

**Minutes of the Meeting**  
**12<sup>th</sup> Faculty Board of Studies of Engineering Sciences**  
**at 1000 hours on Thursday 16<sup>th</sup> February, 2017 (through Video Link)**

**Attendance**

**Present**

**BUIC:**

1.	Prof. Dr. M. Najam-ul-Islam	Dean (ES)	Chairman
2.	Prof. Dr. Tahseenullah Khan	HoD(E&ES)	Member
3.	Prof. Dr. Shehzad Khalid	Director PGP	Member
4.	Assoc. Prof. Dr. Tamim Ahmed Khan	HoD(SE)	Member
5.	Dr Faisal Bashir	HoD(CS)	Member
6.	Dr Saleem Aslam	HoD(EE)	Member
7.	Dr.Khurram Shehzad	HoD(CE)	Member

**BUKC:**

8.	Prof. Dr. Mubarak Ali	HoD(E&ES)	Member
9.	Assoc. Prof. Dr. Haroon Rasheed	HoD(EE)	Member
10.	Assoc. Prof. Dr. Humera Farooq	HoD(CS)	Member
11.	Asstt. Prof. Dr.Sohaib Ahmad	HoD(C&SE)	Member

**BULC:**

12.	Asstt. Prof. Farhan Saeed Sheerazi	HoD(CS)	Member
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**In attendance**

**BUIC**

1.	Prof. Dr. Muhammad Zafar	FM(EES)
2.	Asstt. Prof. Dr. Imtiaz Alam	FM(EE)
4.	Assoc. Prof. Dr. Awais Majeed	FM(SE)

## Proceedings

### Commencement of the Meeting

1. The Chairman declared the meeting open at 1000 hours and welcomed the members. The chair urged the members to participate actively.
2. The minutes of the 11<sup>th</sup> FBoS were confirmed by the house as no observations were received.

### **Review Items**

**Item 0907: Proposed Total Time for Final Examination**  
Responsibility: HOD (CE) BUIC

#### **Decision of 9<sup>th</sup> FBoS**

3. The case is to be moved on file and input from all stake holders be sought before next FBoS.

#### **Progress Reported:**

4. The input from stake holders is awaited.

#### **Decision:**

5. The process be expedited and progress be reported in the next FBoS.

>>**Action:** HOD(CE) BUIC

**Item 0915: Weightage of Candidate's Interview in Admission Process of BS programs**  
Responsibility: HOD (EE) BUKC

#### **Decision of 9<sup>th</sup> FBoS**

6. The committee, headed by HOD(EE)BUKC, is to propose an SOP for BS admissions in Engineering Sciences. The SOP is to be presented in the next FBOS.

#### **Progress Reported:**

7. The committee is in process of preparing the SOP, and required help from HODs of Islamabad campus. HOD-CS-BUIC volunteered to help the committee.

#### **Decision:**

8. SOP to be prepared before the admission process and the case be moved on file by HOD(EE)BUKC.

>>**Action:** HOD(EE) BUKC

## New Items

### Agenda Item # 1201

**Initiated by: HoD .C&SE(BUKC)**

#### **Moving/adding courses from elective supporting/Unified course code to software engineering electives**

##### **1. Background to the Case**

In the software engineering roadmap, courses which have codes starting with SEN should be placed in the software engineering electives instead of supporting electives. Further, there are couple of courses, which are already in the other roadmaps/unified code booklet starting with SEN, need to be added in the software engineering electives.

##### **2. Financial Effect**

Nil

##### **3. Recommendations**

The following courses need to be added in the software engineering electives:

- a) SEN-441 Mathematical Tools for Software Engineering (Supporting electives)
- b) SEN-421 Semantic Web (Found in the unified course code/CS roadmap)
- c) SEN-456 Usability Engineering (Found in the unified course code/CS roadmap)

##### **4. Establishment/HR effect if any**

Nil

#### **Discussion and Decision**

- 9. FBoS unanimously approved the agenda item and the case is recommended to ACM.

**Action By: HoD (C&SE) BUKC**

**Agenda Item # 1202**

**Initiated by: HoD.C&SE (BUKC)**

**Adding new electives to Domain electives**

**1. Background to the Case**

Adding few new courses to the list of Domain Elective Courses which already exists in the unified code book and are being offered in other departments having SEN codes.

**2. Financial Effect**

Nil

**3. Recommendations**

It is recommended to add the following courses to their respective domains

- a) SEN-493 Multimedia Systems to Multimedia domain
- b) SEN-455 Knowledge Management to Information System Domain

**4. Establishment/HR effect if any**

Nil

**Discussion & Decision**

- 10. The chair inquired that the credit hours of the course is 2+1 or 3+0, in both the cases it must be in the same format as it is in the existing road map of BS (CS).
- 11. The agenda item is recommended for approval to ACM and one agenda item is to be prepared for all departments for the addition of all elective courses for recommendation to ACM.

**Action By: HoD.C&SE (BUKC)**

**Agenda Item # 1203****Initiated by: HoD.C&SE (BUKC)****Change of Pre-requisites of domain elective courses****1. Background to the Case**

The pre-requisites of the courses; CEN-453 Real Time Systems and GSC-320 Numerical Analysis have CSC-320 Operating Systems and GSC 210- Differential Equation respectively in the BCE roadmap. However, in the current BSE roadmap, GSC 210- Differential equation and GSC-110 Applied Calculus & Analytical Geometry are the pre-requisites.

**2. Financial Effect**

Nil

**3. Recommendations**

It is recommended that both these courses may have similar pre-requisites; CSC-320 Operating Systems and GSC 210- Differential Equation respectively. It is also suggested that “Real Time System” with CEN code; it should be moved from the list of Software engineering electives to list of supporting electives for the BSE program.

**4. Establishment/HR effect if any**

Nil

**Discussion & Decision**

12. After detailed discussion, the house suggested that for real time system (CEN-453), the prerequisite shall be operation systems (CSC-320) and for Numerical analysis (GSC-320), the existing prerequisite is Applied Calculus & Analytical Geometry (GSC-110), which is shall not be changed.
13. The case is approved as per following:

Couse name	Prerequisite course
Real time systems (CEN-453)	Operating system (CSC-320)
Numerical Analysis (GSC-320)	Applied Calculus & Analytical Geometry (GSC-110)

**Action By: HoD.C&SE (BUKC)**

**Agenda Item # 1204**

**Initiated by: HoD.C&SE (BUKC)**

**Change of credit hours in the list of elective software engineering course**

**1. Background to the Case**

There is only one course of 3+1 Credit hours in the list of Elective Software Engineering Course i.e. CEN-453 Real Time Systems. However, all SE electives have 3 + 0 so there is no condition that Real Time System should be offered.

