (Poetry & Drama)	03		Major (08)	Existing
2	ENG 402	South Asian Literature	03		Major (09)	Existing
3	ENG 403	American/Canadian Literature	03		Major (10)	Existing
4		Elective I	03		Major (11)	Existing
5		Elective II	03		Major (12)	Existing
	Total		15			

Semester: 7 (LINGUISTICS¹⁴)

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 405	Stylistics	03		Major (08)	Existing
2	ENG 406	Language Learning Theories	03		Major (09)	Existing
3	ENG 408	Teaching English as a Foreign Language (TEFL)-1	03		Major (10)	Existing
4		Elective I ¹⁵	03		Major (11)	Existing
5		Elective II	03		Major (12)	
	Total		15			

¹³ 3 Majors are to be selected out of 4 [offered], making 9 CHs, adding 6 CHs from Electives total 15 CHs (in 7th Semester) The 4th additional course is **ENG 404 Translational theory & Literary Studies**.

¹⁴ 3 Majors are to be selected out of 4 [offered], making 9 CHs, adding 6 CHs from Electives total 15 CHs (in 7th Semester) The 4th additional course is **ENG 407 Syllabus Designing & Testing**

¹⁵ These courses will be selected from the given list of Elective Courses (Literature or Linguistics) mentioned at the end of this road map.

Semester 8: (LITERATURE ¹⁶)

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	ENG 409	Contemporary Literature-2	03		Major (13)	
2	ENG 410	Post-Colonial Literature	03		Major (14)	
3		Elective III ¹⁷	03		Major (15)	
4		Elective IV	03		Major (16)	
5		Research Thesis ¹⁸	03		Major (17)	
	Total		15			

Semester: 8 (LINGUISTICS¹⁹)

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	ENG 412	Teaching English as a Foreign Language (TEFL)-2	03		Major (13)	
2	ENG 414	Introduction to Applied Linguistics	03		Major (14)	
3		Elective III	03		Major (15)	
4		Elective IV	03		Major (16)	
5		Research Thesis	03		Major (17)	
	Total		15			

¹⁶ 2 Majors are to be selected out of 3 [offered], making 6 CHs, adding 6 CHs from Electives, and 3 CHs from Research Thesis, total 15 CHs (in 8th Semester) The 3rd additional course is **ENG 411 Literary Discourse & Journalistic Writing**

¹⁷ These courses will be selected from the given list of Elective Courses (Literature or Linguistics) mentioned at the end of this road map.

¹⁸ It is Mandatory for the students [Literature and Linguistics] both to complete 03 CHs from research Thesis in 8th semester.

¹⁹ 2 Majors are to be selected out of 3 [offered], making 6 CHs, adding 6 CHs from Electives, and 3 CHs from Research Thesis, total 15 CHs (in 8th Semester) The 3rd additional course is **ENG 413 Pragmatics**

Electives for Literature

Course Code	Course Title	Credit Hours
ENG 515	Western Literature	3
ENG 516	World Literature	3
ENG 517	Feminist Literature	3
ENG 518	Comparative Studies	3

Electives for Linguistics

Course Code	Course Title	Credit Hours
ENG 520	English for Specific Purposes	3
ENG 521	Translational Studies	3
ENG 522	English Language Teaching	3
ENG 523	Media Discourse Analysis	3

Program Summary:

Total Courses	Total Credit Hours
45	135

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: LLB 5 Years Program****Faculty: Humanities and Social Sciences
Department of Law****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Social Sciences (2) Natural Sciences (2)	18	LLB 125	History (South Asia)	3	Existing
		LLB 114	Fundamental of Economics	3	Existing
		LLB 117	Introduction to Sociology	3	Existing
		LLB 123	Principle of Political Science	3	Existing
		LLB 227	Introduction to Psychology	3	Existing
		LLB 228	Introduction to Environmental Sciences	3	New
Functional Skills courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	LLB 111	English-I	3	Existing
		LLB 121	English-II	3	Existing
		LLB 211	English-III	3	Existing
		LLB 118	Skills development	3	Existing
		LLB 217	Introduction to logic and reasoning	3	Existing
Civilizational Courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	LLB 112	Pakistan Studies	3	Existing (1CH added)
		LLB 122	Islamic Studies/Ethics	3	Existing (1CH added)

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses	LLB 115	Introduction to Law	3	Existing
	LLB 124	Legal System of Pakistan	3	Existing
	LLB 127	Law of Torts-1	3	Existing
	LLB 213	Islamic Jurisprudence-I	3	Existing
	LLB 215	Law Of Contract-I	3	Existing
	LLB 218	Constitutional Law-I (UK)	3	Existing
	LLB 219	Law of Torts-II	3	Existing
	LLB 222	Human Rights Law	3	Existing
	LLB 224	Law of Contract-II	3	Existing
	LLB 225	Islamic Jurisprudence-II	3	Existing
	LLB 226	Constitutional Law-II (US)	3	Existing
	LLB 311	Jurisprudence-I	3	Existing
	LLB 316	Constitutional Law-III(Pakistan)	3	Existing
	LLB 313	Islamic Personal Law-I	3	Existing
	LLB 314	Criminal Law-I	3	Existing
	LLB 317	Law of Property	3	Existing
	LLB 321	Jurisprudence-II	3	Existing
	LLB 326	Law of Business Organizations	3	Existing
	LLB 323	Islamic Personal Law-II	3	Existing
	LLB 324	Criminal Law-II	3	Existing
	LLB 327	Land Laws	3	Existing
	LLB 411	Public International Law-I	3	Existing
	LLB 417	Constitutional Development in Pakistan	3	Existing
	LLB 413	Civil Procedure-I	3	Existing
	LLB 414	Criminal Procedure-I	3	Existing
	LLB 415	Law of Evidence-I	3	Existing
	LLB 416	Legal Drafting-I	3	Existing
	LLB 421	Public International Law-II	3	Existing
	LLB 422	Equity and Specific Relief	3	Existing
	LLB 423	Civil Procedure-II	3	Existing
	LLB 424	Criminal Procedure-II	3	Existing
	LLB 425	Law of Evidence-II	3	Existing
	LLB 426	Legal Drafting-II	3	Existing
	LLB 516	Research Method	3	Existing
	LLB 517	Minor Acts	3	Existing
		Elective-I	3	Existing
		Elective-II	3	Existing
	LLB 515	Moot Cases and Professional Ethics	3	Existing
	LLB 526	Administrative Law	3	Existing

	LLB 527	Interpretation of Statutes and Legislative Drafting	3	Existing
	LLB 523	Research Project	3	Existing
		Elective-III	3	Existing
		Elective-Iv	3	Existing
Lab/Field work/ Thesis		NA		

c. Practical Learning Requirements

Category			Weeks/Hours		
Practical Learning Requirements	Internship	<i>Complied</i>	<i>9 Weeks Internship</i>	3	Existing
	Practical Learning Lab* (4 contact hrs per week)	<i>Complied under the area of youth clubs</i>		Non credit	Existing
		Entrepreneurship	NA	NA	NA
		Youth Club	Department of law is complying PLL requirements i.e, DOL have two exclusive student societies, Bahria University Law Moot Society (BULMS) and Bahria University Law Society, (BULS) who actively participating in co-curricular and extra-curricular activities.		
		Sports	Campus Sports club in place		

* weekly planned PLL activities for the semester

Program Summary

<i>Roadmap</i>	<i>Total Courses</i>	<i>Total CHs</i>	<i>Internship</i>	<i>PLL</i>	<i>Remarks</i>
Existing	56	166	Complied	Complied	-
Revised (as per new HEC Policy 2020)	57	171	Complied	Complied	- 3 credit hour course added under breadth courses. One credit hour each of Pakistan Studies and Islamic studies/Ethics increased.

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: LLB 5 Years****Faculty: Humanities and Social Sciences
Department of Law****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	LLB 111	English-I	3		Expository Writing (1)	Existing
2	LLB 112	Pakistan Studies	3		Civilization Courses	Existing (1 CH added)
3	LLB 114	Fundamentals of Economics	3		Arts and Humanities (1)	Existing
4	LLB 115	Introduction to Law	3		Discipline Specific Course	Existing
5	LLB 117	Introduction to Sociology	3		Social Science (1)	Existing
6	LLB 118	Skills Development	3		Quantitative Reasoning (1)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Optional: These are introductory courses in different disciplines that are offered by department which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	LLB 121	English –II	3		Expository Writing (2)	Existing
2	LLB 122	Islamic Studies/Ethics	3		Civilization Courses	Existing (1 CH added)
3	LLB 123	Principles of Political Science	3		Social Science (2)	Existing
4	LLB 124	Legal System of Pakistan	3		Discipline Specific Course	Existing
5	LLB 125	History (South Asia)	3		Arts and Humanities (2)	Existing
6	LLB 127	Law of Torts-1	3		Discipline Specific Course	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	LLB 211	English-III	3		Expository Writing (3)	Existing
2	LLB 213	Islamic Jurisprudence-I	3		Discipline Specific Course	Existing
3	LLB 215	Law of Contract-I	3		Discipline Specific Course	Existing
4	LLB 217	Introduction to Logic and Reasoning	3		Quantitative Reasoning (2)	Existing
5	LLB 218	Constitutional Law-I (UK)	3		Discipline Specific Course	Existing
6	LLB 219	Law of Torts-II	3		Discipline Specific Course	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	LLB 222	Human Rights Law	3		Discipline Specific Course	Existing
2	LLB 224	Law of Contract-II	3		Discipline Specific Course	Existing
3	LLB 225	Islamic Jurisprudence-II	3		Discipline Specific Course	Existing
4	LLB 226	Constitutional Law-II (US)	3		Discipline Specific Course	Existing
5	LLB 227	Introduction to Psychology	3		Natural Science Course (1)	Existing
6	LLB 228	Introduction to Environmental Science	3		Natural Science Course (2)	New Course of 3 credit hours
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	LLB 311	Jurisprudence-I	3		Discipline Specific Course	<i>Existing</i>
2	LLB 316	Constitutional Law-III(Pakistan)	3		Discipline Specific Course	<i>Existing</i>
3	LLB 313	Islamic Personal Law-I	3		Discipline Specific Course	<i>Existing</i>
4	LLB 314	Criminal Law-I	3		Discipline Specific Course	<i>Existing</i>
5	LLB 317	Law of Property	3		Discipline Specific Course	<i>Existing</i>
Total			15			

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	LLB 321	Jurisprudence-II	3		Discipline Specific Course	<i>Existing</i>
2	LLB 326	Law of Business Organizations	3		Discipline Specific Course	<i>Existing</i>
3	LLB 323	Islamic Personal Law-II	3		Discipline Specific Course	<i>Existing</i>
4	LLB 324	Criminal Law-II	3		Discipline Specific Course	<i>Existing</i>
5	LLB 327	Land Laws	3		Discipline Specific Course	<i>Existing</i>
Total			15			

Semester 7:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	LLB 411	Public International Law-I	3		Discipline Specific Course	<i>Existing</i>
2	LLB 417	Constitutional Development in Pakistan	3		Discipline Specific Course	<i>Existing</i>

3	LLB 413	Civil Procedure-I	3		Discipline Specific Course	<i>Existing</i>
4	LLB 414	Criminal Procedure-I	3		Discipline Specific Course	<i>Existing</i>
5	LLB 415	Law OF Evidence-I	3		Discipline Specific Course	<i>Existing</i>
6	LLB 416	Legal Drafting-I	3		Discipline Specific Course	<i>Existing</i>
Total			18			

Semester 8:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	LLB 421	Public International Law-II	3		Discipline Specific Course	<i>Existing</i>
2	LLB 422	Equity and Specific Relief	3		Discipline Specific Course	<i>Existing</i>
3	LLB 423	Civil Procedure-II	3		Discipline Specific Course	<i>Existing</i>
4	LLB 424	Criminal Procedure-II	3		Discipline Specific Course	<i>Existing</i>
5	LLB 425	Law of Evidence-II	3		Discipline Specific Course	<i>Existing</i>
6	LLB 426	Legal Drafting-II	3		Discipline Specific Course	<i>Existing in 8th Semester</i>
Total			18			

Semester-9

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	LLB 516	Research Method	3		Discipline Specific Course	<i>Existing</i>
2	LLB 517	Minor Acts	3		Discipline Specific Course	<i>Existing</i>
3		Elective-I	3		Discipline Specific Course	<i>Existing</i>
4		Elective-II	3		Discipline Specific Course	<i>Existing</i>
5	LLB 515	Moot Cases and Professional Ethics	3		Discipline Specific Course	<i>Existing</i>
	Total		18			

Semester-10

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	LLB 526	Administrative Law	3		Discipline Specific Course	<i>Existing</i>
2	LLB 527	Interpretation of Statutes and Legislative Drafting	3		Discipline Specific Course	<i>Existing</i>
3	LLB 523	Research Project	3		Discipline Specific Course	<i>Existing</i>
4		Elective-III	3		Discipline Specific Course	<i>Existing</i>
5		Elective-IV	3		Discipline Specific Course	<i>Existing</i>
	Total		18			

Program Summary:

Total Courses	Total Credit Hours
57	171

ELECTIVE LIST	
Course Code	Subject Title
LLB 535	Alternate Dispute Resolution
LLB 536	Banking Laws
LLB 537	Conflict of Laws
LLB 538	Consumer Protection Laws
LLB 539	Custom and Tariff Laws
LLB 540	e-Commerce Law
LLB 541	Election Laws
LLB 542	Environmental Laws
LLB 543	Gender and Law
LLB 544	Insurance laws
LLB 545	Intellectual Property Laws
LLB 546	International Economic Law
LLB 547	International Humanitarian Law
LLB 548	International Institutions
LLB 549	International Trade Law
LLB 550	Islamic Commercial Laws
LLB 551	Labour Laws
LLB 552	Law and Development
LLB 553	Law and Energy
LLB 554	Law and Society in Pakistan
LLB 555	Local and Special Laws
LLB 556	Media Laws
LLB 557	Medical and Forensic Law
LLB 558	Mergers and Acquisitions
LLB 559	Islamic Legal Maxims
LLB 560	Public Interest Litigation
LLB 561	Securities Regulation
LLB 562	Shipping and Admiralty Laws
LLB 563	Taxation Laws
LLB 564	Telecommunication Laws
LLB 565	Competition Law
LLB 566	Parliamentary Studies
LLB 567	Air and Space Law
LLB 568	Cyber Security Law & Policy

FACULTY OF ENGINEERING SCIENCES

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BS Environmental Sciences****Faculty: FoES****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	MED 111	Photography	3	New
		ARH 211	Museology	3	New
		CHM 105	Chemistry	2+1	1 Lab CH added
		PHY 101	Physics	3	Existing
		HSS 202	Introduction to Sociology	3	Existing
		HSS 107	Introduction to Psychology	3	New
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 103	English-I	3	Existing
		ENG 104	English-II	3	Existing
		ENG 205	Technical Writing and Presentation Skills	3	Replaced with Oral Communications course
		CSC 105	Introduction to Computers	2+1	1 Lab CH added
		MAT 205	Statistics	3	Existing
Civilizational courses (2) Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 102	Pakistan Studies	3	1 CH added
		ISL 102	Islamic Studies	3	1 CH added

b. Disciplinary Requirement

<i>Sub-Category</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
Discipline Courses (Majors Courses 54 Credit Hrs (18 Courses))	ENV 105	Introduction to Environmental Sciences	2+1	1 Lab CH added
	ENV 236	Introduction to Climate Change	3	Existing
	ENV 210	Environmental Chemistry	2+1	1 Lab CH added
	ENV 215	Social Theory of Environment	3	Existing
	ENV 220	Environmental Microbiology	2+1	1 Lab CH added
	ENV 225	Applied Ecology	3	Existing
	ENV 305	Environmental Monitoring	2+1	1 Lab CH added
	ENV 310	Environmental Toxicology	2+1	1 Lab CH added
	ENV 315	Environmental Management System	3	Existing
	ENV 335	Analytical Techniques in Environmental Sciences	2+1	1 Lab CH added
	ENV 425	Occupational Health & Safety	3	Existing
	ENV. 340	Solid Waste Management	2+1	1 Lab CH added
	ENV 345	Environmental Hazard & Management	3	Existing
	ENV 330	Environmental & Natural Resource Economics	3	Existing
	ENV 415	Natural Resource Management	3	Existing
	ENV 440	Energy and Environment	3	Existing
	ENV 430	Environmental Policies & Laws		Existing
	ENV 420	Research Methods in Environmental Sciences	3	Existing

Minor Courses 12 credit hrs (4 Courses)		Elective I	3	Select from List of Approved Electives
		Elective II	3	Select from List of Approved Electives
		Elective III	3	Select from List of Approved Electives
		Elective IV	3	Select from List of Approved Electives
Distribution Courses 18 Credit hrs (6 Courses)	MAT 115	Calculus & Analytical Geometry	3	Existing
	GEO 110	Fundamental of Geography & Geomorphology	3	Existing
	GEO 305	Environmental Geology	3	Existing
	GEO 435	GIS & Remote Sensing	2+1	1 CH of Lab added
	GEO 420	Hydrogeology	2+1	1 CH of Lab added
	ENV 360	Water Resources Management	2+1	New
Lab/Field work/ Thesis 6 credit hrs field (2 courses) 6 credit hrs Thesis	ENV 240	Environmental Sciences Field Work and Report-1	3	Existing
	ENV 370	Environmental Sciences Field Work and Report II	3	New
	ENV 440	Thesis	6	Existing
Zero Credit Course (1 Zero credit Math/Biology course for students with Pre-Medical background)	MAT 105 OR BIO 105	Mathematics OR Fundamentals of Biology	0	Academic credit of this course is zero but its contact hours, teaching material and tuition fee are equal to a 3 credit hours course.

c. Practical Learning Requirements

Category			Weeks/Hours		
Practical Learning Requirements	Internship (9 weeks)				
	Practical Learning Lab* (4 contact hrs per week)				
		Entrepreneurship			
		Youth Club			
		Sports			

* weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	45	135			
Revised (as per new HEC Policy 2020)	45	135			

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: BS Environmental Sciences****Faculty: FoES****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 103	English I	3	0	Expository Writing (1)	Existing
2	PHY 101	Physics	3	0	Natural Sciences (1)	Existing
3	HSS 107	Introduction to Psychology	3	0	Social Science (1)	New
4	CSC 105 CSL 105	Introduction to Computers Introduction to Computer Lab	2	1	Quantitative Reasoning (1)	Existing
5	MED 111	Photography	3	0	Arts and Humanities (1)	New
6	ENV 105	Introduction to Environmental Sciences	2	1	Major	Existing
7	MAT 105/BIO 105**	Mathematics/Biology	0	0		Existing
Total Credit Hours			18			
8	Practical Learning Lab (4 contact hours per week as per BU Policy)					

* Optional: These are introductory courses in different disciplines that are offered by department which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

** Zero credit Math course for students with Pre-Medical background and Zero credit Biology course for students with Pre-Engineering background. Academic credit of this course is zero but its contact hours, teaching material and tuition fee are equal to a 3 credit hours course.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 104 Prereq: ENG 103	English II	3	0	Expository Writing (2)	Existing
2	CHM 105 CHL 105	Chemistry Chemistry Lab	2	1	Natural Sciences (2)	1 Lab CH added
3	HSS 202	Introduction to Sociology	3	0	Social Science (2)	Existing
4	MAT 205	Statistics	3	0	Quantitative Reasoning (2)	Existing
5	ARH 211	Museology	3	0	Arts and Humanities (2)	New
6	ENV 236 Prereq: ENV 105	Introduction to Climate Change	3	0	Major	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week as per BU Policy)					

Semester 3:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 205 Prereq: ENG 104	Technical Writing & Presentation Skills	3	0	Expository Writing (3)	Replaced with Oral Communications course
2	PAK 102	Pakistan Studies	3	0	Pakistan Studies	1 CH added
3	ISL 102	Islamic Studies	3	0	Islamic/Religious Studies	1 CH added
4	MAT 115	Calculus & Analytical Geometry	3	0	Distribution	Existing
5	GEO 110 Prereq: GEO 105	Fundamental of Geography & Geomorphology	3	0	Distribution	Existing

6	ENV 210	Environmental Chemistry	2	1	Major	1 Lab CH added
	ENL 210	Environmental Chemistry Lab				
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week as per BU Policy)					

Semester 4:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENV 215	Social Theory of Environment	3	0	Major	Existing
2	ENV 220	Environmental Microbiology	2	1	Major	1 Lab CH added
	ENL 220	Environmental Microbiology Lab				
3	ENV 225	Applied Ecology	3	0	Major	Existing
4	ENV 305	Environmental Monitoring	2	1	Major	1 Lab CH added
	ENL 305	Environmental Monitoring Lab				
	Prereq: ENV 105					
5	ENV 310	Environmental Toxicology	2	1	Major	1 Lab CH added
	ENL 310	Environmental Toxicology Lab				
	Prereq: ENV 105					
6	GEO 305	Environmental Geology	3	0	Distribution	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week as per BU Policy)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENV 335 ENL 335	Analytical Techniques in Environmental Sciences Analytical Techniques in Environmental Sciences Lab	2	1	Major	1 Lab CH added
2	ENV 315	Environmental Management System	3	0	Major	Existing
3	ENV 325	Environmental Engineering	3	0	Major	Existing
4	ENV 340 ENL 340	Solid Waste Management Solid Waste Management Lab	2	1	Major	1 Lab CH added
5		Elective-I	3	0	Minor	Select from List of Approved electives
6	ENV 240	Environmental Sciences Field Work and Report I	3		Major	Existing
Total Credit Hours			18			

Semester 6:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	ENV 345	Environmental Hazard & Management	3	0	Major	Existing
2	ENV 330	Environmental & Natural Resource Economics	3	0	Major	Existing
3	ENV 360	Water Resources Management	2	1	Distribution	1 Lab CH added
	ENL 360	Water Resources Management Lab				
4		Elective-II	3	0	Minor	Select from List of Approved Electives
5	ENV 370	Environmental Sciences Field Work and Report II	3		Major	New
Total Credit Hours			15			

Semester 7:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	ENV 415	Natural Resource Management	3	0	Major	Existing
	Prereq: ENV 105					
2	ENV 420	Research Methods in Environmental Sciences	3	0	Major	Existing
3	GEO 420	Hydrogeology	2	1	Distribution	1 Lab CH added
	GEL 420	Hydrogeology Lab				
4		Elective III	3	0	Minor	Select from List of Approved Electives
5		Elective IV	3	0	Minor	Select from List of Approved Electives
Total Credit Hours			15			

Semester 8:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	GEO 435 GEL 435	GIS & Remote Sensing GIS & Remote Sensing Lab	2	1	Distribution	1 Lab CH added
2	ENV 440	Energy and Environment	3	0	Major	Existing
3	ENV 430	Environmental Policies & Laws	3	0	Major	Existing
4	ENV 435	Thesis	0	6		Existing
Total Credit Hours			15			

LIST OF ENVIRONMENTAL SCIENCES ELECTIVE COURSES (MINOR)

Course Code	Prerequisite	Elective Courses	Credit Hours
ENV 425		Occupational Health & Safety	3+0
ENV 320	ENV 110	Environmental Biotechnology	3+0
ENV 410		Environmental Impact Assessment	3+0
ENV 405		Pollution Control Technology	3+0
GEO 335		Earthquake Seismology	3 +0
GEO 351		Natural Disaster Management	3 +0
ENV 350		Soil and Environment	3 +0
ENV 355		Urban Environmental Management	3 +0

Program Summary:

Total Courses	Total Credit Hours
45	135

Courses Description**ENV 210 Environmental Chemistry (2 CH)**

Theory: Historical background, Introduction to Environmental Science, Technology and Chemistry, Water pollution, Water treatment, Atmosphere and atmospheric chemistry, Particles in the atmosphere, Gaseous inorganic and organic pollutants, Photo-chemical smog, Environmental chemistry of hazardous waste, Chemical analysis of Water and waste water, Waste and solid, Air and gas.

ENL 210 Environmental Chemistry Lab (1CH)

The pH and Buffer Capacity of Environmental Waters, Alkalinity of Streams and Lakes, Conductivity of Various Waters (TDS), Hydrophobic/Hydrophilic Character, Kinetics of the Decomposition of Pollutants in the Environment with an Application to Plasticizers, Introduction to Air Sampling: Particulates in Urban Air, Determination of the Concentration of Carbon Dioxide in the Atmosphere

ENV 220 Environmental Microbiology (2 CH)

Theory: Microorganisms and safety: Harmless microorganisms and assumptions, handling clinical and contaminated samples, Bio-safety against risk type microorganisms, Handling of genetically manipulated microorganisms and plant pathogens, Environmental applications: Waste water microbial treatments, solid waste treatment, biogas, sludge from fermentation as fertilizer, bio-deterioration control, bio-mining, and geological applications; Microorganisms and agri-production: bio-pesticides, dinitrogen fixation, virus detection, bacteria and virus elimination in plants, soil biological quality and plant growth, microbial activities, mineralization and immobilization, rhizosphere and degradation, Food technology and microbial aspects, Microbial food spoilage and improvement, sanitation in food industry, value addition, Industrial hygiene.

ENL 220 Environmental Microbiology Lab (1 CH)

Culturing, isolation, and identification of bacteria (culture-based) from environmental or human samples. Isolating the novel bacterial strains, microbial and molecular biological techniques.

ENV 305 Environmental Monitoring (2 CH)

Theory: Conceptual Basis of Environmental Monitoring Systems, Integrated Data Management for Environment Monitoring Programs, Basic Concept and Applications of Environmental Monitoring, Atmospheric Monitoring, Opportunities and Challenges in Surface Water Quality Monitoring, Groundwater Monitoring: Statistical Methods for Testing, Selection of Ecological Indicators for Monitoring, Efficacy of Forest Health Monitoring Indicators, Landscape Monitoring, Monitoring and Assessment of the Fate and Transport, Statistical Methods for Environmental Monitoring and Assessment, Discriminating between the Good and the Bad: Quality Assurance, Monitoring, Assessment and Environmental Policy, Development of Watershed-Based Assessment Tools, Biological Indicators in Environmental Monitoring Programs.

ENL 305 Environmental Monitoring Lab (1 CH)

Introduction to sampling techniques and analytical methods to measure environmental contamination in air, water, soils, and food. Emphasis on instrument selection and quality control, including documentation, calibration, and sample management. Wind flow rates. Quantification of noise. Quantification of light intensity. Humidity levels

ENV 310 Environmental Toxicology (2 CH)

Pre Req ENV 105

Introduction to Toxicology: History, Toxin vs Toxicants, Anthropogenic Chemicals as Toxicants. Classification of Environmental Toxicants, Toxicological Agents and their types. Dose and Dose response relationship. Toxicity and its measurement. Organs, Organ system and Effects of Toxicants on Organ system. Bioaccumulation and bio-magnifications: Threshold limit for toxins, Toxicant Metabolism and accumulation in body organs and pathways. Response of the body systems to toxicological agents: immunological considerations in toxicology, toxicity screening using microbial systems. Risks and their characterization: risk assessment and management.

ENL 310 Environmental Toxicology Lab (1CH)

Quantification of toxicity – LD50 and rating systems, Threshold Limit Values, Epidemiology, Fates of absorbed toxins, Natural detoxification processes, Photochemical smog Nitrogen oxides and photochemical smog. Oxidation of hydrocarbons, water quality indicators including dissolved oxygen, Environmental toxicity testing. Integrated chemical analysis and toxicity testing protocols.

ENV 335 Analytical Techniques in Environmental Sciences (2 CH)

Theory: Introduction, Principal of physical, chemical and microbiological analysis of environmental pollutants, Sampling rules, procedure, collection and their preservations for the examination of water, waste water, air, solid waste and soil, Lab technique and field monitoring, Conventional chemical analysis, Analytical Environmental data, assessment and interpretation, Separation Techniques, Electro analytical techniques, Thermal method of analysis, Biological indicators, General principle of spectrometry, Instrumental techniques using atomic absorption, U.V-visible, infrared spectrophotometers, gas chromatography, X-ray defraction, X-ray Florence etc.

ENL 335 Analytical Techniques in Environmental Sciences Lab (1 CH)

Analytical basics (separation versus detection, precision, “accuracy”, common sense, trace analysis (metal and organic), contamination, blanks, protocols, note keeping, sampling), spectrometric theory (atomic absorption, UV, IR, fluorescence, colorimetry: Atomic Absorption for metals, UV for silica and nitrate, IR detection, pH detection), electrodes (function, G, examples of uses in marine chemistry: pH electrodes, microelectrodes; oxygen electrodes), chromatographic theory – LC and GC.

ENV 340 Solid Waste Management (2 CH)

Sources and impacts of waste, Sustainability and the economics of waste management, Integrated Waste Management and Life Cycle Analysis, Quantification of waste, Waste minimisation and reuse, Collection, and sorting systems, Biological treatments, Incineration, Landfill, Recycling and Integrated Waste Management Case Studies, Wastewater emissions and water quality, Waste gas emissions and climate change.

ENL 340 Solid Waste Management Lab (1 CH)

Introduction, Responsibilities, Waste Minimization, General requirements, Specific Waste Management Requirements, Biological Waste Management, Chemical Waste Management, Radioactive Waste Management, Mixed Waste (mixtures of biological, chemical and/or radioactive), Sharp Waste Management, Laboratory Decommissioning, composting, recycling

ENV 360 Water Resources Management (2 CH)

Introduction; hydrological cycle, water resources and their role, limits to water availability, water losses, water consumption, water pollution, water shortage problem and solution, improving water productivity, water conservation practices, integrated management of coastal and marine resources, improving water productivity/irrigation water efficiency, wetlands resources, irrigation resources, sustainable aquaculture practices, flood and draught management, government Policies and Programs. Dams, barrages, and their environmental impacts on farm water management. Recycling and re-use of wastewater as a resource. Indus Water Treaty 1960, Indus Water Accord 1991, relevant institutions, and authorities

ENL 360 Water Resources Management Lab (1 CH)

Water quality assessment, physical, chemical, and biological contamination. Measurement of Sodium Adsorption Ration (SAR), Residual Sodium Carbonate (RSC). Estimation of Evaporation by Pan evaporation, Determination of Channel Flow By Using Current Meter/Float Method, Volumetric Method Measurement of Temperature, Relative Humidity, Wind Velocity & Direction, Measurement of Rainfall Using Various Equipment, hands on exercise on crop water requirements.

ENV 350 Soil and Environment (3 CH)

Introduction, Soil forming minerals, Types and properties of parent materials, Physical and chemical processes of weathering, Factors and processes of soil formation, Physical and chemical properties of soil, Soil morphology and classification Cation and anion exchange, Soil buffering capacity and its importance, Soil degradation, management and green productivity, Environmental implications of fertilizers and agrochemicals, Environmental impact of agricultural and Industrial wastes, Soil as a natural sink for pollutants.

ENV 335 Urban Environmental Management (3 CH)

Introduction, Urbanization, Definition, Process and outcome, Causes of urbanization, Forms of urbanization, urbanization in Pakistan, Urban ecology: atmospheric processes, hydrological processes, soils, urban flora and fauna, transport, residential mobility and the neighborhood change, humans as components of urban ecosystems, urban settlements, Urban ecosystem, urban patterns and ecosystem functions, urban landscapes characteristics, urban political ecology, future of urban centers.

ENV 370 Environmental Sciences Field Work and Report II (3 CH)

4 days field work to train the students on the environmental management system of industrial environment or practical applications such as on-site testing/analysis of environmental samples in field. Students on return will write a detailed report on the work carried out in the field.