**2. Financial Effect**

Nil

**3. Recommendations**

It is recommended that SE Elective-II should be changed to 3+1 to 3 + 0.

**4. Establishment/HR effect if any**

Nil

**Discussion & Decision**

14. The board had detailed discussion on the effect of total minimum credit hour required for graduation, if any change in the credit hour is made.
15. The chair emphasized that there shall be no conflict in road map and offering courses.  
We need a proper document to recommend the case to ACM
16. Dr. Tamim (HOD.SE BUIC) requested for some time so that he together with HOD(C&SE) BUKC will prepare the case in detail.
17. The deadline of 27<sup>th</sup> February was given to the committee.

**Action By: HoD. C&SE (BUKC)**

## **Agenda Item # 1205**

**Initiated by: HoD.C&SE(BUKC)**

### **Prerequisite of domain electives mentioned in BSE roadmap**

#### **1. Background to the Case**

In Software Engineering road map pre-requisites of the domain specific electives are not mentioned. Few of these courses are being offered in other programs with some pre-requisites, which may cause confusion at the time of course offering. For example; CEN-444 Digital Image Processing has a pre-requisite of EET-313 Signals and Systems.

#### **2. Financial Effect**

Nil

#### **3. Recommendations**

It is recommended that either the pre-requisites should be mentioned in the road map or decision should be taken that these courses can be offered to the students without considering these pre-requisites.

#### **4. Establishment/HR effect if any**

Nil

### **Discussion & Decision**

18. The case is recommendation for approval to ACM, after detailed discussion.

**Action By: HoD.C&SE(BUKC)**

## **Agenda Item # 1206**

**Initiated by: HoD.C&SE(BUKC)**

### **Updating Description of Course CEN 222 Data Communication and Networking**

#### **1. Background to the Case**

The contents of the course CEN 222 are currently more focused on the lower layers of the communication model. This does not allow the student to gain complete understanding of networking. It also creates a disparity between the contents of theory and the contents of the laboratory work.

#### **2. Financial Effect**

Nil.

#### **3. Recommendations**

It is recommended to update the description of the course so that a more comprehensive understanding of networking can be delivered to the students. The recommended course description is as follows:

This is an introductory course in Data Communications and networking. It familiarizes the students with the basics of data communication, computer networks, OSI model and the TCP/IP protocol suite. Upon completion of this course, the students will understand data communication, transmission media, network models, data link control, networking protocols, transport layer protocols, Internet standards and application layer protocols.

#### **Discussion & Decision**

19. Dr. Haroon commented that in general the course content should be made very flexible and 25% of the course contents can be changed by the instructor.
20. Since Data communication and networking is offered by all department, an input from all the departments is required to update the current course contents of this course.
21. The case will be discussed in the next FBoS and C&SE BUKC department is to present the case with input from all departments.

**Action By: HoD.C&SE (BUKC)**



**Initiated by: HOD.C&SE(BUKC)**

**Adding CE Depth Elective courses of 3+0 or 2+1 Credit Hours**

**1. Background to the Case**

Currently five CE Depth Elective courses are being offered in the BCE program, all of them comprise of 3+1=4 credit hours. This does not allow room for courses with 3+0=3 or 2+1=3 credit hours to be offered.

**2. Financial Effect**

Nil

**3. Recommendations**

It is recommended to change the credit hours of course **CE Depth Elective II** from 3+1=4 to 3/2+0/1=3 credit hours. Since there is no course of 3+0 or 2+1 credit hours currently in the list of Depth Electives, it is therefore recommended to add the following courses to the current list of CE Depth Elective courses. These courses are available in the course catalogue.

- SEN-310 Web-Engineering (2+1)
- CSC-313 Visual Programming (2+1)
- CSC-315 Theory of Automata (3+0)
- CSC-321 Design and Analysis of Algorithms (3+0)
- CSC - 342 Parallel Programming (2+1)
- CSC-444 Computer Graphics (2+1)
- CEN-450 Simulation and Modeling (2+1)
- SEN-453 Information System Audit (3+0)

**4. Establishment/HR effect if any**

Nil

**Discussion & Decision**

22. Dr. Khurram Shehzad commented that sometime the courses offered in a program are of software, hardware or networking oriented nature. He added that our roadmap contains courses from Software Engineering and Computer science department. HEC criteria is that we can offer five electives and two courses from the inter discipline courses.
23. The chair emphasized that all elective courses shall be of 3+1 credit hours. Rapid changes are not suggested as its effects become visible after some time like 3 years or so.
24. More detailed working on the revision of road map is required before the recommendation is made to the ACM. The case is to be presented in the next FBoS after detailed working.

<b>Action By: HOD.C&amp;SE(BUKC)</b>

## **Agenda Item # 1208**

**Initiated by: HOD.C&SE(BUKC)**

### **Extra courses offered in the final year upto 21 credit hours**

#### **1. Background to the Case**

According to the academic rule (3.4.2.1), the maximum course load that can be taken by a student shall be 6 courses. However, in the CE & SE roadmaps, there are 13 and 12 credit hours respectively. In the final year, students want to complete his degree while taking maximum course load i.e. 18 along with one extra course as indicated in the same rule.

#### **2. Financial Effect**

Nil

#### **3. Recommendations**

It is recommended that this rule should be revised according to the roadmaps as students are allowed to take courses with 21 credit hours either they take one more course or two courses.

#### **4. Establishment/HR effect if any**

Nil

### **Discussion & Decision**

25. The Chair FBoS emphasized that the rule is already flexible enough. Six courses are allowed (five regular and one with special approval) which can go to maximum of 24 credit hours if all courses taken are of 3+1 credit hours.
26. Dr. Khurram Shehzad suggested that in academic matters e.g. registration of courses and maximum load for students, the decision shall be taken by the Dean instead of Director. Sometimes it becomes difficult to support a student in such circumstances.
27. The case is to be revised and presented by adding relevant issues.

**Action By: HoD.C&SE(BUKC)**

**Agenda Item # 1209**

**Initiated by: HOD.C&SE(BUKC)**

**Bifurcation of C&SE Department**

**1. Background to the Case**

The department is running two programs including bachelor of software engineering and bachelor of computer engineering. PEC has observed that the department should be split into two departments. The first batch of BCE will going to be passed out in this coming semester. So, it is a high time to process the separation of the department.