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BS Geology****Faculty: FoES****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	MED 111	Photography	3	New
		ARH 211	Museology	3	New
		CHM 105	Chemistry	2+1	1 CH for lab added
		PHY 101	Physics	3	Existing
		HSS 202	Introduction to Sociology	3	Existing
		HSS 107	Introduction to Psychology	3	New
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 103	English-I	3	Existing
		ENG 104	English-II	3	Existing
		ENG 205	Technical Writing and Presentation Skills	3	Replaced with Oral Communications course
		CSC 105	Introduction to Computers	2+1	1 CH for lab added
		GEO 206	Geostatistics	3	Replaced with Statistics course
Civilizational courses (2) Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 102	Pakistan Studies	3	1 CH added
		ISL 102	Islamic Studies	3	1 CH added

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses Majors 54 Credit Hrs (18 Courses)	GEO 105	Physical & General Geology	3	Existing
	GEO 120	Field Geology	2+1	1 CH for lab added
	GEO 205	Structure Geology	2+1	1 CH for lab added
	GEO 210	Mineralogy and Crystallography	2+1	1 CH for lab added
	GEO 215	Sedimentology	3	Existing
	GEO 220	Optical Mineralogy	2+1	1 CH for lab added
	GEO 225	Geochemistry	3	Existing
	GEO 230	Geotectonics	3	Existing
	GEO 305	Environmental Geology	3	Existing

	GEO 310	Paleontology	3	Existing
	GEO 315	Igneous & Metamorphic Petrology	3	Existing
	GEO 325	Stratigraphy of Pakistan	3	Existing
	GEO 330	Micropaleontology & Biostratigraphy	2+1	1 CH for lab added
	GEO 340	Wireline Logging	3	Existing
	GEO 345	Petroleum Geology	3	Existing
	GEO 350	Geology of Pakistan	3	Existing
	GEO 410	Engineering Geology	3	Existing
	GEO 420	Hydrogeology	2+1	1 CH for lab added
Discipline Courses Minors 12 Credit Hrs (4 Courses)		Elective I	3	Select from list of approved electives
		Elective II	3	
		Elective III	3	
		Elective IV	3	
Distribution Courses 18 Credit Hrs (6 Courses)	MAT 115	Calculus & Analytical Geometry	3	Existing
	GEO 110	Fundamental of Geography & Geomorphology	3	Existing
	GEO 435	GIS & Remote Sensing	2+1	1 CH for lab added
	GEO 326	Computing with Matlab	2+1	1 CH for lab added
	GEO 425	Research Methodology	3	1 CH Added
	GEO 115	Introduction to Geophysics	3	Existing
Lab/Field work/ Thesis 6 Credit Hrs field (2 Courses) 6 Credit Hrs Thesis	GEO 235	Geology Field Work & Report-I	3	Existing
	GEO 355	Geology Field Work & Report-II	3	Existing
	GEO 440	Thesis	6	Existing
Zero Credit Course (1 Zero credit Math course for students with Pre-Medical background)	MAT 105	Mathematics	0	Existing Academic credit of this course is zero but its contact hours, teaching material and tuition fee are equal to a 3 credit hours course.

c. Practical Learning Requirements

Category			Weeks/Hours		
Practical Learning Requirements	Internship (9 weeks)				
	Practical Learning Lab* (4 contact hrs per week)				
		Entrepreneurship			
		Youth Club			
		Sports			

* weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	45	135			
Revised (as per new HEC Policy 2020)	45	135			

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: BS Geology****Faculty: FoES****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 103	English I	3	0	Expository Writing (1)	Existing
2	PHY 101	Physics	3	0	Natural Sciences (1)	Existing
3	HSS 107	Introduction to Psychology	3	0	Social Science (1)	New
4	CSC 105	Introduction to Computers	2	1	Quantitative Reasoning (1)	1 CH for lab added
	CSL 105	Introduction to computers lab				
5	MED 111	Photography	3	0	Arts and Humanities (1)	New
6	GEO 105	Physical & General Geology	3	0	Major	Existing
7	MAT 105**	Mathematics	0	0		Existing
Total Credit Hours			18			
8	Practical Learning Lab (4 contact hours per week as per BU Policy)					

* Optional: These are introductory courses in different disciplines that are offered by department which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

** Zero credit Math course for students with Pre-Medical background. Academic credit of this course is zero but its contact hours, teaching material and tuition fee are equal to a 3 credit hours course.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 104 Prereq: ENG 103	English II	3	0	Expository Writing (2)	Existing
2	CHM 105 CHL 105	Chemistry Chemistry lab	2	1	Natural Sciences (2)	1 CH for lab added
3	HSS 202	Introduction to Sociology	3	0	Social Science (2)	Existing
4	GEO 206	Geostatistics	3	0	Quantitative Reasoning (2)	Replaced with Statistics course
5	ARH 211	Museology	3	0	Arts and Humanities (2)	New
6	GEO 115 Prereq: PHY 101	Introduction to Geophysics	3	0	Distribution	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week as per BU Policy)					

Semester 3:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 205 Prereq: ENG 104	Technical Writing & Presentation Skills	3	0	Expository Writing (3)	Replaced with Oral Communications course
2	PAK 102	Pakistan Studies	3	0	Pakistan Studies	1 CH added
3	ISL 102	Islamic Studies	3	0	Islamic/Religious Studies	1 CH added
4	MAT 115	Calculus & Analytical Geometry	3	0	Distribution	Existing
5	GEO 110 Prereq: GEO 105	Fundamental of Geography & Geomorphology	3	0	Distribution	Existing

6	GEO 326 GEL 326	Computing with Matlab Computing with Matlab lab	2	1	Distribution	1 CH for lab added
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week as per BU Policy)					

Semester 4:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	GEO 435 GEL 435	GIS & Remote Sensing GIS & Remote Sensing Lab	2	1	Distribution	1 CH for lab added
2	GEO 225 Prereq: CHM 105	Geochemistry	3	0	Major	Existing
3	GEO 425	Research Methodology	3	0	Distribution	1 CH Added
4	GEO 205 GEL 205 Prereq: GEO 105	Structure Geology Structure Geology Lab	2	1	Major	1 CH for lab work added
5	GEO 215 Prereq: GEO 105	Sedimentology	3	0	Major	Existing
6	GEO 210 GEL 210 Prereq: GEO 105	Mineralogy and Crystallography Mineralogy and Crystallography lab	2	1	Major	1 CH for lab added
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week as per BU Policy)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	GEO 120 GEL 120 Prereq: GEO 105	Field Geology Field Geology Lab	2	1	Major	1 CH for lab added
2	GEO 325 Prereq: GEO 215	Stratigraphy of Pakistan	3	0	Major	Existing
3	GEO 230 Prereq: GEO 205	Geotectonics	3	0	Major	Existing
4	GEO 305	Environmental Geology	3	0	Major	Existing
5	GEO 220 GEL 220 Prereq: GEO 210	Optical Mineralogy Optical Mineralogy Lab	2	1	Major	1 CH for lab added
6	GEO 235	Geology Field Work & Report-I	3		Major	Existing
Total Credit Hours			18			

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	GEO 345 Prereq: GEO 325	Petroleum Geology	3	0	Major	Existing
2	GEO 310	Paleontology	3	0	Major	Existing
3	GEO 315 Prereq: GEO 210	Igneous & Metamorphic Petrology	3	0	Major	Existing
4	GEO 340	Wireline Logging	3	0	Major	Existing
5	GEO 355	Geology Field Work & Report-II	3		Major	Existing
Total Credit Hours			15			

Semester 7:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	GEO 330 GEL 330 Prereq: GEO 310	Micropaleontology & Biostatigraphy Micropaleontology & Biostatigraphy Lab	2	1	Major	1 CH for lab added
2	GEO 410	Engineering Geology	3	0	Major	Existing
3	GEO 350 Prereq: GEO 230	Geology of Pakistan	3	0	Major	Existing
4		Elective I	3	0	Minor	Select from list of approved electives
5		Elective II	3	0	Minor	Select from list of approved electives
Total Credit Hours			15			

Semester 8:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	GEO 420 GEL 420	Hydrogeology Hydrogeology Lab	2	1	Major	1 CH for lab added
2		Elective III	3	0	Minor	Select from list of approved electives
3		Elective IV	3	0	Minor	Select from list of approved electives
4	GEO 440	Thesis	0	6	Major	Existing
Total Credit Hours			15			

LIST OF GEOLOGY ELECTIVE COURSES

Course Code	Elective Courses	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
GEO 320	Marine Geology	3+0	Existing
GEO 406	Reservoir Geology	3+0	Existing
GEO 407	Clastic Sedimentology Prerequisite: GEO 215 – Sedimentology	3+0	Existing
GEO 408	Carbonate Sedimentology Prerequisite: GEO 215 – Sedimentology	3+0	Existing
GEO 409	Geology and Tectonics of Pakistan Prerequisite: GEO 230 – Geotectonics	3+0	Existing
GEO 415	Economic Geology Prerequisite: GEO 315 – Igneous & metamorphic Petrology	3+0	Existing
GEO 430	Geochemical Exploration Techniques Prerequisite: GEO 225 – Geochemistry	3+0	Existing
GEO 431	Introduction to Geotechnical Engineering Prerequisite: GEO 410 – Engineering Geology	3+0	New Course Added
GEO 432	Rock Mechanics	3+0	New Course Added
GEO 433	Soil Mechanics	3+0	New Course Added

Program Summary:

Total Courses	Total Credit Hours
45	135

COURSE DESCRIPTION**HSS 107 Introduction to Psychology (3CH)**

The objective of the course is to give students experience in thinking psychologically about individual and social behaviors. The historical and theoretical foundations of Professional Psychology are also explored. Students will learn about a broad range of psychological concepts through different perspectives. This course addresses History of Modern psychology, Muslim contribution to psychology, nature, scope and branches of psychology, sensation, perception, attention, memory, theories of intelligence, motivation, emotion, learning and problem solving.

CSC 105 Introduction to Computers (2 CH)

History of Computer Development, Application of computers; Classification and types of computers; Basic block diagram of a computer; Hardware (input, output, memory, CPU and software (system software & application software); social impact of computer age; Computer in education and scientific

research; Introduction to Internet and History of internet; Internet service providers and connections; The World Wide Web.

CSL 103 Introduction to Computers Lab (1 CH)

Lab: Introduction to Microsoft (word, Excel, PowerPoint); Structure of C; Input and output function of C++; Variable and Operators; Decision and Loops.

MED 111 Photography (3 CH)

An introductory course in the study of photography with emphasis on the digital single lens reflex (D-SLR) camera. Exposure, metering, focus, depth of field, lenses, basic lighting, design elements and composition are explored. Basic principles of digital photographic capture are discussed. Students are responsible for providing a digital single lens reflex (D-SLR) camera.

CHM 105 Chemistry (2 CH)

Fundamentals of chemistry including macroscopic behavior of basic States of Matter; Energetics of Chemical bonding and its applications; Solutions and colloids; Special emphasis on the acid-base equilibrium in aqueous solutions; Buffers and pH; Hydrocarbons; Factors effecting the Chemical reactivity of different organic functional groups; Introduction to molecular spectroscopy and modern analytical techniques with their applications.

CHL 105 Chemistry Lab (1 CH)

Molarity, normality, acid digestion of plant sample, extraction of hydrocarbon from soil sample, pH detection using titrimetric assay, The Beer-Lambert Law and colorimetry

GEO 206 Geostatistics (3 CH)

Descriptive statistics and exploratory data analysis, random variable; moments; probability distributions; normal and lognormal distributions, random function model, modeling spatial continuity; experimental variograms covariance functions; correlograms and madograms; variogram and covariance function models; isotropy and anisotropy, estimation methods: simple kriging.

ARH 211 Museology (3 CH)

Introduction of Museology, Museum and Its Function, Collection, recording, preservation, exhibition and education, Different types of museums, History of Museology in Pakistan Problems and prospects of museums in Pakistan, Museum Administration, Museum Security, Record keeping, Care and Storage of Museum Objects, Museum Architecture, Museum Exhibition.

PAK 105 Pakistan Studies (3 CH)

The course consists of the analysis of the various dimensions of Pakistan. It is designed to enable a balanced perception of the ideological rationale and the political factors & forces that generated events leading to the creation of Pakistan. Equally important is the knowing of social structure and ethnic divide, the plural character of Pakistan's society. The main strands of Pakistan's foreign Policy are to be examined in the context of historical constraints-strategic location and stresses of contemporary world. Pakistan studies, therefore, should act as a window to future Globalization has made the world a global village and our youth actively interacts with the people belonging to different culture, races, ideologies and religions. There is a strong need to make our youth aware about the economic challenges facing by Pakistan after 9/11 attacks and Pakistan's strategic role in the world scenario.

ISL 105 Islamic Studies (3 CH)

The course introduces students to the Holy Quran and throws light on its different aspects. Selected verses from the Holy Quran and Hadith have been also included in the course. The course also throws

light on the life of Prophet (Peace Be Upon Him). The course will give a clear vision to students regarding economic, political, social system of Islam. The designed course also covers topic of Islamic culture and civilization. Last but not the least Islam and science have also added to clarify vision of students that our religion is not against but for science

GEO 326 Computing with Matlab (2 CH)

Matlab basics (getting mat lab to run, programming, the command prompt, simple expressions, variables and referencing matrix elements), getting mat lab to run, programming, the command prompt, simple expressions, variables, referencing matrix elements, matrices, accessing matrix elements, assigning into sub-matrices, basic tools, matrix concatenations, more expression, plotting, logical constructs, formatting text, flow control, “if” statement, “for” loops. Defining functions, “while” statements, variable scope, functions and logic, multiple input functions, more on logic, basic lab commands, programming structures, bsic graphing routines, advanced matrix operations, file input/output, writing and calling functions, data structures and input assertion, mat lab compiler, practical computer based exercise.

GEL 326 Computing with Matlab Lab (1 CH)

Introduction to Matlab (Get Knowing), MATLAB as Calculator (Arithmetic Operations). Elementary Math Functions, Scalar variables, Predefined Variables; Complex numbers; Built-In functions for handling arrays; Writing, saving, and execute MATLAB programs. Fundamental form MATLAB uses to store and manipulate data; Matrices operations: addition and subtraction of arrays Multiplication, division, and exponentiation; element-by-element operations; Matrices operations: element-by-element operations; Matrices operations: element-by-element operations; How to input data to a script file; How data are stored in MATLAB How to exchange data between MATLAB and other applications; Yield 2- and 3-D plots in Matlab, Standard plots with linear axes, logarithmic and semi-logarithmic axes, bar and stairs plots, polar plots, three-dimensional contour surface and mesh plots. Relational operators; Logical operators; Conditional statements; Loops; User-defined functions and function files.

GEO 435 GIS & Remote Sensing (2 CH)

Introduction to Geographical Information System, Data Types (Spatial/Aspatial), Data Models and Structures (Raster/Vector), Data Sources and Capturing Techniques, Displaying and Manipulating spatial information, Vector Data Preparation (Digitization and Spatial Data Editing), GPS Survey, Introduction to the concept of RS, Electromagnetic Spectrum, Atmospheric Interaction, Technology of Remote sensing (Orbits, Satellites, Sensors and Platforms), Applications of Remote Sensing, Satellite Image Processing Cycle, Image Enhancement, Data Fusion and Mosaicing Information Extraction (Classification and Vectorization).

GEL 435 GIS & Remote Sensing Lab (1 CH)

Introduction to ArcGIS, Exploring GIS Data set in Arc Catalog, working on vector data in ArcGIS (Scanning, Digitization and Editing), Integrating GPS data in GIS Environment, Applications of GIS, ERDAS Imagine, ENVI - Environment, Noise Corrections, Geometric Corrections, Radiometric Corrections.

GEO 205 Structural Geology (2 CH)

Prerequisite: GEO 105 Physical and General Geology

Dynamics of rock deformation and mechanical properties of rocks; Stress and strain concepts; Factors controlling mechanical behavior of Materials; Folds classification based on morphology, geometry, and vergence; Mechanics of fold formation; Faults classification based on geometry and genesis; Structures in compressional and extensional regimes; Classification of Joints, foliations and lineation;

Unconformities, their classification and recognition. Laboratory exercises on geologic map interpretation and cross sections; Field trips to area where good Geological structures are exposed.

GEL 205 Structural Geology Lab (1 CH)

Map exercises, linear and planar structures, and construction of geological cross-sections; orthographic projections (geometrical exercises); stereographic projections, fault plane solutions and use of structural computer software.

GEO 210 Mineralogy and Crystallography (2 CH)

Prerequisite: GEO 105 Physical and General Geology

Introduction to Crystallography; elements of symmetry, symmetry operations, crystal notation, crystal systems study of normal classes of crystallographic systems; Classification and system study of minerals with an emphasis on their crystallographic features, physical properties, Chemical composition, occurrences, associations and uses; Introduction to X-ray crystallography

Lab: Identification and description of common minerals. Study of crystal models.

GEL 210 Mineralogy and Crystallography Lab (1 CH)

Lab: Identification and description of common minerals. Study of crystal models. Construction and interpretation of phase diagrams.

GEO 120 Field Geology (2 CH)

Prerequisite: GEO 105 Physical and General Geology

Instruments used in field mapping. Introduction to topographic and Geological maps. Methods and techniques of surface and subsurface Geological mapping. Correlation techniques. Field description of igneous, metamorphic and sedimentary rocks. Modes of Geological illustration including structural contour, isopach and litho-facies maps, block and fence diagrams. Field mapping, preparation of Geological maps and cross-section. Fieldwork: Each student is required to do Fieldwork and submit a report in the examination. The Fieldwork should cover; observation of physical features and their plotting on topographic sheet. Study of geomorphic feature. Measurement of stratigraphic sections. Recognition of structural features. Fauna observation. Study of primary and secondary structures. Field description of sedimentary, igneous and metamorphic rocks.

GEL 120 Field Geology Lab (1 CH)

Map exercises, linear and planar structures, and construction of geological cross-sections; orthographic projections (geometrical exercises); instrumentation, basic balanced cross-sections, stereographic projections.

GEO 220 Optical Mineralogy (2 CH)

Pre-requisite: GEO 210 Mineralogy and Crystallography

Review of the rock-forming minerals – occurrences and associations, light & its nature, basic principles of polarized light microscopy (PLM) & its applications to mineral identification, types of microscopic samples, thin-section preparation techniques, optics of isotropic minerals, optics of anisotropic minerals, uniaxial optics, biaxial optics.

GEL 220 Optical Mineralogy Lab (1 CH)

Lab: Identification and description of common minerals; study of rocks and minerals in thin sections, texture and composition; classification of rocks using different techniques, volume estimates and other elementary petrographic techniques.

GEO 330 Micropaleontology and Biostratigraphy (2 CH)

Pre-requisite: GEO 310 Paleontology

Introduction to Foraminifera, Bryozoa, Ostracoda, Conodonts, Algae, Pollen and Spores; Organic walled microplanktons and nanno-fossils; Principles of bio-stratigraphy and bio-stratigraphic zones; Biostratigraphic techniques and procedures; Tertiary bio-stratigraphy with special reference to Pakistan. Lab: Basic micro-paleontological and bio-stratigraphic techniques. Morphological and taxonomic studies of selected microfossils.

GEL 330 Micropaleontology and Biostratigraphy Lab (1 CH)

Basic micropaleontological and bio stratigraphic techniques; morphological and taxonomic studies of selected/index microfossils.