**2. Financial Effect**

Nil

**3. Recommendations**

It is recommended that the FBoS approves the split of the department .

**4. Establishment/HR effect if any**

Nil.

**Discussion & Decision**

28. Bifurcation of computer and software Engineering department is recommended into two different departments of Software Engineering and Computer Engineering, after the completion of Computer Engineering four years cycle.

**Action By: All HODs (CSE)BUKC**

## **Agenda Item # 1210**

**Initiated by: E&ES BUIC**

### **Approval of Departmental Vision, Mission and Program Objectives statements of all programs of the department**

#### **1. Background to the Case**

Self-academic audit for the program of MS Environmental Sciences was carried out on 30th of January, 2017. The assessment team included Mr. Fazal Wahab, Director Quality Assurance and Prof. Dr. Mubarik Ali, HOD Earth and Environmental Sciences, Bahria University, Karachi Campus. During the assessment, it was found that the department vision, mission and objectives were not approved by the statutory body. Therefore, the agenda item was placed before DBOS meeting for discussion and improvements in the vision, mission and objectives. The house agreed that vision, mission and objectives will be forwarded to FBOS for approval.

#### **2. Financial Effect**

Nil

#### **3. Recommendations**

Nil

### **Discussion & Decision**

29. All departments were requested to submit their vision, mission and objective in their agenda items. However, some of the departments were not able to submit their vision, mission and objectives in time. A deadline of 27<sup>th</sup> February is set to submit the same.
30. The vision, mission & objectives of all the programs were presented and approved. The same is circulated via email.

**Action By: All HODs**

**Agenda Item # 1211**

**Initiated by: E&ES BUIC**

**Revision of Road Maps and Course Titles, Core and Elective Courses as per HEC guidelines for MS Geology, MS Geophysics and MS Environmental Sciences**

**1. Background to the Case**

The self-academic assessment team during their audit of MS Environmental Science program noted that the road map of the department of E&ES deviates 50% from the HEC recommended road map for Environmental Sciences. All the members of DBOS agreed to forward the revised road map of the all programs of the department at par with HEC approved road map to FBOS for subsequent approval from ACM

**2. Financial Effect**

Nil

**3. Recommendations**

**Discussion & Decision**

31. Any changes in the road map are to be discussed with Dr. Mubarak (HOD-EES-KC) in detailed and revised road map is to be submitted by 27<sup>th</sup> February 2017.
32. The case is recommended for ACM approval.

**Action By: E&ES BUIC**

## **Agenda Item # 1212**

**Initiated by: E&ES BUIC**

### **Breakdown of Lab Oriented Courses from 3 credit hours to 2+1 Credit hours and their assessment schemes for BS and MS programs**

#### **1. Background to the Case**

During Self Academic Audit conducted by QA directorate, it was observed that the labs are been conducted in all the lab oriented courses for both BS and MS programs, but they are not mentioned as a separate credit hour in the roadmap which gives an impression of a theory course. Therefore, the house agreed to break all the lab oriented courses into (2+1) credit hours instead of 3 credit hours. In addition, members also recommended separate assessment schemes for 1 credit hour of lab. The house agreed to forward the revised road map to FBOS for subsequent approval from ACM.

#### **2. Financial Effect**

Nil

#### **3. Recommendations**

#### **Discussion & Decision**

- 33. The house unanimously agreed to the recommendation of audit team.
- 34. The agenda item is recommended for ACM approval.

**Action By: E&ES BUIC**

**Agenda Item # 1213**

**Initiated by: E&ES BUIC**

**Change of MS thesis from 12 credit hours to 6 credit hours as per HEC guidelines**

**1. Background to the Case**

During self-academic audit, it was found that the department offers 12 credit hours MS thesis that does not align with HEC recommendation of 6 credit hours MS thesis. It was therefore decided in DBOS that credit hours for MS thesis should be changed to 6 credit hours as recommended by HEC for all MS programs. The house agreed to forward the revised road map to FBOS for subsequent approval from ACM.

**2. Financial Effect**

Nil

**3. Recommendations**

DBOS recommended for changing MS thesis from 12 credit hours to 6 credit hours as per HEC guidelines.

**Discussion & Decision**

35. The house unanimously agreed to the recommendations.

36. The case is recommended for ACM approval.

**Action By: E&ES BUIC**



## Agenda Item # 1214

**Initiated by: HoD.SE(BUIC)**

### **Revision of FYP grading system**

#### **1. Background to the Case**

Existing FYP grading system puts a lot of emphasis on final evaluation and the interim evaluation is neglected making this activity a waste of time and resources. An alternate scheme is presented for debate in the house.

S.No	Previous Distributions	Marks	Proposed Distribution	Marks
1	Supervisor Evaluation (FALL)	15	Supervisor Evaluation FALL	15
2	Supervisor Evaluation (SPRING)	15	Supervisor Evaluation SPRING	15
3	Interim Evaluation	0	Interim Evaluation	10
4	FYP Coordination	10	FYP Coordinator	10
5	Final Evaluation	60	Final Evaluation	50

#### **2. Financial Effect**

Nil.

#### **3. Recommendations**

Debate on the marks distribution and effective date took place and matter is approved at DBOS level, submitted to FBOS for further discussion and approval for ES as well.

### **Discussion & Decision**

37. Dr. Sohaib commented that we have different departments and campuses, so the grading systems shall be the same throughout.
38. Dr. Khurram added that since we are moving towards OBE based grading systems, so FYP gradings shall also be based on OBE.
39. Dr. Humaira commented in greater details and recommended that a committee be constituted to centralized the grading system across the departemnts.
40. The chair commented that currently a very good practice of grading system is in place in all the departments. The supervisors are trustworthy and it is a good idea to make the grading system based on OBE.

41. A committee is constituted comprising of Dr. Tamim, Dr. Humaira, and Dr. Sherazi, who will make a centralized grading systems based on OBE for discussion in the next meeting.

**Action By: All HOD's**

**Agenda Item # 1215**

**Initiated by: HoD.SE(BUIC)**

**Mapping of OBE with Labs & Courses**

**1. Background to the Case**

The course outlines get updated each year and sometimes the labs go unaligned. For that matter, a committee is required with detailed work assignment and aligns complete courses according to OBE.

**2. Financial Effect**

Nil.

**3. Recommendations**

All the outlines are prepared, approved by the DBOS and committee approved submitted to FBOS for approval and possible replication in all Engineering departments.

**Discussion & Decision**

42. Dr. Haroon said that the preparation for transition to OBE system is in progress and hopefully the process will be completion before the start of fall 2017.
43. Dr. Sohaib said that most of the courses have been prepared OBE based however some of the core courses are still in the transition phase.
44. The chair requested Dr. Tamim Ahmad Khan, Dr. Haroon Rashid, Dr. Sohaib Ahmad and Dr. Saleem Aslam to have a meeting on 9 – 10<sup>th</sup> March 2017 and should have more collaboration on this matter.
45. The case will be discussed in next FBOS

**Action By: HoD SE (BUIC , BUKC) , HoD EE (BUIC , BUKC)**

**Initiated by: HoD.CE(BUIC)**

**Revised Vision, Mission & Program Objective**

**1. Background to the Case**

Ref. 27th ACM – Decision 2718, “Mission, Objectives and Outcomes of the ongoing programs shall be presented at the respective FBOSs for approval by the Deans.”

The Mission, Objectives and Outcomes of BCE, MSCE and PhD CE in addition to the departmental vision and mission were discussed in the DBOS. The updated Mission, Objectives and Outcomes are as below:

**Computer Engineering Department(CE):**

***Vision Statement***

Commitment to prepare students for professional and research activities with an ability to learn independently, within a diverse multi-cultural environment, and enabling them to become global leaders in their respective fields.

***Mission Statement***

The mission of Computer Engineering program is to educate students by inculcating knowledge and developing capabilities for solving complex technological problems through innovation in various domains of Computer Engineering.

**PhD CE:**

***Program Mission***

The mission of PhD Computer Engineering program is to prepare researchers by giving them in-depth knowledge through rigorous course work and empirical research leading to innovative solutions in the field of computer engineering/information and communication technologies.

***Program Objectives***

1. Prepare scholars to make original, creative and valuable research contributions in national/international information and communication technologies society.
2. Enable scholars to carry out research independently as well as in teams.
3. To develop highly skilled human resource in the field of computer engineering for both national and international markets.

**MSCE's:**

***Program Mission***

The mission of Master of Science in Computer Engineering (MSCE) program is to equip students with advanced theoretical and applied knowledge of the computer engineering field through rigorous course work and research so as to enable them to conduct research and develop innovative solutions for academia/industry.

***Program Objectives***

The objectives of Master of Science in Computer Engineering are:

- (i) To enhance the theoretical and technical knowledge and skills of students' so that they can create innovative solutions of complex problems within the domains of computer engineering.
- (ii) To enable students to develop solutions/conduct research independently as well as in teams and effectively communicate their work in the form of written reports and oral presentations.
- (iii) To develop skilled human resource in the field of computer engineering for both national and international markets.

#### **BSCE:**

##### ***Program Mission***

The mission of Bachelor of Computer Engineering program is to prepare hardware/software design, test, and application engineers by giving them technical knowledge and skill sets in addition to inculcating management skills.

##### ***Program Objectives***

- (i) To equip engineers with skill based knowledge enabling them to propose optimized solutions to complex problems in computer engineering and related fields, adapt to changing engineering design for new environments and be successful in their professional practice.
- (ii) To produce engineers with high moral and ethical values, who are able to contribute in society through innovative engineering designs, enterprise and leadership.
- (iii) To nurture engineers with national and global outlook to provide technological leadership through modern design, development, measurement analysis methodologies and tools.
- (iv) To produce engineers with teamwork, communication, interpersonal and management skills, with awareness of societal responsibilities and inculcated life-long learning perspective.

#### **2. Financial Effect**

Nil.

#### **3. Recommendations**

It is requested that the above program missions and objectives for PhD CE, MS CE and BS CE may kindly be approved.

#### **Discussion & Decision**

46. After detailed discussion, the case is approved.

**Action By:** HoD CE (BUIC and BUKC)

**Initiated by: HoD.CE(BUIC)**

**Exam Retake Policy**

**1. Background to the Case**

As per current BU exam re-take policy, re-take of examination is only allowed in special circumstances of severe illness with hospitalization or death of immediate family member.

This policy needs attention. If someone is admitted in hospital due to some illness or surgery issue, he/she may not be able to take exam right after he/she get discharged from hospital. It is observed that in case of hospitalization doctors recommend bed rest for few days so that he/she can recover both mentally and physically before coming back to normal routine. Similarly, in the unlikely event of death of a immediate family member, a student requires time to come out of the shock and fulfill his/her responsibilities of burial. It may also be noted that a student may have travel long distance to attend funeral and may not be able to get back next day for exam. Even in case if one can reach back in time, he/she might not be able to revise subject and get prepared for the exam.

**2. Financial Effect**

Nil.

**3. Recommendations**

It is requested that the provision of re-take may kindly be relieved to departments or at least the cases strongly recommended by a HoD after proper inquiry may kindly be approved.

**Discussion & Decision**

47. The house agreed that the current exam retake policy requires revision because it deals only with two types of scenarios i.e. Hospitalization and death of immediate relative.
48. In case of hospitalization, in majority of the cases, the doctor advise bed rest after discharge and in case the student has a paper next day, it is not feasible for him to prepare for and attend his paper.
49. Dr. Mubarik presented his concern on the misuse of the relaxed policy as a general trend found in the society.
50. The chair presented the idea that all faculty members should prepare a comparatively tough paper, to avoid habitual retake by few students.

51. Dr. Khurram Shehzad suggested that three times more than that of normal fee shall be charged to the student and the amount obtained from that shall be paid to the faculty member for the extra load of making and checking a tough paper.
52. The case is recommended to ACM.

**Action By:** Nil

**Agenda Item # 1218**

**Initiated by: HoD.CE(BUIC)**

**Minimum student strength for MS program of FoES**

**1. Background to the Case**

The minimum number of student strength required to start MS programs is not stated in BU rules.

HoD CE BUIC through multiple sources have come to know that a presentation was to given the BU authorities in past regarding this matter and SEVEN (7) students were considered essential for break even and the case was approved. However, the documented evidence is not found.

Cost analysis for starting a MS program in FoES:

Course Registration Fee per CH = 5240 PKR

No. of CHs = 30

Admission Fee/student = 22900 PKR

Misc. charges/student/semester = 4600 PKR

**Total Revenue for 7 student for whole degree program =**

**$7 \times (22900 + 30 \times 5240 + 4 \times 4600) = 13, 89, 500 \text{ PKR}$**

Assuming per hour instruction remuneration of PKR 2000

Total remuneration for 4 semesters for 8 courses

$= 8 \times 48 \times 2000 = 7, 68, 000 \text{ PKR}$

Theses supervision remuneration =  $15000 \text{ PKR} \times 7 = 105,000 \text{ PKR}$

**Total Expense = 8,73, 000 PKR**

**Profit = 5, 25, 500 PKR**

**2. Financial Effect**

Nil .