GEO 410 Engineering Geology (2 CH)

Basic concept of Engineering Geology; Mass-wasting, landslide and other rock movements; Uplift and settlement problems; Excavation and tunneling; Introduction to soil mechanics; Classification and characteristics of soil; Engineering properties of soil; Introduction to rock mechanics, stress and strain characteristics in deformation of rocks; rock classification; rock engineering properties; Geology of the engineering structures: dams, tunnels, bridges.

GEL 410 Engineering Geology Lab (1 CH)

Lab: Sieve analysis, slake durability, moisture, void ratios, porosity, angle of repose, and other geotechnical properties of soils. Uniaxial and Triaxial Testing; tensile, compressive and shear tests of rocks.

GEO 420 Hydrogeology (2 CH)

Introduction to the hydrology of surface and groundwater supplies; Water bearing properties of rocks; hydrodynamics of flow through porous Materials; Flow nets; Well hydraulics; Analysis and evaluation of pumping test data; Groundwater quality; Occurrence of groundwater in various rock types and sediments; Introduction to techniques used in groundwater exploration and survey.

GEL 420 Hydrogeology Lab (1 CH)

Lab: Preparation of water table and piezometric surface maps. Flow-net analysis; study and preparation of hydro-geologic maps; graphical presentation of published chemical data of groundwater, ER survey and groundwater geochemistry.

COURSE OUTLINES OF GEOLOGY ELECTIVE COURSES

GEO 401 Introduction to Geotechnical Engineering (3 CH)

Prerequisite: GEO 410 – Engineering Geology

Scope of geotechnical engineering; Engineering significance of geotechnical investigation; Geotechnical investigation at selected sites; Geotechnical mapping procedure; Construction material and uses; Types of concrete; Asphalt; Introduction to slope stabilization methods; Basic mechanics of slope failure; Slope classification. Slope stability; rock and soil mechanics and its application in civil engineering; study of geological factors in relation to the construction of buildings and foundations, roads, highways, excavation and tunneling.

GEO 402 Rock Mechanics (3 CH)

Fabric and mechanical nature of rocks; determination of rock quality for engineering purposes; stress strain behaviors of different rocks; rock mass strength. theories of failure; types of fracture; rock deformation in compression; factors controlling mechanical behaviors of rocks; excavation methods in rocks; distribution of stresses around underground excavations; use of photo elasticity in rock mechanics. Measurement of stresses in situ; wave propagation in rocks; dynamic models.

GEO 403 Soil Mechanics (3 CH)

Introduction and concept of soil mechanics; soil formation and its classification, survey and sampling with its important engineering properties like soil grading, moisture contents, void ratios, density, permeability, shearing strength, bearing capacity, consolidation and settlements.

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BS Geophysics****Faculty: FoES****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	MED 111	Photography	3	New
		ARH 211	Museology	3	New
		CHM 105	Chemistry	2+1	1 CH for lab added
		PHY 101	Physics	3	Existing
		HSS 202	Introduction to Sociology	3	Existing
		HSS 107	Introduction to Psychology	3	New
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 103	English-I	3	Existing
		ENG 104	English-II	3	Existing
		ENG 205	Technical Writing and Presentation Skills	3	Replaced with Oral Communications course
		CSC 105	Introduction to Computers	2+1	1 CH for lab added
		GEO 206	Geostatistics	3	Replaced with Statistics course
Civilizational courses (2) Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 102	Pakistan Studies	3	1 CH added
		ISL 102	Islamic Studies	3	1 CH added

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses Majors 54 Credit Hrs (18 Courses)	GEO 105	Physical & General Geology	3	Existing
	GEO 115	Introduction to Geophysics	3	Existing
	GEO 205	Structure Geology	2+1	1 CH for lab added
	GEO 215	Sedimentology	3	Existing
	GEO 210	Mineralogy and Crystallography	2+1	1 CH for lab added
	GEO 120	Field Geology	2+1	1 CH for lab added

	GEO 325	Stratigraphy of Pakistan	3	Existing
	GEO 230	Geotectonics	3	Existing
	GEO 305	Environmental Geology	3	Existing
	GEO 365	Electrical & Radioactive Techniques	3	Existing
	GEO 345	Petroleum Geology	3	Existing
	GEO 352	Gravity Exploration Techniques	3	Course split GEO 240 - Gravity & Magnetic Exploration Techniques
	GEO 350	Geology of Pakistan	3	Existing
	GEO 367	Seismic Data Acquisition & Planning	3	Existing
	GEO 340	Wireline Logging	3	Existing
	GEO 470	Seismic Data Processing	3	Existing
	GEO 353	Magnetic Exploration Techniques	3	Course split GEO 240 - Gravity & Magnetic Exploration Techniques
	GEO 475	Seismic Data Interpretation	3	Existing
Minors 12 Credit hrs (4 Courses)		Elective I	3	Select from list of approved electives
		Elective II	3	
		Elective III	3	
		Elective IV	3	
Distribution Courses 18 credit hrs (6 courses)	MAT 115	Calculus & Analytical Geometry	3	Existing
	GEO 110	Fundamental of Geography & Geomorphology	3	Existing
	CSC 419	Introduction to Machine Learning	3	New
	GEO 435	GIS & Remote Sensing	2+1	1 CH for lab added
	GEO 326	Computing with Matlab	2+1	1 CH for lab added
	GEO 425	Research Methodology	3	1 CH Added
Lab/Field work/ Thesis 6 Credit Hrs field (2 Courses)	GEO 250	Geology and Geophysical Field	3	Existing

6 Credit Hrs Thesis		Work and Report-I		
	GEO 375	Geology and Geophysical Field Work and Report-II	3	Existing
	GEO 440	Thesis	6	Existing
Zero Credit Course (1 Zero credit Math course for students with Pre-Medical background)	MAT 105	Mathematics	0	Existing
				Academic credit of this course is zero but its contact hours, teaching material and tuition fee are equal to a 3 credit hours course.

c. Practical Learning Requirements

Category			Weeks/Hours		
Practical Learning Requirements	Internship (9 weeks)				
	Practical Learning Lab* (4 contact hrs per week)				
		Entrepreneurship			
		Youth Club			
		Sports			

* weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	45	135			
Revised (as per new HEC Policy 2020)	45	135			

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: BS Geophysics****Faculty: FoES****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 103	English I	3	0	Expository Writing (1)	Existing
2	PHY 101	Physics	3	0	Natural Sciences (1)	Existing
3	HSS 107	Introduction to Psychology	3	0	Social Science (1)	New
4	CSC 105 CSL 105	Introduction to Computers Introduction to computers lab	2	1	Quantitative Reasoning (1)	1 CH for lab added
5	MED 111	Photography	3	0	Arts and Humanities (1)	New
6	GEO 105	Physical & General Geology	3	0	Major	Existing
7	MAT 105**	Mathematics	0	0		Existing
Total Credit Hours			18			
8	Practical Learning Lab (4 contact hours per week as per BU Policy)					

* Optional: These are introductory courses in different disciplines that are offered by department which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

** Zero credit Math course for students with Pre-Medical background. Academic credit of this course is zero but its contact hours, teaching material and tuition fee are equal to a 3 credit hours course.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 104 Prereq: ENG 103	English II	3	0	Expository Writing (2)	Existing
2	CHM 105 CHL 105	Chemistry Chemistry Lab	2	1	Natural Sciences (2)	1 CH for lab added
3	HSS 202	Introduction to Sociology	3	0	Social Science (2)	Existing

4	GEO 206	Geostatistics	3	0	Quantitative Reasoning (2)	Replaced with Statistics course
5	ARH 211	Museology	3	0	Arts and Humanities (2)	New
6	GEO 115 Prereq: PHY 101	Introduction to Geophysics	3	0	Major	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week as per BU Policy)					

Semester 3:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 205 Prereq: ENG 104	Technical Writing & Presentation Skills	3	0	Expository Writing (3)	Replaced with Oral Communications course
2	PAK 102	Pakistan Studies	3	0	Pakistan Studies	1 CH added
3	ISL 102	Islamic Studies	3	0	Islamic/Religious Studies	1 CH added
4	MAT 115	Calculus & Analytical Geometry	3	0	Distribution	Existing
5	GEO 110 Prereq: GEO 105	Fundamental of Geography & Geomorphology	3	0	Distribution	Existing
6	GEO 326 GEL 326	Computing with Matlab Computing with Matlab lab	2	1	Distribution	1 CH for lab added
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week as per BU Policy)					

Semester 4:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	GEO 435 GEL 435	GIS & Remote Sensing GIS & Remote Sensing lab	2	1	Distribution	1 CH for lab added
2	CSC 419	Introduction to Machine Learning	3	0	Distribution	New

3	GEO 425	Research Methodology	3	0	Distribution	1 CH Added
4	GEO 205 GEL 205 Prereq: GEO 105	Structure Geology Structure Geology Lab	2	1	Major	1 CH for lab added
5	GEO 215 Prereq: GEO 105	Sedimentology	3	0	Major	Existing
6	GEO 210 GEL 210 Prereq: GEO 105	Mineralogy and Crystallography Mineralogy and Crystallography lab	2	1	Major	1 CH for lab added
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week as per BU Policy)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	GEO 120 GEL 120 Prereq: GEO 105	Field Geology Field Geology lab	2	1	Major	1 CH for lab added
2	GEO 325 Prereq: GEO 215	Stratigraphy of Pakistan	3	0	Major	Existing
3	GEO 230 Prereq: GEO 205	Geotectonics	3	0	Major	Existing
4	GEO 305	Environmental Geology	3	0	Major	Existing
5	GEO 365 Prereq: GEO 115	Electrical & Radioactive Techniques	3	0	Major	Existing
6	GEO 250	Geology and Geophysical Field Work and Report-I	3		Major	Existing
Total Credit Hours			18			

Semester 6:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	GEO 345 Prereq: GEO 325	Petroleum Geology	3	0	Major	Existing
2	GEO 352 Prereq: GEO 115	Gravity Exploration Techniques	3	0	Major	Course split GEO 240 - Gravity & Magnetic Exploration Techniques
3	GEO 367 Prereq: GEO 115	Seismic Data Acquisition & Planning	3	0	Major	Existing
4	GEO 340	Wireline Logging	3	0	Major	Existing
5	GEO 375	Geology and Geophysical Field Work and Report-II	3		Major	Existing
Total Credit Hours			15			

Semester 7:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	GEO 470 Prereq: GEO 367	Seismic Data Processing	3	0	Major	Existing
2	GEO 353 Prereq: GEO 115	Magnetic Exploration Techniques	3	0	Major	Course split GEO 240 - Gravity & Magnetic Exploration Techniques

3	GEO 350 Prereq: GEO 230	Geology of Pakistan	3	0	Major	Existing
4		Elective I	3	0	Minor	Select from list of approved electives
5		Elective II	3	0	Minor	Select from list of approved electives
Total Credit Hours			15			

Semester 8:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	GEO 475 Prereq: GEO 470	Seismic Data Interpretation	3	0	Major	Existing
2		Elective III	3	0	Minor	Select from list of approved electives
3		Elective IV	3	0	Minor	Select from list of approved electives
4	GEO 440	Thesis	0	6	Major	Existing
Total Credit Hours			15			

LIST OF GEOPHYSICS ELECTIVE COURSES

Course Code	Elective Courses	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
GEO 411	Reservoir Geophysics	3+0	New
GEO 412	Rock Physics	3+0	New
GEO 414 Prereq: GEO 340	Borehole Geophysics	3+0	New
GEO 445	Seismic Stratigraphy	3+0	Existing
GEO 413	Sequence Stratigraphy	3+0	New
GEO 370 Prereq: GEO 115	Geomagnetism & Paleomagnetism	3+0	Existing
GEO 335	Earthquake Seismology	3+0	Existing
GEO 405	Petroleum Engineering	3+0	Existing
GEO 416 Prereq: GEO 365	Groundwater Exploration Techniques	3+0	New

Program Summary:

Total Courses	Total Credit Hours
45	135

COURSE DESCRIPTION**CSC 419 Introduction to Machine Learning (3 CH)**

Supervised learning (parametric/non-parametric algorithms, support vector machines, kernels, neural networks). Unsupervised learning (clustering, dimensionality reduction, recommender systems, deep learning). Best practices in machine learning (bias/variance theory; innovation process in machine learning and AI).

GEO 352 Gravity Exploration Techniques (3 CH)**Pre-requisite GEO 115 Introduction to Geophysics**

Introduction, fundamental principles, units of gravity, roll of mass & density in gravity, distribution of density inside earth, methods of determining value of “g”, gravity acquisition, flattening effect of earth, gravity processing including gravity reduction, different types of correction with their mathematical derivation, Bouger anomaly, regional and residual effect, gravity modeling of ore bodies, methods of finding out density & thickness of ore bodies.

GEO 353 Magnetic Exploration Techniques (3 CH)**Pre-requisite GEO 115 Introduction to Geophysics**

Introduction to magnetic method, significance in oil exploration, magnetic force, definition, unit, advantages & disadvantages, planning of survey, magnetic moment, magnetic induction & magnetic permeability, intensity of magnetization, magnetic reduction, magnetism in rocks and minerals, remnant magnetization, susceptibility contrast, magnetism of earth (geomagnetism), hysteresis loop,

Magnetic data Acquisition, Instrumentation and its types, Magnetic data processing, Regional and Residual separation techniques, interpretation of magnetic data, Depth estimation and its rules, Estimation of the shapes of magnetic bodies

COURSE OUTLINES OF GEOPHYSICS ELECTIVE COURSES

GEO 411 Reservoir Geophysics (3 CH)

Introduction to Reservoir Geophysics. Petroleum reservoir description and characterization with particular emphasis on Seismic techniques. Physical properties of rocks and fluids and why they are influencing on geophysical measurements. Seismic properties of a reservoir depicted in seismic data. Introduction and uses of seismic attributes. Introduction and uses of AVO analyses. Introduction of Gassmann-Biot theory. Role of Reservoir Simulation, Rock Physics and Seismic in Reservoir Monitoring.

GEO 412 Rock Physics (3 CH)

Fundamentals and principles of rock physics, their scope and utility, concepts of elasticity, plasticity and viscosity, rock permeability, porosity, elastic properties of the fluids, seismic wave propagation, porous media, fluid substitution model and rock properties model. In-situ stress measurement, pore pressure, effective pressure, fluid migration, seismic signature, isotropy and anisotropy, velocity dispersion and attenuation, causes of velocity dispersion and attenuation, fluid distribution patterns into the pores, rock physics as interpretation tool and Empirical relations between different rock physics parameters.

GEO 413 Sequence Stratigraphy (3 CH)

Introduction, history, concept and significance of sequence stratigraphy; data sources: seismic reflections, outcrops, well logs, core; seismic facies; sea level changes, their causes and effects; accommodation, eustatic and relative sea curve; hierarchy of sequence stratigraphic elements; types of sequences and systems tracts; applications to hydrocarbon exploration and basin analysis.

GEO 414 Borehole Geophysics (3 CH)

Pre-requisite GEO 340 Wireline Logging

Introduction; basic theory of geophysical methods; petrophysics and formation evaluation; different types of logging techniques, instrumentation and their field application; log analysis and interpretation; application of borehole geophysics for lithological, environmental, water resources, geotechnical, mineral and hydrocarbon studies. Borehole logging; VSP, Case histories. Specified assignments on data acquisition/processing and interpretation.

GEO 416 Groundwater Exploration Techniques (3 CH)

Pre-requisite GEO 365 Electrical and Radioactive Techniques

Groundwater exploration techniques, geological and hydrogeological maps, aerial photographs and satellite imageries; use of various geophysical methods in groundwater exploration; the application of surface geophysical surveying to groundwater problems including identification of aquifer geometry, aquifer properties and water quality; principles and application in hydrogeology of well logging techniques.

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BS Geosciences****Faculty: FoES BUKC****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	GEO 223	Urban and Town Planning	3	New
		MTB 411	Introduction to Film Making	3	New
		CHM 105	Chemistry	3	Existing
		PHY 101	Physics	3	Existing
		HSS 111	Introduction to IR	3	Existing
		PSY 107	Introduction to Psychology	3	Existing
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 103	English-I	3	Existing
		ENG 104	English-II	3	Existing
		HSS 320	Technical Writing and Presentation Skills	3	New (Replaced with Oral Communications course)
		CSC 103	Introduction to Computers and programming	3	Existing
		MAT 205	Statistics	3	Existing
Civilizational Courses (2) Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 102	Pakistan Studies	3	1 CH added
		ISL 102/ SOC 360	Islamic Studies/ Ethics	3	1 CH added

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses Majors 60 Credit Hrs (20 Courses)	GEO 101	Introduction to Geosciences	3	New
	GEO 115	Introduction to Geophysics	3	New
	GEO 120	Field Geology & Surveying	3	New
	GEO 205	Structure Geology	3	Existing
	GEO 210	Mineralogy & Crystallography	3	New
	GEO 215	Sedimentology	3	New
	GEO 225	Geochemistry	3	Existing
	GEO 230	Geotectonic	3	New
	ENV 245	Introduction to Oceanography	3	Existing
	GEO 335	Earthquake Seismology	3	Existing
	GEO 305	Environmental Geology	3	Existing
	GEO 302	Exploration Geophysical Methods	3	New
	GEO 315	Igneous & Metamorphic Petrology	3	Existing
	GEO 325	Stratigraphy of Pakistan	3	Existing
	GEO 303	Geology of Pakistan and Arabian Sea	3	New
	GEO 320	Marine Geology	3	Existing
	GEO 345	Petroleum Geology	3	Existing
	GEO 309	Geological Engineering & Soil	3	Existing
	GEO 340	Wireline Logging	3	Existing
	GEO 420	Hydrogeology	3	Existing
Minors 09 Credit Hrs (3 Courses)		Elective I	3	Select from List of approved Electives
		Elective II	3	Select from List of approved Electives
		Elective III	3	Select from List of approved Electives
Distribution Courses 15 Credit Hrs (5 Courses)	MAT 115	Calculus & Analytical Geometry	3	Existing

	GEO 435	GIS & Remote Sensing	3	Existing
	GEO 425	Research Methodology	3	1 CH Added
	ENV 425	Occupational Health & Safety	3	Existing
	GEO 326	Computing with Mat Lab	3	Existing
Lab/Field work/ Thesis 6 Credit Hrs field (3 Courses) and 6 Credit Hrs Thesis	GEO 281	Geosciences Field Work & Report-I	3	New
	GEO 381	Geosciences Field Work & Report-II	3	New
	GEO 490	Thesis	6	New
Zero Credit Course	MAT 105	Mathematics	0 (compulsory)	Existing Academic credit of this course is zero but its contact hours, teaching material and tuition fee are equal to a 3 credit hours course.

c. Practical Learning Requirements

Category			Weeks/Hours		
Practical Learning Requirements	Internship (9 weeks)				
	Practical Learning Lab* (4 to 6 contact hrs per week)				
		Entrepreneurship			
		Youth Club			
		Sports			

* weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	46	133			1 CH added to three courses overall increase of 3 CH
Revised (as per new HEC Policy 2020)	45	135			

ROAD MAP BS GEOSCIENCE
E&ES BUKC

YEAR -1

Semester 1:

S. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	PAK 102	Pakistan studies	3	0	Civilization Courses	1 CH added
2	ISL 102/ SOC 360	Islamic Studies/Ethics	3	0	Civilization Courses	1 CH added
3	ENG103	English I	3	0	Expository Writing (1)	Existing
4	GEO 101	Introduction to Geosciences	2	1	Major	Existing
	GEL 101	Introduction to Geoscience Lab				
5	MAT 105*	Mathematics (for Pre-Med.)	0	0	Zero credit Course	Existing
6	CSC 103	Introduction to Computers and programming	2	1	Quantitative Reasoning (1)	Existing
	CSL 103	Introduction to Computers and programming				
7	PHY 101	Physics	2	1	Natural Sciences (1)	Existing
	PHL 101	Physics Lab				
	Total Credit Hours		18			
8	Practical Learning Lab (6 contact hours per week as per BU Policy)					

***Academic credit hour of this course is zero but its contact hours, teaching materials and tuition fee are equal to a 3 credit hour course.**

Semester 2:

S.#	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 104 Pre req: ENG 103	English II	3	0	Expository Writing (2)	Existing
2	GEO 115 GEL 115 Pre req: GEO 101	Introduction to Geophysics Introduction to Geophysics	2	1	Major	Existing
3	PSY 107	Introduction to Psychology	3	0	Social Sciences (1)	Existing
4	MAT 115	Calculus & Analytic Geometry	3	0	Distribution	Existing
5	GEO 120 Pre req: GEO 101	Field Geology & Surveying	3	0	Major	Existing
6	MTB 411 MTL 411	Introduction to Film Making and Analysis Introduction to Film Making and Analysis	2	1	Arts & Humanities (1)	New
	Total Credit Hours		18			
7	Practical Learning Lab 2 Hrs					

YEAR-2**Semester 3:**

S. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	HSS 320 Pre req: ENG 104	Technical Writing & Presentation Skills	3	0	Expository Writing (1)	New
2	GEO 205 GEL 205 Pre req: GEO 101	Structural Geology Structural Geology Lab	2	1	Major	Existing
3	GEO 210 GEL 210 Pre req: GEO 101	Mineralogy & Crystallography Mineralogy & Crystallography Lab	2	1	Major	Existing
4	CHM 105	Chemistry	3	0	Natural Sciences	Existing
5	ENV 245 ENL 245	Introduction to Oceanography Introduction to Oceanography Lab	2	1		Existing
6	HSS 111	Introduction to International Relations (IR)	3	0		Existing
	Total Credit Hours		18			
7	Practical learning Lab added (6 contact hour per week)					

Semester 4:

S.#	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MAT 205	Statistics	3	0	Quantitative Reasoning	Existing
2	GEO 225	Geochemistry	2	1	Major	Existing
	GEL 225	Geochemistry Lab				
3	GEO 230	Geotectonic	3	0	Major	Existing
	Pre req: GEO 205					
4	GEO 215	Sedimentology	3	0	Major	Existing
	Pre req: GEO 101					
5	GEO 223	Urban and Town Planning	2	1	Arts & Humanities	New
	GEL 223	Urban and Town Planning Lab				
6	GEO 281	Geosciences Field Work and Report-I	3		Lab/Field Work	Existing
	Total Credit Hours		18			
7	Practical Learning Lab (4 Contact Hours as per BU Policy)					

YEAR-3**Semester 5:**

S.#	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	GEO 305	Environmental Geology	2	1	Major	Existing
	GEL 305	Environmental Geology Lab				
2	GEO 315	Igneous & Metamorphic Petrology	2	1	Major	Existing
	GEL 315	Igneous & Metamorphic Petrology				

3	GEO 302	Exploration Geophysical Methods	2	1	Major	Existing
	GEL 302	Exploration Geophysical Methods Lab				
	<i>Pre req:</i> <i>GEO 115</i>					
4	GEO 303	Geology of Pakistan & Arabian Sea	3	0	Major	Existing
	GEL 303	Geology of Pakistan & Arabian Sea				
5	GEO 325	Stratigraphy of Pakistan	2	1	Major	Existing
	GEL 325	Stratigraphy of Pakistan Lab				
6	GEO 320	Marine Geology	2	1	Major	Existing
	GEL 320	Marine Geology Lab				
	Total Credit Hour		18			
	Practical Learning Lab (10 contact hours)					

Semester 6:

S. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	GEO 425	Research Methodology	3	0	Distribution	Existing
2	GEO 309	Geological Engineering & Soil	2	1	Major	Existing
	GEL 309	Geological Engineering & Soil				
3	GEO 335	Earthquake Seismology	3	0	Major	Existing
4	GEO 345	Petroleum Geology	3	0	Major	Existing
5	GEO 381	Geosciences Field Work and Report-II	3		Lab Field Work	Existing
	Total Credit Hours		15			
6	Practical Learning Lab (2Contact hours)					

YEAR-4**Semester 7:**

S. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	GEO 340	Wireline Logging	3	0	Major	New
2	ENV 425	Occupational Health & Safety	3	0	Distribution	New
3	GEO 420	Hydrogeology	2	1	Major	Existing
	GEL 420	Hydrogeology Lab				
4	GEO 326	Computing with Mat Lab	2	1	Distribution	Existing
	GEL 326	Computing with Mat Lab, Lab				
5		Elective I	2	1	Minor	Select from List of approved Electives
	Total Credit Hours		15			
6	Practical Learning Lab (6 Contact Hours)					

Semester 8:

S.#	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	GEO 435	GIS & Remote Sensing	2	1	Distribution	Existing
	GEL 435	GIS & Remote Sensing Lab				
2		Elective II	2	1	Minor	Select from List of approved electives
3		Elective III	2	1	Minor	Select from List of Approved electives
4	GEO 490	Thesis	0	6	Thesis	Existing
	Total Credit Hours		15			
5	Practical Learning lab (6 contact hours)					

ELECTIVE COURSES

S #	Marine Geology		Remarks	Marine Geophysics		Remarks	GIS & RS		Remarks
1	GEO 461	Coastal Geology & Geomorphology	Existing	GEO 461	Coastal Geology & Geomorphology	Existing	GEO 481	GIS Database Management	Existing
	GEL 461	Coastal Geology & Geomorphology (Lab)		GEL 461	Coastal Geology & Geomorphology (Lab)		GEL 481	GIS Database Management (Lab)	
2	GEO 462	Physical Oceanography & Surveying	Existing	GEO 471	2D/3D Seismic Data Interpretation	Existing	GEO 482	Satellite Image Processing	Existing
	GEL 462	Physical Oceanography & Surveying (Lab)		GEL 471	2D/3D Seismic Data Interpretation (Lab)		GEL 482	Satellite Image Processing (Lab)	
3	GEO 463	Ocean Crust Sedimentation	Existing	GEO 463	Ocean Crust Sedimentation	Existing	GEO 483	GIS Data Analysis	Existing
	GEL 463	Ocean Crust Sedimentation (Lab)		GEL 463	Ocean Crust Sedimentation (Lab)		GEL 483	GIS Data Analysis (Lab)	
4	GEO 464	Offshore Seismic Stratigraphy	Existing	GEO 464	Offshore Seismic Stratigraphy	Existing	GEO 484	Cartography & Mapping	Existing
	GEL 464	Offshore Seismic Stratigraphy (Lab)		GEL 464	Offshore Seismic Stratigraphy (Lab)		GEL 484	Cartography & Mapping (Lab)	
5	GEO 415	Economic Geology & Mining	Existing	GEO 340	Borehole Geophysics	Existing	GEO 485	GIS Surveying & GPS Tech.	Existing
	GEL 415	Economic Geology & Mining (Lab)		GEO 340	Borehole Geophysics (Lab)		GEL 485	GIS Surveying & GPS Tech. (Lab)	
6	GEO 444	Applied GIS & RS Tech. in Geosciences	Existing	GEO 444	Applied GIS & RS Tech. in Geosciences	Existing	GEO 444	Applied GIS & RS Tech. in Geosciences	Existing
	GEL 444	Applied GIS & RS Tech. in Geosciences (Lab)		GEL 444	Applied GIS & RS Tech. in Geosciences (Lab)		GEL 444	Applied GIS & RS Tech. in Geosciences (Lab)	

DETAILS OF COURSE CONTENTS

A. BREADTH COURSES (5 Course; 15 Credit Hr.)

ARTS AND HUMANITIES COURSES (2 Course; 6 Credit Hours)

GEO 223 URBAN AND TOWN PLANNING (3CH)

Introduction to Urban and Town Planning, Justification and Aims of Planning, Planning Principles and Elements of Planning, Scope, nature and purpose of Physical Planning, Types of Plans and Planning, Characteristics of Planned and Unplanned Human Settlements, Overview of Old and New Towns Designed in the Developed and Developing Countries, Introduction to Planning System in Pakistan, Historical and Modern Cities of Pakistan.

GEL 223 URBAN AND TOWN PLANNING (Lab): *Software of AutoCAD, Global Mapper for urban and town planning.*

MTB 411 INTRODUCTION TO FILM MAKING AND ANALYSIS (3CH)

Fundamentals of Film: Definition, Scope and Importance Genres of Films, Brief History of World Cinema History of Cinema in Pakistan Camera operation, composition and framing, lens choice, camera movement, setting proper exposure, lighting, collaboration, blocking, continuity and all aspects of visual. Role of the cinematographer, Screen clips & short film, Composition & Framing

MTL 411 Introduction to Film Making and Analysis (Lab): Camera operating, Static camera, Panning/Tilting, Lighting for emotional impact, Lighting example clips, Lighting terminology & concepts, Media literacy

EXPOSITORY WRITING (3 Course; 9 Credit Hours)

HSS 320 TECHNICAL WRITING AND PRESENTATION SKILLS (3 CH)

Pre-requisite ENG 104

The Writing Process, Objectives in Technical Writing, Audience Recognition and Involvement, Criteria for Writing Reports, Summaries, Letters and Proposals, Research Paper Writing, Oral Communication, Writing Technical Descriptions, Instruction and User Manuals, The Job Search. Public Speaking & Presentation Skills, Meeting & Interviewing Skills, Non Verbal Communication, Project Reviewing.

QUANTITATIVE REASONING (2 Course; 6 Credit Hours)

CSC 103 INTRODUCTION TO COMPUTERS AND PROGRAMMING (3 CH)

History of computer development; Application of computers; Classification and types of computers; Basic block diagram of a computer; Hardware (input, output, memory, CPU) and software (system software & application software); Social impact of computer age; Computer in education and scientific research; Introduction to, and history of Internet; Internet service providers and connections; The World Wide Web Basic applications of language software's in programing data; Introduction of Program structure of C language; Input & Output functions of C and C + +; Preprocessor directives; Variables and Consonants; Operators; Decision and Loops; Arrays and Pointers. MATLAB

CSL 103 Introduction to Computers And Programming (Lab):

Introduction of Program structure of C language; Input & Output functions of C and C + +; Preprocessor directives; Variables and Consonants; Operators; Decision and Loops; Arrays and Pointers. MATLAB

B. PROGRAM REQUIRED COURSES

GEO 340 WIRELINE LOGGING

Introduction; types of logs; method and principles; factor influencing logs; resistivity logs; SP log; Gamma ray log; Formation density logs; Neutron log; Sonic log; Caliper log; Dip meter log. Application of logs; Porosity determination; Lithology and hydrocarbon detection; Structural interpretation; Correlation;

GEL 340 Wireline Logging (Lab): Lab work on Techlog using the upper mentioned logs

GEO 326 COMPUTING WITH MATLAB

This course teaches computer programming to those with little to no previous experience. It uses the programming system and language called MATLAB to do so because it is easy to learn, versatile and very useful for engineers and other professionals. MATLAB is a special-purpose language that is an excellent choice for writing moderate-size programs that solve problems involving the manipulation of numbers. The design of the language makes it possible to write a powerful program in a few lines. The problems may be relatively complex, while the MATLAB programs that solve them are relatively simple: relative that is, to the equivalent program written in a general-purpose language, such as C++ or Java. As a result, MATLAB is being used in a wide variety of domains from the natural sciences, through all disciplines of engineering, to finance, and beyond, and it is heavily used in industry. Hence, a solid background in MATLAB is an indispensable skill in today's job market.

GEL Computing With Mat Lab (Lab): Lab work related to the above mentioned programming

GEO 281 Geosciences Field Work-I (3 CH)

Use of field instruments; Basic Geological mapping procedures; Identification of mineral and Rocks and coastal features & resources

GEO 381 Geosciences Field Work-II (3 CH)

One-week fieldwork for mapping of terrains and their structures, coastal environment & morphology by using Geological, geophysical and GIS/RS Techniques; measurement of stratigraphic sections.