### **3. Recommendations**

Approval for launch of PhD (Mathematics) program along with its roadmap is requested.

### **Discussion & Decision**

53. The house didn't approve the agenda item.

**Action By:** Nil

## **Agenda Item # 1219**

**Initiated by:** HoD.EE(BUKC)

### **New Course Registration should be Allowed in Summer**

#### **1. Background to the Case**

Timing clashes between courses are getting increased in regular semester once students wish to register in certain courses to clear their pre-requisite and to register new courses elective or core etc.

As in Engg Sciences a course is offered once in a year, consequently, student must wait a whole year to get register in the desired or offered courses

#### **2. Financial Effect**

Nil

#### **3. Recommendations**

New courses electives or core etc., can be allowed to offer in summer semester, capping of grade B is already there so students cannot deliberately skip regular semester, which is a major consequence.

### **Discussion & Decision**

54. Dr. Humaira commented that since the maximum allowed grade in summer is B and cap of registering two courses is already in place, it is very unlikely that the student will exploit the rule.

55. The house unanimously agreed to allow registration of new courses to be registered in summer.

56. The case is recommended for approval to ACM only for 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> semester, a new course shall be allowed to register.

**Action By:** HoD.EE (BUKC)

**Agenda Item # 1220**

**Initiated by: HoD.EE(BUKC)**

**One Day Relaxation between Papers in Final Examinations**

**1. Background to the Case**

Management of Examination duties/invigilation would be far better and student performance in the exams will be improved if a gap between examinations is introduced.

Appropriate changes in academic calendar can be made once it is decided to do so.

**2. Financial Effect**

Nil

**3. Recommendations**

As BU policies are quite tough as compared to other universities, this one day break in examinations will reduce the dropout ratio significantly.

**Discussion & Decision**

57. Since a committee is already working on the extension of duration to 3 hours in the final exam, so the case must be discussed after the decision of the committee.

58. The agenda item is dropped.

**Action By: Nil**



## Agenda Item # 1221

**Initiated by: HoD.EE(BUKC)**

### **Addition of course “Fundamentals Of Renewable Energy” in BEE Electives**

#### **1. Background to the Case**

There is always a room for improvement in the list of elective courses of BEE (Electronics/Telecom) program. A new course covering the basics of renewable energy systems could be added in the list per new research trends and industrial demand.

This course introduces the engineering and technical aspects of renewable energy conversion systems utilizing solar, wind and others. It emphasizes on basic generation and power conversion technologies of renewable energy generation systems. Topics include different available sources of sustainable energy and power, their applications, their limitations, energy conversion, integration circuits and storage for renewable technologies.

#### **2. Financial Effect**

Nil

#### **3. Recommendations**

It is recommended that a new elective course titled ‘Fundamentals of Renewable energy systems with 3+1 credits can be added in the list of electives.

### **Discussion & Decision**

59. Recommended for ACM considering the importance of the course.

**Action By:** Nil

## Agenda Item # 1222

**Initiated by: HoD.EE(BUKC)**

### **Pool for (3+0) Electives in BEE road map**

#### **1. Background to the Case**

There are five (5) elective courses to be offered in the BEE roadmap of 2014 onwards. All the electives are of 3+1 credit hours. The list of electives includes many courses whose lab work is not possible due to nature of course or unavailability of suitable lab equipment. Because of this reason, following courses cannot be offered despite of available teaching faculty and student's choice.

Telecommunication Management, Tele Traffic Engineering, Satellite Engineering, Solid State Devices and Intro to Biomedical Engineering.

#### **2. Financial Effect**

Nil

#### **3. Recommendations**

Presently, out of five elective courses, one should be of 3+0 credits so that the above stated problem can be solved. Furthermore, some courses can be added in the list of electives which can be offered with 3+0 credits.

### **Discussion & Decision**

60. The agenda item is dropped as a more detailed 'revised road map' is to be presented in the next meeting.

**Action By: HoD.EE (BUKC , BUIC)**

**Agenda Item # 1223**

**Initiated by: HoD.EE(BUKC)**

**Degree Title Should be Synchronized for Islamabad and Karachi with PEC**

**1. Background to the Case**

BUKC BEE students are facing problems in their PEC registration process due to degree title, field of specialization etc., The situation gets worst once there is a change in clerical staff in accreditation division.

Recently, PEC objected over the degree title of BEE program, and declined applications of BUKC students over unnecessary issues.

Interestingly, the degree title and nomenclature of offered streams are similar, but BUIC have not faced such kind of problem from PEC.

This undue concern is also affecting the intake of BEE program at BUKC.

**2. Financial Effect**

Nil

**3. Recommendations**

This issue should be solved at PEC head quarter as PEC Karachi office has shown their limitations and guided us to contact PEC HQ. Furthermore, PEC letters for accreditation and observations can be shared to pursue the case more properly.

**Discussion & Decision**

61. The chair suggested that the case to be forwarded to PEC one by one by each department.
62. The case is to be moved on file.

**Action By: HoD.EE (BUKC)**

**Agenda Item # 1224**

**Initiated by: HoD.EE(BUKC)**

**Relaxation of Attendance for Students with Second Attempt**

**1. Background to the Case**

Students attempting a course second time due to failure or to improve GPA may be relaxed for 50% attendance in Lab or Theory classes.

This step will reduce the timing clashes between courses. Also, it will cover somehow the limitation of new course offering criteria in summer semester.

**2. Financial Effect**

Nil

**3. Recommendations**

Students taking a course second time can be relaxed for attendance as they have already attended the course, provided their sessional marks are unaltered or they don't want to change in sessional marks.

**Discussion & Decision**

63. The case is not approved as such relaxation will result in violation of PEC/HEC rules for attendance.

**Action By:** Nil

**Agenda Item # 1225**

**Initiated by: HoD.EE(BUKC)**

**Unified CLO / PLO for Electrical Engineering Program**

**1. Background to the Case**

EE Department is working on CLO/PLO modification and updating various courses objectives etc.,

It would be suitable if EE Department at BUIC could share their efforts and mutual unified CLO/PLO can be formulated for BEE program.

**2. Financial Effect**

Nil

**3. Recommendations**

Collaboration is required from each department of both campuses to generate unified learning objectives of BEE program.

**Discussion & Decision**

64. The case is approved and the chair instructed that close collaboration be made between HODs across the campuses to ensure transition to OBE based system.