FACULTY OF MANAGEMENT SCIENCES

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BBA****Faculty: Business Studies****a. General Education Requirement**

<i>Sub-Category</i>	<i>Total Credit hrs</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>	<i>Remarks</i>
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	HSS 108	Intro to Sociology	3	Existing
		HSS 115	Introduction to Media Studies	3	Need to be added to the roadmap
			Natural Resource and Trade (Maritime)	3	New Course
			Introduction to Environment & Sustainability	3	New Course
		ECO 110	Microeconomics	3	Existing
		ECO 121	Macroeconomics	3	Existing
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 120	English Writing Skill	3	Existing
		ENG 105	Functional English	3	Existing
		BCM 204	Oral Communication	3	Existing
		QTM 101	Business Mathematics I	3	Existing
		QTM 120	Business Mathematics II	3	Existing
Civilizational Courses (2) Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 101	Pakistan Studies	3	Existing
		ISL 101	Islamic Studies / Ethics	3	Existing

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks
Discipline Courses Major (17) Minor (6) Distribution Courses (9)	ACC 102	Financial Accounting	3	Majors
	MKT 231	Marketing Management	3	Majors
	QTM 110	Business Statistics	3	Majors
	MGT 242	Organizational Theory and Behavior	3	Majors
	QTM 205	Statistical Inference	3	Majors
	ACC 203	Cost Accounting	3	Majors
	FIN 201	Fundamentals of Finance	3	Majors
	HRM 253	Human Resource Management	3	Majors
	FIN 202	Financial Management	3	Majors
	ACC 304	Managerial Accounting	3	Majors
	SCM 360	Supply Chain Management	3	Majors

	RMT 240	Research Methods & Techniques	3	Majors
	MGT 363	Entrepreneurship	3	Majors
	OPM 360	Operation & Production Management	3	Majors
	RMT 621	Operation Research	3	Majors
	SOC 350	Business Ethics	3	Majors
	HSS 402	Pakistan and Geo-political Studies		Majors
		Specialization-I		Minors
		Specialization-II		Minors
		Specialization-III		Minors
		Specialization-IV		Minors
	MIS 460	E-Commerce	3	Distribution
	MIS 461	Advance Application of IT in Business	3	Distribution
	MGT 487	Change Management	3	Distribution
	MGT 211	Self-Management	3	Distribution
	MGT 301	Business Law	3	Distribution
	MGT 463	Corporate Skills	3	Distribution
	MIS 161	IT Skills	3	Minors
	ENG 222	Business Communication	3	Minors
	ACC 101	Principles of Accounting	3	Distribution
	MKT 110	Principles of Marketing	3	Distribution
	MGT 111	Principles of Management	3	Distribution

c. Practical Learning Requirements

Category		Credit	Responsibility	Activities	Evaluation
Practical Learning Requirements	Internship (9 weeks)	Non-credit	In summer and after the fourth semester		University will assign individual faculty members to monitor and evaluate the quality of work of each student-internee (e.g., papers or reports submitted, employers feedback, or other prescribed indicators of performance), and these evaluations will be made part of the students'

					permanent record
	Practical Learning Lab* (4 hours per week for 4 semesters)	Entrepreneurship	Director ORIC or Director BIC or a faculty member designated specially for this purpose	Lectures, teamwork, proposal writing sessions, competitions, presentation sessions, fundraising events, start-up events, and marketing events	University will evaluate the quality of work (e.g., papers or reports submitted, patents filed, start-ups initiated, sports medals obtained, club activities promoted, and the like), and these evaluations will be made part of the students' permanent record.
		Youth Club	Each of these clubs will have a faculty advisor, who will keep a record of attendance, oversee financial matters, where needed, and provide advice on university policies or regulations.	Green Clubs, Drama Clubs, Book Reading Clubs, University Magazines or Newspapers, University TV or Radio Stations, Debating Clubs, or Student Associations	
		Sports	Director Sports or other designated officer	Different sports activities	

* weekly planned PLL activities for the semester

Certification: On successful completion of the internship and PLL requirement, students will be awarded a certificate of completion

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	45	135 CHs	9 Weeks	128	
Revised (as per new HEC Policy 2020)	45 Courses	135 CHs	9 Weeks	128	

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: BBA****Faculty: Business Studies****Semester 1:**

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			Theory	Lab		
1	ENG 105	Functional English	3		Expository Writing (1)	Existing
2		Introduction to Environment and Sustainability	3		Natural Sciences (1)	New Course
3	ECO 110	Microeconomics	3		Social Science (1)	Existing
4	QTM 101	Business Mathematics	3		Quantitative Reasoning (1)	Existing
5	HSS 202	Intro to Sociology	3		Arts and Humanities (1)	Existing Shift from S2
6	MIS 161	IT Skills	3		Minor	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 2:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			Theory	Lab		
1	ENG 120	English Writing Skills	3		Expository Writing (2)	Existing
2		Natural Resource and Trade (Maritime)	3		Natural Sciences (2)	New
3	ECO 121	Macroeconomics	3		Social Science (2)	Existing
4	QTM 120	Business Mathematics II / Numeracy Skills	3		Quantitative Reasoning (3)	Existing
5	HSS 115	Introduction to Media Studies	3		Arts and Humanities (2)	New
6	ENG 222	Oral Communication	3		Expository Writing	Change in title from Oral communication (Public speaking) Shift from S3
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	BCM 204	Business Communication	3		Minor	Existing
2	PAK 101	Pakistan Studies	3		Pakistan Studies	New as current roadmap has Analysis of Pakistani industry not Pakistan Studies Shift from S4
3	ISL 101	Islamic Studies/Ethics	3		Islamic/Religious Studies	New as current roadmap has Islamic Socio-Economic Studies Shift from S4
4	ACC 101	Principles of Accounting	3		Distribution	Existing Shift from S2
5	MKT 110	Principles of Marketing	3		Distribution	Existing Shift from S1
6	MGT 111	Principles of Management	3		Distribution	Existing Shift from S1
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	ACC 102	Financial Accounting	3		Major	Existing Shift from S2
2	MKT 231	Marketing Management	3		Major	Existing Shift from S3
3	QTM 110	Business Statistics	3		Major	Existing Shift from S3
4	MGT 211	Self Management	3		Distribution	Existing Shift from S4
5	MGT 242	Organizational Theory and Behavior	3		Major	Existing Shift from S3
6	MGT 463	Corporate Skills	3		Distribution	Existing Shift from S8
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	QTM 205	Statistical Inference	3		Major	Existing Shift from S3
2	ACC 203	Cost Accounting	3		Major	Existing Shift from S4
3	FIN 201	Fundamentals of Finance	3		Major	Existing Shift from S4
4	HRM 253	Human Resource Management	3		Major	Existing Shift from S4
5	SOC 350	Business Ethics	3		Major	Existing Shift from S4
6	MGT 301	Business Law	3		Distribution	Existing Shift from S4
Total			18			

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	FIN 202	Financial Management	3		Major	Existing Shift from S4
2	ACC 304	Managerial Accounting	3		Major	Existing Shift from S4
3	SCM 360	Supply Chain Management	3		Major	Existing Shift from S5
4	RMT 240	Research Methods & Techniques	3		Major	Existing
5	MGT 363	Entrepreneurship	3		Major	Existing No change
6	OPM 360	Operation & Production Management	3		Major	Existing Shift from S4
Total			18			

Semester 7:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	RMT 621	Operation Research	3		Major	Existing Shift from S5
2	MIS 461	Advance Application of IT in Business	3		Distribution	Existing Shift from S6
3	MIS 460	E-Commerce	3		Distribution	Existing Shift from S6
4		Specialization-I	3		Minor	Existing No change
5		Specialization-II	3		Minor	Existing No change
Total			15			

Semester 8:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	MGT 487	Change Management	3		Distribution	Existing No change
2	HSS 403	Pakistan and Geo-political Studies	3		Major	Existing Shift from S6
3		Specialization-III	3		Minor	Existing No change
4		Specialization-IV	3		Minor	Existing No change
Total			12			

PROGRAM SUMMARY:

Total Courses	Total Credit Hours
45	135

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BS (A&F)****Faculty: Management Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	HSS 108	Introduction to Sociology	3	Existing
		HSS 115	Introduction to media studies	3	Existing
		New	Into to Environment & Sustainability	3	New
		New	Natural Recourse & Trade (Maritime)	3	New
		ECO 110	Microeconomics	3	Existing
		ECO 121	Macroeconomics	3	Existing
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 103	English-I	3	Existing
		ENG 104	English II	3	Existing
		BCM 243	Business Communication	3	Existing
		QTM 101	Business Mathematics-I	3	Existing
		QTM 102	Business Mathematics-II/ Numeracy Skills	3	Existing
Civilizational Courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	ISL 101	Islamic Studies	3	Existing
		PAK 101	Pakistan Studies	3	Existing

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses Major (16) Minor (4) Distribution Courses (6)	MGT 111	Principles of Management	3	Existing
	MKT 110	Principles of Marketing	3	Existing
	MGT 301	Business Law	3	Existing
	HRM 353	Human Resource Management	3	Existing
	MGT 508	Corporate Law	3	Existing
	ECO 415	Econometrics	3	Existing
	MKT 110	Principles of Accounting	3	Existing
	ACC 102	Financial Accounting	3	Existing
	FIN 201	Introduction to Finance	3	Existing
	ACC 203	Cost Accounting	3	Existing
	QTM 105	Introduction to Statistics	3	Existing
	ACC 220	Principles of Taxation	3	Existing
	FIN 306	Financial Modeling	3	Existing
	ACC 306	Principles of Auditing	3	Existing
	ACC 304	Managerial Accounting	3	Existing
	FIN 202	Financial Management	3	Existing
	ACC 305	Financial Reporting-I	3	Existing
	ACC 400	Advance Managerial Accounting	3	Existing
	FIN 320	Financial Institution Management	3	Existing
	FIN 308	Corporate Finance	3	Existing
	ACC 410	Advanced Taxation	3	Existing
	ACC 320	Financial Reporting-II	3	Existing
		Elective-1		
		Elective-2		
		Elective-3		
		Elective-4		
		Elective-5		
		Elective-6		
	QTM 105	Introduction to Statistics	3	Existing
	QTM 204	Statistical Inference	3	Existing
	MIS 210	Introduction to IT	3	Existing
	RMT 240	Research Methods & Techniques	3	Existing

c. Practical Learning Requirements

Category			Weeks/Hours	
Practical Learning Requirements	Internship (9 weeks)		9 weeks	
	Practical Learning Lab* (4 contact hrs per week)			
		Entrepreneurship		
		Youth Club		
		Sports		
		CSR/CSP		

* weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	46	138	6 weeks	48 CSP	
Revised (as per new HEC Policy 2020)	45	135	9 weeks	48 hours of mandatory Community Support Program (CSP) as PLL	

Revision of Semester-wise roadmap in accordance with HEC UG Policy 2020**Program: BS (A&F)****Faculty: Management Sciences****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 103	English-I	3		Expository Writing (1)	Existing
2	New	Into to Environment & Sustainability	3		Natural Sciences (1)	New
3	ECO 110	Microeconomics	3		Social Science (1)	Existing
4	QTM 101	Business Mathematics-I	3		Quantitative Reasoning (1)	Existing
5	HSS 108	Introduction to Sociology	3		Arts and Humanities (1)	Existing
6	MGT 111	Principles of Management	3		Distribution (1)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Optional: These are introductory courses in different disciplines that are offered by department which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 104	English II	3		Expository Writing (2)	Existing
2	NEW	Natural Resource & Trade	3		Natural Sciences (2)	New
3	ECO 121	Macroeconomics	3		Social Science (2)	Existing
4	QTM 102	Business Mathematics-II/Numeracy Skills	3		Quantitative Reasoning (2)	Existing
5	HSS 115	Introduction to media studies	3		Arts and Humanities (2)	Existing
6	MKT 110	Principles of Accounting	3		Major (1)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	BCM 243	Business Communication	3		Expository Writing (3)	Existing
2	PAK 101	Pakistan Studies	3		Pakistan Studies	Existing
3	ISL 101	Islamic Studies	3		Islamic/Religious Studies	Existing
4	MIS 210	Introduction to IT	3		Minor (1)	Existing
5	ACC 102	Financial Accounting	3		Major (2)	Existing
6	MKT 110	Principles of Marketing	3		Distribution (2)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	FIN 201	Introduction to Finance	3		Major (3)	Existing
2	ACC 203	Cost Accounting	3		Major (4)	Existing
3	QTM 105	Introduction to Statistics	3		Minor (2)	Existing
4	MGT 301	Business Law	3		Distribution (3)	Existing
5	HRM 353	Human Resource Management	3		Distribution (4)	Existing
6	ACC 220	Principles of Taxation	3		Majors (5)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	FIN 306	Financial Modeling	3		Majors (6)	Existing
2	ACC 306	Principles of Auditing	3		Majors (7)	Existing
3	ACC 304	Managerial Accounting	3		Majors (8)	Existing
4	RMT 240	Research Methods & Techniques	3		Minor (3)	Existing
5	FIN 202	Financial Management	3		Majors (9)	Existing
6	QTM 204	Statistical Inference	3		Minor (4)	Existing
Total			18			

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MGT 508	Corporate Law	3		Distribution (5)	Existing
2	ACC 305	Financial Reporting-I	3		Majors- (10)	Existing
3	ACC 400	Advance Managerial Accounting	3		Majors- (11)	Existing
4	FIN 320	Financial Institution Management	3		Majors- (12)	Existing
5	FIN 308	Corporate Finance	3		Majors- (13)	Existing
6	ACC 410	Advanced Taxation	3		Majors- (14)	Existing
Total			18			

Semester 7:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	ACC 320	Financial Reporting-II	3		Majors (15)	Existing
2	ECO 415	Econometrics	3		Distribution (6)	Existing
3		Elective-1	3		Majors (16)	Existing
4		Elective-2	3		Majors (17)	Existing
5		Elective-3	3		Majors (18)	Existing
Total			15			

Semester 8:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	PRO 450	Project	3		Majors (19)	Existing
2		Elective-4	3		Majors (20)	Existing
3		Elective-5	3		Majors (21)	Existing
4		Elective-6	3		Majors (22)	Existing
Total			12			

Program Summary:

Total Courses	Total Credit Hours
45	135

COURSE DESCRIPTION OF NEW OFFERED COURSES

Into to Environment & Sustainability

Through introducing major environmental issues, such as climate change, water scarcity and pollution, food security and biodiversity, health within the context of sustainable development, this course will aim to explore the interface between development and environmental issues in a global and regional context. It will focus on: (i) the different theoretical perspectives of development and environment, and (ii) the dimensions of sustainability. The course will also introduce to student's systems approaches to managing change and environmentally sustainable development.

Natural Resources and Trade

This course will give students an understanding of the key challenges about trade in natural resource, discussing both trade patterns and price movements. Students will also study cost benefit analysis of natural resources (like fisheries, forests, and fossil fuels), and energy. In this course we will take an economic approach to global sustainability and the relationship between the Natural Resources and economic growth and trade. Moreover, students will be able to look at key features of natural resources trade from a theoretical perspective. This course will also investigate the complex question like. i.e. Does trade provide an efficient mechanism for ensuring access to natural resources? What is the impact of trade on finite or exhaustible resources, including under conditions of "open access" where there is a common ownership and access to a natural resource? Is there a relationship between trade and its impact on the environment? Does trade reinforce or reduce problems associated with resource dominance in certain economies? And how does trade affect resource price volatility?

All these broad questions above will be addressed by surveying the relevant theoretical literature on the determinants and effects of trade in natural resources. After the completion of course Students will be expected to critically assess the main types of Policy tools that governments can use to correct market failures related to the Natural Resources.

List of Electives:

Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Accounting			
ACC 623	Corporate Governance	3	Existing
ACC 624	Accounting Information System With SAP	3	Existing
ACC 625	Mercantile Law	3	Existing
ACC 626	Advance IT	3	Existing
ACC 627	Strategic Management Accounting and Control	3	Existing
ACC 628	Tax Management and Optimization	3	Existing
ACC 629	Actuarial Accounting	3	Existing
ACC 631	Merger and Acquisition Accounting	3	Existing
ACC 607	Advance Financial Reporting	3	Existing
Banking			
FIN 660	Branch and Branchless Banking	3	Existing
FIN 652	Lending-Products, operation and risk management	3	Existing
FIN 653	Finance of International Trade	3	Existing
FIN 654	Marketing of Financial Services	3	Existing
FIN 655	Information Technology in Financial Services	3	Existing
FIN 617	Investment Banking	3	Existing
FIN 615	Commercial Banking	3	Existing
Finance			
FIN 659	Advance Financial Management	3	Existing
FIN 646	Financial Econometrics	3	Existing
FIN 647	Financial Restructuring	3	Existing
FIN 619	Financial Derivatives	3	Existing
FIN 648	International Finance	3	Existing
FIN 649	Islamic Banking and Finance	3	Existing
FIN 650	Analysis of Financial Time Series	3	Existing
FIN 651	Financial Information System	3	Existing
FIN 613	Portfolio Analysis and Management	3	Existing
FIN 618	Treasury and Funds Management	3	Existing
FIN 603	Entrepreneurial Finance	3	Existing
FIN 621	Budgeting	3	Existing
FIN 612	Analysis of Financial Statements	3	Existing
FIN 685	Business Intelligence	3	Existing
FIN 684	Financial Engineering	3	Existing

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020***Program: BS (Economics and Finance)******Faculty: Management Sciences******a. General Education Requirement***

<i>Sub-Category</i>	<i>Total Credit Hours</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	HSS 108	Introduction to Sociology	3	Existing
		HSS 301	Social and Psychological Development	3	Existing
		New 100 Level	Into to Environment & Sustainability	3	New
		New 100 Level	Natural Resource and Trade	3	New
		ECO 110	Microeconomics-I	3	Existing
		ECO 121	Macroeconomics-I	3	Existing
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 105	Functional English	3	Existing
		ENG 132	Oral Communication (Public Speaking Skills)	3	Existing
		BCM 304	Business Communication Skills	3	Existing
		QTM 101 & 120	Business Mathematics - I and Numeracy Skills	3	Existing
		QTM 105	Introduction to Statistics	3	Existing
Civilizational Courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	ISL 101	Islamic Studies	3	Existing
		PAK 101	Pakistan Studies	3	Existing

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses (Major) Distribution Courses	ENG 105	Functional English	3	Existing
	New 100 Level	Into to Environment & Sustainability	3	New
	ECO 110	Microeconomics-I	3	Existing
	MIS 161	IT Skills (Word, Excel)	3	Existing
	HSS 108	Introduction to Sociology	3	Existing
	MGT 111	Principles of Management	3	Existing
	ISL 101	Islamic Studies	3	Existing
	FIN107	Financial Accounting	3	Existing
	New 100 Level	Natural Resource and Trade	3	New
	ECO 121	Macroeconomics-I	3	Existing
	ECO 111	Microeconomics-II (Prereq. ECO 110)	3	Existing
	QTM 101 & 120	Business Mathematics – I and Numeracy Skills	3	Existing
	ECO 122	Macroeconomics-II (Prereq. ECO 121)	3	Existing
	PAK 101	Pakistan Studies	3	Existing
	HSS 301	Social and Psychological Development	3	Existing
	ECO 202	Issues in Pakistan's Economy	3	Existing
	ENG 132	Oral Communication (Public Speaking Skills)	3	Existing
	QTM 105	Introduction to Statistics	3	Existing
	FIN 315	Fundamentals of Econometrics	3	Existing
	ECO 311	Economics of Entrepreneurs	3	Existing
	ECO 304	Business Taxation and Public Finance	3	Existing
	RMT 240	Research Methods & Techniques	3	Existing
	FIN 201	Fundamentals of Finance	3	Existing
	BCM 304	Business Communication Skills	3	Existing
	ECO 384	Financial Management	3	Existing
	FIN 316	Financial Econometrics and Modeling	3	Existing
	ECO 362	Managerial Economics	3	Existing
	MGT 311	Career Exploring Management	3	Existing
	ECO 317	Monetary Theory & Policy	3	Existing

	SCM 361	Introduction to Blue Economy and Green SCM	3	Existing
	ECO 203	Digitization of Economy and Artificial Intelligence	3	Existing
	FIN 321	Finance of Emerging Markets	3	Existing
	FIN 322	Money and Banking	3	Existing
	FIN 323	Financial Markets	3	Existing
	MGT 401	Project Management and Evaluation	3	Existing
	MGT 402	Self-Management	3	Existing
	MGT 403	Corporate Skills	3	Existing

c. Practical Learning Requirements

Category			Weeks/Hours		
Practical Learning Requirements	Internship (9 weeks)		9 weeks		
	Practical Learning Lab* (4 contact hrs per week)				
		Entrepreneurship			
		Youth Club			
		Sports			

* weekly planned PLL activities for the semester

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	44	132	6 weeks		
Revised (as per new HEC Policy 2020)	44	132	9 weeks	40 hours of mandatory Community Support Program (CSP) may be considered as PLL	

Revision of Semester-Wise Roadmap in accordance with HEC UG Policy 2020**Program: BS (E&F)****Faculty: Management Sciences****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 105	Functional English	3		Expository Writing	Existing
2	New 100 Level	Into to Environment & Sustainability	3		Natural Sciences	New Course, description attached
3	ECO 110	Microeconomics-I	3		Social Science	Existing
4	MIS 161	IT Skills (Word, Excel)	3		Distribution	Existing
5	HSS 108	Introduction to Sociology	3		Arts and Humanities	Existing
6	MGT 111	Principles of Management	3		Distribution	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Optional: These are introductory courses in different disciplines that are offered by department which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ISL 101	Islamic Studies	3		Islamiat	Existing
2	FIN107	Financial Accounting	3		Minor	Existing
3	New 100 Level	Natural Resource and Trade	3		Natural Sciences	New
4	ECO 121	Macroeconomics-I	3		Social Science	Existing
5	ECO 111	Microeconomics-II (Prereq. ECO 110)	3		Major	Existing
6	QTM 101 & 120	Business Mathematics - I and Numeracy Skills	3		Quantitative Reasoning	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	ECO 122	Macroeconomics-II (Prereq. ECO 121)	3		Major	Existing
2	PAK 101	Pakistan Studies	3		Pak Studies	Existing
3	HSS 301	Social and Psychological Development	3		Arts and Humanities	Existing, moved from 6 th semester to 3 rd semester
4	ECO 202	Issues in Pakistan's Economy	3		Minor	Existing
5	ENG 132	Oral Communication (Public Speaking Skills)	3		Expository Writing	Existing
6	QTM 105	Introduction to Statistics	3		Quantitative Reasoning	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	FIN 315	Fundamentals of Econometrics	3		Major	Existing
2	ECO 311	Economics of Entrepreneurs	3		Major	Existing
3	ECO 304	Business Taxation and Public Finance	3		Major	Existing
4	RMT 240	Research Methods & Techniques	3		Distribution	Existing
5	FIN 201	Fundamentals of Finance	3		Major	Existing
6	BCM 304	Business Communication Skills	3		Expository Writing	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ECO 384	Financial Management	3		Major	Existing
2	FIN 316	Financial Econometrics and Modeling	3		Major	Existing
3	ECO 362	Managerial Economics	3		Major	Existing
4	MGT 311	Career Exploring Management	3		Distribution	Existing
5	ECO 317	Monetary Theory & Policy	3		Minor	Existing
Total			15			
Internships will be offered after 5 th Semester (90 days)						

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	SCM 361	Introduction to Blue Economy and Green SCM	3		Distribution	Existing
2	ECO 203	Digitization of Economy and Artificial Intelligence	3		Major	Existing, moved from 3 rd to 6 th semester
3	FIN 321	Finance of Emerging Markets	3		Major	Existing
4	FIN 322	Money and Banking	3		Minor	Existing
5	FIN 323	Financial Markets	3		Major	Existing
Total			15			

Semester 7:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	MGT 401	Project Management and Evaluation	3		Distribution	Existing
2	MGT 402	Self-Management	3		Distribution	Existing
3		Elective 1	3		Major	Existing
4		Elective 2	3		Major	Existing
5		Elective 3	3		Major	Existing
6		Elective 4			Major	
Total			18			

Semester 8:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	MGT 403	Corporate Skills	3		Distribution	Existing
2		Elective 5	3		Major	Existing
3		Elective 6	3		Major	Existing
4	SDW 404	Project / Thesis	3		Major	Existing
Total			12			

Program Summary:

Total Courses	Total Credit Hours
44	132

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BS (Economics)****Faculty: Management Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	HSS 108	Introduction to Sociology	3	Existing
		HSS 115	Introduction to Media Studies	3	Existing course, Added in this roadmap
		New	Introduction to Environment & Sustainability	3	New
		New	Natural Resource & Trade	3	New
		HSS 107	Introduction to Psychology	3	Existing
		HSS 301	Social and Psychology Development	3	Existing
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 105	Functional English	3	Existing
		ENG 132	Oral Communication and Public Speaking Skills	3	Existing
		ENG 243	Business Communication Skill	3	Existing
		QTM 101	Business Mathematics-I	3	Existing
		QTM 120	Numeracy Skills	3	Existing
Civilizational courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	ISL 101	Islamic Studies	3	Existing
		PAK 101	Pakistan Studies	3	Existing

b. Disciplinary Requirement

Sub-Category	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses Major (13) Distribution (10)	ECO 101	Microeconomics-I	3	Existing
	ECO 121	Macroeconomics-I	3	Existing
	ECO 111	Microeconomics-II	3	Existing
	ECO 122	Macroeconomics-II	3	Existing
	ECO 201	Financial Institutions and Markets	3	Existing
	ECO 309	Monetary Theory & Policy	3	Existing
	ECO 362	Managerial Economics	3	Existing
	ECO 404	Money & Capital Markets	3	Existing
	ECO 403	Trade Policy	3	Existing
	ECO 306	International Economics & Finance	3	Existing
	ECO 301	Fundamentals of Econometrics	3	Existing
	SDW 699	Project/Thesis	3	Existing
	ECO 502	Industrial Economics	3	Existing
		Elective-1	3	Existing
		Elective-2	3	Existing
		Elective-3	3	Existing
		Elective-4	3	Existing
		Elective-5	3	Existing
		Elective-6	3	Existing
	MGT 111	Principles of Management	3	Existing
	MGT 311	Career Exploring Management	3	Existing
	HSS 207	Self-Management	3	Existing
	MIS 161	IT Skills	3	Existing
	MGT 463	Corporate skills	3	Existing
	New	Project analysis and Evaluation	3	Existing
	ECO 501	Banking & Taxation	3	Existing
	RMT 240	Research Methods & Techniques	3	Existing
	ECO 401	Financial Econometrics	3	Existing
	ECO 202	Issues in Pakistan Economy	3	Existing
	ECO 201	Financial Institutions and Markets	3	Existing
	ECO 340	Development Economics	3	Existing
	QTM 105	Introduction to Statistics	3	Existing
	QTM 204	Statistical Inference	3	Existing

c. Practical Learning Requirements

Category			Weeks/Hours		
Practical Learning Requirements	Internship (9 weeks)		9 weeks		
	Practical Learning Lab* (4 contact hrs per week)				
		Entrepreneurship			
		Youth Club			
		Sports			
		CSR/CSP			

* Weekly planned PLL activities for the semeste

Program Summary

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	44	135	6 weeks	48 hours CSP	
Revised (as per new HEC Policy 2020)	45	135	9 weeks	48 hours of mandatory Community Support Program (CSP) as PLL	

Revision of Semester-wise roadmap in accordance with HEC UG Policy 2020**Program: BS Economics****Faculty: Management Sciences****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 103	Functional English	3		Expository Writing (1)	Existing
2	New	Introduction to Environment & Sustainability	3		Natural Sciences (1)	New
3	HSS 107	Introduction to Psychology	3		Social Science (1)	Existing
4	QTM 101	Business Mathematics-I	3		Quantitative Reasoning (1)	Existing
5	HSS 108	Introduction to Sociology	3		Arts and Humanities (1)	Existing
6	ECO 110	Microeconomics-I	3		Major (1)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Optional: These are introductory courses in different disciplines that are offered by department which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 132	Oral Communication and Public speaking Skills	3		Expository Writing (2)	Existing
2	NEW	Natural Resource & Trade	3		Natural Sciences (2)	New
3	HSS 301	Social and Psychological Development	3		Social Science (2)	Existing
4	QTM 120	Numeracy Skills	3		Quantitative Reasoning (2)	Existing
5	HSS 115	Introduction to Media studies	3		Arts and Humanities (2)	New

6	ECO 121	Macroeconomics-I	3		Major (2)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 243	Business Communication Skills	3		Expository Writing (3)	Existing
2	PAK 101	Pakistan Studies	3		Pakistan Studies	Existing
3	ISL 101	Islamic Studies	3		Islamic/Religious Studies	Existing
4	ECO 111	Microeconomics-II	3		Major (3)	Existing
5	ECO 122	Macroeconomics-II	3		Major (4)	Existing
6	MGT 111	Principles of Management	3		Distribution (1)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ECO 202	Issues in Pakistan Economy	3		Distribution (2)	Existing
2	ECO 201	Financial Institutions and Markets	3		Majors (5)	Existing
3	MGT 311	Career Exploring Management	3		Distribution (3)	Existing
4	HSS 207	Self-Management	3		Distribution (4)	Existing
5	QTM 105	Introduction to Statistics	3		Minor (2)	Existing
6	MIS 161	IT Skills	3		Distribution (5)	Existing
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	MGT 463	Corporate Skills	3		Distribution (6)	Existing
2	ECO 340	Development Economics	3		Minor (3)	Existing
3	QTM 204	Statistical Inference	3		Minor (4)	Existing
4	ECO 309	Monetary Theory & Policy	3		Major (6)	Existing
5	ECO 362	Managerial Economics	3		Major (7)	Existing
6	ECO 501	Banking & Taxation	3		Distribution (7)	Existing
Total			18			

Semester 6:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	RMT 240	Research Methods & Techniques	3		Distribution(8)	Existing
2	ECO 404	Money & Capital Markets	3		Major (8)	Existing
3	ECO 403	Trade Policy	3		Major (9)	Existing
4	New	Project Analysis and Evaluation	3		Distribution (9)	New
5	ECO 306	International Economics & Finance	3		Major (10)	Existing
Total			15			

Semester 7:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	ECO 502	Industrial Economics	3		Majors (11)	Existing
2	ECO 301	Fundamentals of Econometrics	3		Major (12)	Existing
3		Elective-1	3		Major (13)	Existing
4		Elective-2	3		Major (14)	Existing
5		Elective-3	3		Major (15)	Existing
Total			15			

Semester 8:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	SDW 699	Project/Thesis	3		Majors (16)	Existing
2		Elective-4	3		Majors (17)	Existing
3		Elective-5	3		Majors (18)	Existing
4		Elective-6	3		Majors (19)	Existing
5	ECO 401	Financial Econometrics	3		Distribution (10)	Existing
Total			15			

Program Summary:

Total Courses	Total Credit Hours
45	135

Course Description of new offered courses**1- Introduction to Environment & Sustainability:**

Through introducing major environmental issues, such as climate change, water scarcity and pollution, food security and biodiversity, health within the context of sustainable development, this course will aim to explore the interface between development and environmental issues in a global and regional context. It will focus on: (i) the different theoretical perspectives of development and environment, and (ii) the dimensions of sustainability. The course will also introduce to student's systems approaches to managing change and environmentally sustainable development.

2- Natural Resources and Trade

This course will give students an understanding of the key challenges about trade in natural resource, discussing both trade patterns and price movements. Students will also study cost benefit analysis of natural resources (like fisheries, forests, and fossil fuels), and energy. In this course we will take an economic approach to global sustainability and the relationship between the Natural Resources and economic growth and trade. Moreover, students will be able to look at key features of natural

resources trade from a theoretical perspective. This course will also investigate the complex question like. i.e. Does trade provide an efficient mechanism for ensuring access to natural resources? What is the impact of trade on finite or exhaustible resources, including under conditions of “open access” where there is a common ownership and access to a natural resource? Is there a relationship between trade and its impact on the environment? Does trade reinforce or reduce problems associated with resource dominance in certain economies? And how does trade affect resource price volatility?

All these broad questions above will be addressed by surveying the relevant theoretical literature on the determinants and effects of trade in natural resources. After the completion of course Students will be expected to critically assess the main types of Policy tools that governments can use to correct market failures related to the Natural Resources.

3- Introduction to Media Studies

This course is a basic introductory course to the study of Mass Communication Media.

The course provides the historical and technological development of the Media and brings forth the growing influence of the Media in the private lives of communities as well as the transformational pressure it can exert on the social, cultural, economic, and political domains in societies. The course provides guidelines on how to understand and work in the Media. It primarily acquaints students with the different Media mediums, such as the Newspaper, Magazine and Book media, collectively called the Print Media.

The Radio, Television and Internet collectively called the Electronic or more recently, the Digital Media.

4- Project analysis and Evaluation:

The course offers a theoretical and hands on introduction to project evaluation, emphasizing generic knowledge and approaches that are generally applicable to all types of projects. This course also provides the student with fundamental knowledge about project evaluation and in particular investment decisions about the projects.

The students will benefit from the latest Monitoring and Evaluation thinking and practices including the results and participatory approaches. This course is designed to enable the students to become experts in monitoring and evaluating their development projects.

List of Electives:

Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
International Economics			
ECO 536	Globalization and International Trade	3	Existing
ECO 518	International Business Law	3	Existing
ECO 537	International Financial Markets	3	Existing
ECO 538	International Logistics and Transportation Management	3	Existing
ECO 539	Foreign Trade and FDI Policies	3	Existing
ECO 522	International Corporate Law	3	Existing
ECO 523	Global Value chains (GVCs) for Trade	3	Existing
ECO 524	World Trade Organization and Regional Trade Facilitation	3	Existing
ECO 525	Asian transport corridors and Trade	3	Existing
ECO 502	Industrial Economics	3	Existing

ECO 503	Budgeting and Financial Planning	3	Existing
ECO 504	Advanced Topics in Microeconomics	3	Existing
ECO 505	Advanced Topics in Macroeconomics	3	Existing
ECO 507	International Economics	3	Existing
ECO 508	Labor Economics	3	Existing
ECO 509	Investment Banking & Security Analysis	3	Existing
ECO 510	Islamic Economics	3	Existing
ECO 513	Economics of Regulation and Competition Policy	3	Existing
ECO 526	Sustainable Development and Economic Policy	3	Existing
Sustainable Development			
ECO 527	Urbanization and Development	3	Existing
ECO 528	Governance and Global Developmental Issues	3	Existing
ECO 529	Economics of Climate Change	3	Existing
ECO 530	Issues in Environmental Economics (Energy, water, and Forest)	3	Existing
ECO 531	Sustainability: Purpose and Challenges	3	Existing
ECO 532	Food Sustainability	3	Existing
ECO 533	Sustainable Energy	3	Existing
ECO 534	Sustainable Consumption and Production	3	Existing
ECO 535	Sustainable Development Goals	3	Existing
ECO 506	Poverty & Income Distribution	3	Existing
ECO 511	Urban Economics	3	Existing
ECO 512	General Equilibrium and Welfare Economics	3	Existing

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020

Program: BS (SCM)

Faculty: Management Studies***a. General Education Requirement***

<i>Sub-Category</i>	<i>Total Credit Hours</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18	HSS 202	Introduction to Sociology	3	
		HSS 301	Social and Psychological Development	3	Shifted from S-6 to S-4
		New 100 level	Introduction to Environment and Sustainability	3	Shifted "Financial Accounting" S-2
		New 200 level	Natural Resource and Trade	3	Replaced "Business Statistics"
		ECO 110	Microeconomics	3	Updated title removed Hyphen
		ECO 121	Macroeconomics (Prereq. ECO 110)	3	Updated title removed Hyphen
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15	ENG 105	Functional English	3	
		ENG 132	Oral Communication (Public Speaking) (Prereq. ENG 105)	3	
		BCM 204	Business Communication (Prereq. ENG 132)	3	
		QTM 101	Business Mathematics – I	3	Updated title to "Mathematics"
		QTM 120	Business Mathematics – II and Numeracy Skills (Prereq. QTM 101)	3	Updated title to "Mathematics", and added "and"
Civilizational Courses	6	PAK 101	Pakistan Studies	3	

Pakistan Studies (1) Islamic or Religious Studies (1)		ISL 101/ SOC 360	Islamic Studies/Ethics	3	
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b. Disciplinary Requirement