**Action By: HoD.EE(BUKC , BUIC)**

## Agenda Item # 1226

**Initiated by: HoD.EE(BUKC)**

### **Change of Scope in BEE Program at BUKC**

#### **1. Background to the Case**

Power Systems is the most demanding stream undertaking the present scenario of Pakistan. It includes generation, transmission, distribution, customer service, operations and maintenance, markets and service provide.

With above context, EE Dept. is going to submit Change of Scope request to PEC. It is expected that BUKC will be allowed to get an intake of 40 students section for Power Systems Track in addition to Electronics and Telecom streams.

Preemptively, to fulfill the criteria of PEC, we already set up a power systems lab and expecting more trainers in FY 2016-17.

#### **2. Financial Effect**

Nil

#### **3. Recommendations**

Approval is required from FBOS and ACM to advertise and get admissions in Fall 2017 intake.

### **Discussion & Decision**

65. The agenda item is recommended for ACM Approval.

**Action By:** HoD.EE (BUKC)

## Agenda Item # 1227

**Initiated by: HoD.EE(BUKC)**

### **Implementation of CHANCE/DROP/PROBATION Rules from Second Semester**

#### **1. Background to the Case**

Significant number of students from BEE and MS EE program is dropped due to the new policy of chance/probation.

It can be merely a problem associated with BEE program at BUKC but as a matter of fact

BU rules are enough tough as compared to the intake quality.  
Dropping 10 to 20 students per year also reflect negative impression over BUKC intake at BEE program as it is a stereo typing and on monitory benefits as well.

**2. Financial Effect**

Nil

**3. Recommendations**

Revision in BU academic rules is requested.  
Either it can be implemented from second semester OR increase the number of chance/probation as were practiced before.

**Discussion & Decision**

66. The detailed statistics be submitted first and the point will be discussed in the next meeting. if required.

**Action By: HoD.EE(BUKC)**

**Agenda Item # 1228**

**Initiated by: HoD.EE(BUIC)**

**To add elective courses in PhD program**

**1. Background to the Case**

The EE department at BUIC has research group in Control & Communication Systems which has proposed three elective courses.

1. Advanced Cryptanalysis Models for IoTs
2. Security and Privacy for Internet of Things
3. Advanced Secure communication

With the advent of modern technology, the size of wireless communication has increased manifold over the last decade which has caused concerns about the security of the communication link and data being exchanged. Security in communication network is being keenly pursued in different research labs across the globe, DBoS has proposed the course in line with the current is requirements of the researchers.

Internet of Things one of the emerging research field in the Engineering Sciences domain. At BU, PhD faculty members as well as students are working in the said domain. However the domain is not represented well in the PhD course list of Engineering Sciences Programs. Hence the department has proposed three courses so that the students are well prepared to carry out research in this emerging field. The proposed subjects will cover all the major topics related to the Security of IoT networks. The course outlines as per BU standard format

are attached.

**2. Financial Effect**

Nil.

**3. Recommendations**

DBOS recommended to add the PhD elective course in PhD Road Map.

**Discussion & Decision**

67. Dr. Haroon Rashid commented on the contents of the courses and recommend some changes in the outlines.
68. The chair suggested that the outlines of the same courses be reviewed from the SE and CE roadmap.
69. The case is recommended for ACM approval.

**Action By:** HoD.EE(BUIC)

**Agenda Item # 1229**

**Initiated by: HoD.EE(BUIC)**

**To Introduce Independent studies courses in PhD program.**

**1. Background to the Case**

**Objectives of Independent study**

An independent study provides students with the opportunity to work one-on-one with a faculty member on a particular topic or creative project. Many universities in Pakistan offer Independent studies courses e.g. COMSAT offers a 3 credit hrs course (IS-1, IS-2). The objective of this course is to provide the researchers with the opportunity to explore new methods and techniques purely relevant to their research under the supervision of their supervisors. Furthermore, the student will be made capable to demonstrate his analytical, assessment and development capabilities.

**Learning Outcomes**

After completing this course, students will be able to:

- Reproduce and analyze the related work already published.
- Modify the existing model and analyze the impact of variation of different variables.
- Classify different techniques based on his/her analysis
- Model and simulate his own work.
- Justify his engineering and scientific contributions.

**Contents (Catalog Description):**

Research papers and Articles depending upon research topics



**Recommended/Reference Text Books:**

Research Papers and Articles

**General Instructions for students:**

80% Attendance in all the classes is mandatory.

Students will be required to carry out literature survey in their area of interest and write a review. They will also plan and coordinate all the activities involved in organizing a scientific conference and will deliver presentations on assigned topics.

2. **Financial Effect**

Policy is required to be formulated for such cases in order to pay the honorarium.

3. **Recommendations**

The Board recommended to add independent studies courses in curriculum.

The recommended course outline for Independent Studies-1 and Independent Studies -2 is attached

**Discussion & Decision**

70. Dr. Shahzad commented his view point from HEC perspective saying that since we are already evaluating a student in four subjects in his comprehensive examination. The independent studies course will not be a best fit in that case.

71. Dr. Humaira also disagreed with the agenda item.

72. The agenda item was dropped.

**Action By:** Nil

**Agenda Item # 1230**

**Initiated by: HoD.EE(BUIC)**

**Addition of Elective Courses in MS EE Program**

1. **Background to the Case**

Following courses were part of MS EE program before the last course update approved in 27<sup>th</sup> ACM:

- a. EET-546 Radio and Microwave Engineering
- b. EET-768 Cognitive and Software Defined Radio
- c. EEP-780 EMS & SCADA

The students have shown interest in these courses in past and hence these courses have been offered repeatedly successfully. Moreover, the contents of these courses are in line with the recent researches in wireless communication as well as electrical power domains.