Sub-Category	Course code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses Major (19) Minor (4) Distribution (9)	SCM 101	Introduction to SCM	3	
	MIS 163	IT in SCM	3	
	SCM 201	Introduction to Procurement Management	3	
	FIN 220	Finance of Supply Chain Managers	3	
	SCM 221	Logistics and Distribution	3	
	OPM 360	Operation and Production Management	3	
	SCM 301	Inventory and Warehouse Management	3	
	MIS 310	SC Analytics and Information System	3	
	SCM 302	Supply Network Planning and Design	3	
	SCM 320	Import Export Management	3	
	SCM 321	Multimodal Transport Management	3	
	SCM 402	Legal Aspects of Supply Chains	3	
	SCM 323	Innovations in Supply Chain with e-Commerce	3	Updated title "SC" and "ecommerce"
		Elective-I	3	Supply Chain Risk Management is moved to Elective for consistency
		Elective-II	3	
		Elective-III	3	
		Elective-IV	3	
		Elective-V	3	Updated title from "Specialization IV"
		Elective-VI	3	Moved Foreign Language (Chinese / Arabic) to electives
	ACC 102	Financial Accounting	3	Shifted from S-2 to S-3 and replaced Managerial Accounting
	MGT 311	Career Exploring Management	3	

	QTM 205	Statistical Inference and Quantitative Research	3	
	MGT 211	Self-Management	3	Shifted from S-4 to S-6
	MGT 111	Principles of Management	3	
	MKT 110	Principles of Marketing	3	
	HRM 353	Human Resource Management	3	
	MGT 435	Project Management	3	
	MGT 312	Quality Management and Lean Thinking	3	
	RMT 240	Research Methods & Techniques	3	
	RMT 360	Operations Research	3	
	SCM 421	Globalization and Outsourcing Strategies	3	
	MGT 463	Corporate Skills	3	

c. Practical Learning Requirements

Category			Weeks/Hours	
Practical Learning Requirements	Internship (9 weeks)		9 weeks	
	Practical Learning Lab* (4 contact hrs per week)			
		Entrepreneurship		
		Youth Club		
		Sports		

* weekly planned PLL activities for the semester

Program Summary:

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	44	135	6 weeks		
Revised (as per new HEC Policy 2020)	45	135	9 weeks	48 hours of mandatory Community Support Program (CSP) may be considered as PLL	

Revision of Semester-wise roadmap in accordance with HEC UG Policy 2020**Program: BS (SCM)****Faculty: Management Studies****Semester 1:**

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 105	Functional English	3	0	Expository Writing (1)	
2	QTM 101	Business Mathematics – I	3	0	Quantitative Reasoning (1)	Updated title to "Mathematics"
3	ECO 110	Microeconomics	3	0	Social Science (1)	Updated title removed Hyphen
4	PAK 101	Pakistan Studies	3	0	Pak Studies (1)	
5	ISL 101/SOC 360	Islamic Studies/Ethics	3	0	Islamiyat (1)	
6	MGT 111	Principles of Management	3	0	Distribution (1)	
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Optional: These are introductory courses in different disciplines that are offered by department which students may enroll. The department will determine how many, if any, course credits earned in the optional course/s can count towards the Major or Distribution credit requirements.

Semester 2:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	ENG 132	Oral Communication (Public Speaking) (Prereq. ENG 105)	3	0	Expository Writing (2)	
2	SCM 101	Introduction to SCM	3	0	Major (1)	
3	HSS 202	Introduction to Sociology	3	0	Arts and Humanities (1)	

4	New 100 level	Introduction to Environment and Sustainability	3	0	Natural Sciences (1)	Shifted "Financial Accounting" S-2
5	ECO 121	Macroeconomics (Prereq. ECO 110)	3	0	Social Science (2)	Updated title removed Hyphen
6	MIS 163	IT in SCM	3	0	Major (2)	
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 3:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	BCM 204	Business Communication (Prereq. ENG 132)	3	0	Expository Writing (3)	
2	QTM 120	Business Mathematics – II and Numeracy Skills (Prereq. QTM 101)	3	0	Quantitative Reasoning (2)	Updated title to "Mathematics", and added "and"
3	ACC 102	Financial Accounting	3	0	Minor (1)	Shifted from S-2 to S-3 and replaced Managerial Accounting
4	MKT 110	Principles of Marketing	3	0	Distribution (2)	
5	New 200 level	Natural Resource and Trade	3	0	Natural Sciences (2)	Replaced "Business Statistics"
6	SCM 201	Introduction to Procurement Management	3	0	Major (3)	
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

Semester 4:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			Theory	Lab		
1	HSS 301	Social and Psychological Development	3	0	Arts and Humanities (2)	Shifted from S-6 to S-4
2	HRM 353	Human Resource Management	3	0	Distribution (3)	
3	FIN 220	Finance of Supply Chain Managers	3	0	Major (4)	
4	SCM 221	Logistics and Distribution	3	0	Major (5)	
5	OPM 360	Operation and Production Management	3	0	Major (6)	
6	SCM 301	Inventory and Warehouse Management	3	0	Major (7)	
Total Credit Hours			18			
7	Practical Learning Lab (4 contact hours per week)					

* Major and Distribution: **Major** courses are in the discipline that the students declared as the main area of studies and are offered by a department. **Distribution** courses are those which the department determine to be allied with declared major or discipline and are offered by other departments.

Semester 5:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			Theory	Lab		
1	MGT 311	Career Exploring Management	3	0	Minor (2)	
2	MGT 435	Project Management	3	0	Distribution (4)	
3	MIS 310	SC Analytics and Information System	3	0	Major (8)	
4	MGT 312	Quality Management	3	0	Distribution (5)	

		and Lean Thinking				
5	QTM 205	Statistical Inference and Quantitative Research	3	0	Minor (3)	
6	SCM 302	Supply Network Planning and Design	3	0	Major (9)	
Total			18			

Semester 6:

<i>Sr. #</i>	<i>Course Code</i>	<i>Course Title</i>	<i>Credit Hours</i>		<i>Category as per HEC Policy</i>	<i>Remarks (Existing or New Course, CHs added, etc.)</i>
			<i>Theory</i>	<i>Lab</i>		
1	MGT 211	Self-Management	3	0	Minor (4)	Shifted from S-4 to S-6
2	SCM 320	Import Export Management	3	0	Major (10)	
3	SCM 321	Multimodal Transport Management	3	0	Major (11)	
4	SCM 402	Legal Aspects of Supply Chains	3	0	Major (12)	
5	RMT 240	Research Methods & Techniques	3	0	Distribution (6)	
6	RMT 360	Operations Research	3	0	Distribution (7)	Moved from S-7 to S-6
Total			18			

Semester 7:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	SCM 323	Innovations in Supply Chain with e-Commerce	3	0	Major (13)	Updated title "SC" and "ecommerce" Moved from S-6 to S-7
2	SCM 421	Globalization and Outsourcing Strategies	3	0	Distribution (8)	
3		Elective-I	3	0	Major (14)	Supply Chain Risk Management is moved to Elective for consistency
4		Elective-II	3	0	Major (15)	
5		Elective-III	3	0	Major (16)	
Total			15			

Semester 8:

Sr. #	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
			<i>Theory</i>	<i>Lab</i>		
1	MGT 463	Corporate Skills	3	0	Distribution (9)	
2		Elective-IV	3	0	Major (17)	
3		Elective-V	3	0	Major (18)	Updated title from "Specialization IV"
4		Elective-VI	3	0	Major (19)	Moved Foreign Language (Chinese/ Arabic) to electives
Total			12			

Program Summary:

Total Courses	Total Credit Hours
45	135

Mapping of UG Courses in Specified Categories as per HEC UG Policy 2020**Program: BS Maritime Business & Management****Faculty: Management Sciences****a. General Education Requirement**

Sub-Category	Total Credit Hours	Pre-requisite course Code	Course Code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Breadth Courses (6) Art & Humanities (2) Natural Sciences (2) Social Sciences (2)	18		ENG 132	Oral Communication & Public Speaking Skills	3	Existing
			MGT 211	Self-Management	3	Existing
			MAT 105	Mathematics	3	Existing
			GEO 115	Introduction to Geophysics	3	Existing
			HSS 202	Introduction to Sociology	3	Existing
			HSS 225	Psychological & Emotional Development	3	Existing
Foundational Skills Courses (5) Expository Writing (3) Quantitative Reasoning (2)	15		ENG 105	Functional English	3	Existing
		ENG 105	BCM 121	Business Communication Skills	3	Existing
			MRM 302	Research & Project Writing Methods	3	Existing
			ITC 101	IT Skills	3	Existing
			MAT 205	Statistics	3	Existing
Civilizational Courses Pakistan Studies (1) Islamic or Religious Studies (1)	6	PAK 101	Pakistan Studies		3	Existing
		ISI 101	Islamic Studies/Ethics		3	Existing

b. Disciplinary Requirement

Sub-Category	Pre-requisite course Code	Course code	Course Title	Credit Hours	Remarks (Existing or New Course, CHs added, etc.)
Discipline Courses Major (17) Minor (6) Distribution (9)		MTM 101	Introduction to Maritime Industry	3	Existing
		MTM 120	Introduction to Meteorology & Oceanography	3	Existing
		MTM 230	Intro to Maritime Law & International Maritime Convention	3	Existing
		MTM 322	Fisheries Resources & Management	3	Existing
		MTM 222	Introduction to Coastal Zone Management	3	Existing
		MTM 223	Marine Insurance	3	Existing
		MTM 224	Marine Pollution & Control	3	Existing
	MTM 201	MTM 226	Regularity Framework of Maritime Organizations	3	Existing
		MTM 304	Ports Operations and Management	3	Existing
		MTM 305	Maritime Logistics	3	Existing
	MTM 226	MTM 303	Law of Carriage of Goods by Sea	3	Existing
		MTM 306	Shipping Operations and Management	3	Existing
		-	ELECTIVE - I	3	Existing
			ELECTIVE - II	3	Existing
			ELECTIVE - III	3	Existing
		-	ELECTIVE - IV	3	Existing
			ELECTIVE -V	3	Existing
			ELECTIVE-VI	3	Existing
			ELECTIVE-VI	3	Existing
		ECO 101	Fundamentals of Economics	3	Existing
		MTM 401	Coastal Eco-Tourism Development and Management	3	Existing
		MTM 402	Hydrographic Data & Services Management/Hydrography & Navigation	3	Existing
	MTM 322	MTM 403	Maritime Innovation & Entrepreneurship	3	Existing
		MTM 202	Economics of Sea Transport & International Trade	3	Existing
		FIN 205	Fundamental of Accounting and Finance	3	Existing

		MGT 221	Management and Leadership	3	Existing
		HRM 353	Human Resource Management	3	Existing
		MGT 111	Principles of Management	3	Existing
	MGT 221	MKT 110	Principles of Marketing	3	Existing
		MIS 460	E-Commerce	3	Existing
Lab/Fieldwork/ Thesis	MRM 302	SDW 499	Project/ Thesis	6	Existing

c. Practical Learning Requirements

Category			Weeks/Hours	
Practical Learning Requirements	Internship (9 weeks)		9/360	
	Practical Learning Lab* (4 contact hrs per week)			
		Entrepreneurship	Activities are planned to be undertaken as per the new HEC Policy	
		Youth Club	Activities are undertaken regularly	
		Sports	Activities are undertaken regularly	

* weekly planned PLL activities for the semester

Program Summary:

Roadmap	Total Courses	Total CHs	Internship	PLL	Remarks
Existing	44 (including 6 credit hours thesis)	135	6 weeks	Activities are undertaken regularly	Need to be added to the Roadmap
Revised (as per new HEC Policy 2020)	44 (including 6 credit hours thesis)	135	9 weeks	Activities are undertaken regularly	Internship time extended.

Revision of Semester-Wise Roadmap following HEC UG Policy 2020**Program: BS Maritime Business & Management****Faculty: Management Sciences****Semester 1:**

Sr. #	Pre-requisite Course Code	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
				Theory	Lab		
1		ENG 105	Functional English	3	-	Expository Writing (1)	Existing
2		ITC 101	IT Skills	3	-	Quantitative Reasoning (1)	Existing
3		ECO 101	Fundamentals of Economics	3	-	Minor (1)	Existing
4		MTM 101	Introduction to Maritime Industry	3	-	Major (1)	Existing
5		MGT 211	Self-Management	3	-	Minor (2)	Existing
6		MAT 105	Mathematics	3	-	Natural (1)	Existing
	Total Credit Hours			18			
7		Practical Learning Lab (4 contact hours per week)				Added	

Semester 2:

Sr. #	Pre-requisite Course Code	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
				Theory	Lab		
1		MGT 111	Principles of Management	3		Distribution (1)	Existing
2	ENG 105	BCM 121	Business Communication Skills	3		Expository Writing (2)	Existing
3		ISI 101	Islamic Studies/Ethics	3		Islamiat (1)	Existing
4		GEO 115	Introduction to Geophysics	3		Natural Science (2)	Existing
5		MTM 120	Introduction to Meteorology & Oceanography	3		Major (2)	Existing
6		HSS 202	Introduction to Sociology	3		Social Sciences (1)	Existing
	Total Credit Hours			18			
7		Practical Learning Lab (4 contact hours per week)				Added	

Semester 3:

Sr. #	Pre-requisite Course Code	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
				Theory	Lab		
1		MTM 230	Intro to Maritime Law & International Maritime Convention	3		Major (3)	Existing
2		ENG 132	Oral Communication (Public Speaking Skills)	3		Arts and Humanities (1)	Existing
3		PAK 101	Pakistan Studies	3		Pakistan Studies (1)	Existing
4		FIN 205	Fundamental of Accounting and Finance	3		Minor (4)	Existing
5		MTM 202	Economics of Sea Transport & International Trade	3		Major (4)	Existing
6		MGT 221	Management and Leadership	3		Minor (5)	Existing
	Total Credit Hours			18			
7		Practical Learning Lab (4 contact hours per week) Added					

Semester 4:

Sr. #	Pre-requisite Course Code	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
				Theory	Lab		
1		MTM 222	Introduction to Coastal Zone Management	3		Major (5)	Existing
2		MTM 223	Marine Insurance	3		Major (6)	Existing
3		MTM 224	Marine Pollution & Control	3		Major (7)	Existing
4	MTM 201	MTM 226	Regularity Framework of Maritime Organizations	3		Major (8)	Existing
5		MAT 205	Statistics	3		Quantitative Reasoning (2)	Existing

6		HSS 225	Psychological & Emotional Development	3		Social Sciences (2)	Existing
	Total Credit Hours			18			
7		Practical Learning Lab (4 contact hours per week) Added					

Semester 5:

Sr. #	Pre-requisite Course Code	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
				Theory	Lab		
1		MTM 304	Ports Operations Management	3		Major (9)	Existing
2		MTM 305	Maritime Logistics	3		Major (10)	Existing
3	MTM 225	MTM 303	Law of Carriage of Goods by Sea	3		Major (11)	Existing
4	MGT 221	MKT 110	Principles of Marketing	3		Distribution (2)	Existing
5		HRM 353	Human Resource Management	3		Arts and Humanities (2)	Existing
6		MIS 460	E-Commerce	3		Distribution (3)	Existing
	Total			18			
7		Practical Learning Lab (4 contact hours per week) Added					

Semester 6:

Sr. #	Pre-requisite Course Code	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
				Theory	Lab		
1		MTM 306	Shipping Operations and Management	3		Major (12)	Existing
2		MTM 322	Fisheries Resources & Management	3		Major (13)	Existing
3		MRM 302	Research & Project Writing Methods	3		Expository Writing (3)	Existing

4		MTM 508	Occupational Health and Safety, Risk and Disaster Management	3		Major (14)	Existing
5		-	ELECTIVE - I	3		Minor (6)	Existing
6		-	ELECTIVE - II	3		Minor (7)	Existing
	Total			18			
7		Practical Learning Lab (4 contact hours per week) Added					

Semester 7:

Sr. #	Pre-requisite Course Code	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
				Theory	Lab		
1		MTM 401	Coastal Eco-Tourism Development and Management	3		Major (15)	Existing
2		MTM 402	Hydrographic Data & Services Management/Hydrography & Navigation	3		Major (16)	Existing
3	MTM 322	MTM 403	Maritime Innovation & Entrepreneurship	3		Major (17)	Existing
4		-	ELECTIVE - III	3		Minor (8)	Existing
5		-	ELECTIVE - IV	3		Minor (9)	Existing
	Total			15			
6		Practical Learning Lab (4 contact hours per week) Added					

Semester 8:

Sr. #	Pre-requisite Course Code	Course Code	Course Title	Credit Hours		Category as per HEC Policy	Remarks (Existing or New Course, CHs added, etc.)
				Theory	Lab		
1	MRM 302	SDW 499	Project/ Thesis	6		Major (18)	Existing
2		-	ELECTIVE -V	3		Minor (10)	Existing
3		-	ELECTIVE - VI	3		Minor (11)	Existing
	Total			12			
4		Practical Learning Lab (4 contact hours per week) Added					

Program Summary:

Total Courses	Total Credit Hours
44	135