It is therefore proposed that these courses should be included in the elective course list as

<p>through these courses students are introduced to the latest research.</p> <p><b>2. <u>Financial Effect</u></b></p> <p>Nil.</p> <p><b>3. <u>Recommendations</u></b></p> <p>The Board strongly recommended the above changes in curriculum.</p>
<p style="text-align: center;"><b>Discussion &amp; Decision</b></p> <p>73. The house unanimously agreed with the addition of these courses after detailed discusses.</p> <p>74. The courses are recommended for ACM approval.</p>
<p><b>Action By: Nil</b></p>

<b>Agenda Item # 1231</b>
<p style="text-align: right;"><b><u>Initiated by: HoD.EE(BUIC)</u></b></p> <p><b><u>Revision in the BEE Road Map.</u></b></p> <p><b>1. <u>Background to the Case</u></b></p> <ul style="list-style-type: none"> <li>• Computer Architecture &amp; Organization (CAO) is currently being offered in the 4<sup>th</sup> semester. It is suggested to move (CAO) from 4<sup>th</sup> to 3<sup>rd</sup> semester and Linear Algebra (LA) from 3<sup>rd</sup> semester to 4<sup>th</sup> semester.</li> <li>• Communication Skills (CS) from 4<sup>th</sup> semester to 7<sup>th</sup> semester and Microprocessor/ Microcontroller Based Systems (MBS) from 6<sup>th</sup> semester to 4<sup>th</sup> semester.</li> <li>• FPGA Based System Design is an elective course which is being offered in 7<sup>th</sup> semester. It is suggested to offer it in 6<sup>th</sup> semester.</li> </ul> <p>With this revision students will be able to perform better during completion of their final year project. Above change will not disturb the logical connection of sequence of other courses.</p> <p><b>2. <u>Financial Effect</u></b></p> <p>Nil.</p> <p><b>3. <u>Recommendations</u></b></p> <ul style="list-style-type: none"> <li>• The Board strongly recommended the above changes in curriculum.</li> <li>• The proposed revised road map is attached.</li> </ul>
<p style="text-align: center;"><b>Discussion &amp; Decision</b></p>

75. The chair inquired about the course code of Communication skills and suggested that since the road map has been recently revised by ACM and a more frequently modification is not recommended.

76. The agenda item is dropped.

**Action By:** Nil

### **Agenda Item # 1232**

**Initiated by: HoD.EE(BUIC)**

#### **Retake Result Submission**

##### **1. Background to the Case**

- The faculty members face problems while submitting the results of Re-take paper.
- The exam cell locks the results and the faculty members are not able to access and submit the result of retake paper by themselves.
- The Board suggested that online results should be accessible and open to teachers who take the re-take exam.

##### **2. Financial Effect**

Nil.

##### **3. Recommendations**

The board strongly recommended that the online results submission should remain open for teachers who take re-take exam until their result submission.

#### **Discussion & Decision**

77. The house discussed the issues arises with the re-take of examination in details.

78. The house suggested to put up the case at campus level.

**Action By:** Nil

## Agenda Item # 1233

**Initiated by: HoD.EE(BUIC)**

**To change the nomenclature of thesis (i.e., within transcript) for MS students.**

### **1. Background to the Case**

- The MS Electrical Engineering program requirement is 30 credit hours. The students have two options to complete their degree, Thesis and Non-Thesis.
- Thesis Option (MS by Research): The requirement is minimum 24 credit hours of course work and 6 credit hours of thesis involving research work.
- It has been observed that the thesis offered in 3<sup>rd</sup> and 4<sup>th</sup> semester has not been clearly defined. It should be Thesis I in 3<sup>rd</sup> and thesis II in 4<sup>th</sup> semester. In thesis-I the students will do literature review and completely understand their model. The requirement for thesis-I to get cleared should be proposal defense. The students will register for thesis II after successfully defending their proposals. Thesis II will be concluded on the successful completion of final defense. Same nomenclature will be appeared in their transcripts.

### **2. Financial Effect**

Nil.

### **3. Recommendations**

The board recommended the above changes in MSEE Road map.

### **Discussion & Decision**

79. Dr. Shahzad Khalid(Director PGP) commented that the same suggestion has already been raised in the recent presentation to the Honorable Rector by PGP coordinators. It is just the issue of nomenclature which will be resolved soon.
80. The house suggested that either Thesis-1 or Thesis-2 OR a course code may differentiate the two parts of the thesis e.g. Thesis (500) and Thesis (600).
81. The agenda item is recommended to ACM.

**Action By: HoD.EE(BUIC)**

## **Agenda Item # 1234**

**Initiated by: HoD.EE(BUIC)**

### **Implementation of CLO's and PIO's.**

#### **1. Background to the Case**

The manual provided by the PEC has 12 PLO's and the faculty members have to analyze how to cover these PLO's in different courses.

PEC has not provided a clear guide line for assigning PLO's to different courses.

The weightage assigned to different PLO's is also not defined.

Different campuses of BU have defined their courses with CLO's and PLO's that are not synchronized.

#### **2. Financial Effect**

Nil.

#### **3. Recommendations**

- There should be a standard procedure for implementation of OBE which is uniform for all campuses.
- The department can take guidance from the universities where OBE has already implemented and the marking / grading scheme is based on CLOs and PLOs.
- A discussion in this regard must be carried out in FBOS.

### **Discussion & Decision**

82. The suggestion was appreciated by the house members and the chair instructed that close collaboration be made between HODs across the campuses to ensure smooth transition to OBE based system.

**Action By:** All HoDs

## Agenda Item # 1235

**Initiated by: HoD.CS(BULC)**

### **Teaching of Java as Programming Language tool in CSC-313; Visual Programming Course**

#### **1. Background to the Case**

As Visual programming allows students to flex their creative muscles without worrying too much about the underlying technicalities. Once the students have learnt the basic of programming using languages like C++, visual programming should be in java language which is the medium to exhibit their understanding of the concepts in more creative and industry tailored ways to step into industry

Open Source Community. The number of excellent open-source tools for Java is staggering. Look at HSqlDb, BeanShell, Eclipse and many more. More importantly, the Java community has proven much more interested in doing it the open-source way.

From students perspective java would help them a lot in their Final Year Projects, as there is a huge percentage of student working on android application having no prior knowledge of Eclipse

#### **2. Financial Effect**

Nil.

#### **3. Recommendations**

It is requested that the Java may kindly be approved as computer language tool for CSC-313; Visual Programming course

### **Discussion & Decision**

83. Dr. Awais Majeed suggested that the curriculum shall be technology oriented not based on a specific programing based. The house agreed with his suggestions.

84. The house agreed that the flexibility of 20 % course contents is with the teacher already as per HEC rule, so it should not be more stringent.

85. The chair asked HoD.CS (BULC) to discuss the matter with peers and present it in the next meeting.

**Action By: HoD.CS(BULC)**

#### **Agenda Item # 1236**

**Initiated by: HoD.CS(BULC)**

#### **Offering Basic Electronics in the First semester of BSIT program**

##### **1. Background to the Case**

Digital logic and design is offered in BSC and the prerequisite of DLD course is basic electronics course, therefore it is an anomaly to offer DLD in BSIT without having its prerequisite. Situation gets more complex when both BSIT and BSCS students study DLD together in one class.

##### **2. Financial Effect**

Nil.

##### **3. Recommendations**

It is requested that the Basic Electronics course may kindly be approved in the first semester of BSIT program.

#### **Discussion & Decision**

86. The proposal is already part of the existing roadmap and the point was dropped.

**Action By:** Nil

#### **Agenda Item # 1237**

**Initiated by: HoD.CS(BULC)**

#### **Incorporation of Python as programming language with CSC-113 computer programming (3+1) in BSCS and BSIT curriculum.**

##### **1. Background to the Case**

Python is a popular, general-purpose, multi-paradigm, open-source, scripting language. It is designed to emphasize code readability – has a clean syntax with high level data types. It is suited for interactive work and quick prototyping, while being powerful enough to write large applications in. Python has a large number of available and well-written modules for everything from abstract syntax trees to ZIP file manipulation.

**2. Financial Effect**

Nil.

**3. Recommendations**

It is requested that the python as programming language may please be incorporated in the last four week of course outline of CSC-113 for BSCS and BSIT program.

**Discussion & Decision**

87. The case is to be discussed with HoD.CS (BUIC) and presented again in the next meeting, if required.

**Action By:** HoD.CS(BULC)

**Agenda Item # 1238**

**Initiated by: HoD.CS(BULC)**

**Addition of Elective course in CS and IT BS Program.**

**1. Background to the Case**

Continuously increasing demand is being witnessed (both in national and international industry) for manpower conversant with 'Data Science'. Keeping in view this development, It is suggested that a course in 'Data Science' should be offered (preferably in 6th semester of Bachelor program), so that students can apply their Data Science knowledge in final year projects.

**2. Financial Effect**

Nil.

**3. Recommendations**

It is requested that the Data Science as new course may kindly be approved as elective courses for the BSCS and BSIT program

**Discussion & Decision**

88. The detailed outlines were missing.

89. The case is to be discussed with HoD.CS(BUIC) and present again in the next meeting, if required.

**Action By:** HoD.CS(BULC)



### **Agenda Item # 1239**

**Initiated by: HoD.CS(BUIC)**

#### **Mission Statement, Program Objectives and Learning Outcomes – PhD(CS) Program**

##### **1. Background to the Case**

As per 27th ACM each department shall have approved (from FBOS) "Mission Statement, Program Objectives & Program's learning Outcomes" of all their degree programs. In this regard, the Mission, Objectives and Learning Outcomes of the PhD(CS) program are presented for discussion.

##### **2. Financial Effect**

Nil

##### **3. Recommendations**

Members of FBOS are requested to analyze the mission statements, objectives and learning outcomes of the PhD(CS) program, suggest improvements and approve the final and agreed version.

#### **Discussion & Decision**

90. After detailed discussion in the house, the agenda item is approved.

**Action By: HoDs. CS (all campuses)**

### **Agenda Item # 1240**

**Initiated by: HoD.CS(BUIC)**

#### **Mission Statement, Program Objectives and Learning Outcomes – MS(CS)**

##### **1. Background to the Case**

The Mission, Objectives and Learning Outcomes of the MS(CS) program are presented for discussion.

##### **2. Financial Effect**

Nil

### **3. Recommendations**

Members of FBOS are requested to analyze the mission statements, objectives and learning outcomes of the MS(CS) program, suggest improvements and approve the final and agreed version.

#### **Discussion & Decision**

91. After detailed discussion in the house, the agenda item is approved.

**Action By: HoD.CS (BUKC and BUIC)**

### **Agenda Item # 1241**

**Initiated by: HoD.CS(BUIC)**

#### **Mission Statement, Program Objectives and Learning Outcomes – MS(TN):**

##### **1. Background to the Case:**

The Mission, Objectives and Learning Outcomes of the MS(TN) program are presented for discussion.

##### **2. Financial Effect:**

Nil

##### **3. Recommendations:**

Members of FBOS are requested to analyze the mission statements, objectives and learning outcomes of the MS(TN) program, suggest improvements and approve the final and agreed version.

#### **Discussion & Decision**

92. After detailed discussion in the house, the agenda item is approved.

**Action By: HoD.CS (BUIC , BUKC)**

## **Agenda Item # 1242**

**Initiated by: HoD.CS(BUIC)**

### **Mission Statement, Program Objectives and Learning Outcomes – MS(IS) Program**

#### **1. Background to the Case**

The Mission, Objectives and Learning Outcomes of the MS(IS) program are presented for discussion.

#### **2. Financial Effect**

Nil

#### **3. Recommendations**

Members of FBOS are requested to analyze the mission statements, objectives and learning outcomes of the MS(IS) program, suggest improvements and approve the final and agreed version.

### **Discussion & Decision**

93. After detailed discussion in the house, the agenda item is approved.

**Action By: HoD.CS (BUIC)**

## **Agenda Item # 1243**

**Initiated by: HoD.CS(BUIC)**

### **Mission Statement, Program Objectives and Learning Outcomes –MS (Mathematics) Program**

#### **1. Background to the Case**

The Mission, Objectives and Learning Outcomes of the MS(Mathematics) program are presented for discussion.

#### **2. Financial Effect**

Nil

#### **3. Recommendations**

Members of FBOS are requested to analyze the mission statements, objectives and learning outcomes of the MS(Mathematics) program, suggest improvements and approve the final and agreed version.
<b>Discussion &amp; Decision</b>
94. After detailed discussion in the house, the agenda item is approved.
<b>Action By: HoD.CS(BUIC and BUKC)</b>

<b>Agenda Item # 1244</b>
<b><u>Initiated by: HoD.CS(BUIC)</u></b>
<b><u>Subject: Revised Roadmap – MS (Mathematics) Program</u></b>
<p><b>1. <u>Background to the Case</u></b></p> <p>Prof. Ramzan has prepared the revised road map of MS (Mathematics) Program in the light of the comments received after evaluation by the HEC. The revised roadmap is attached at Anx-F.</p> <p><b>2. <u>Financial Effect</u></b></p> <p>Detailed in working paper.</p> <p><b>3. <u>Establishments/HR Effect if any</u></b></p> <p>Detailed in working paper.</p> <p><b>4. <u>Recommendations</u></b></p> <p>The revised roadmap of MS (Mathematics) program is recommended for approval</p>
<b>Discussion &amp; Decision</b>
<p>95. The house suggested a number of changes in the road map.</p> <p>96. Dr. Ramzan will submit the new road map after incorporating the changes. The case is recommended for ACM approval.</p>
<b>Action By: HoD.CS(BUIC)</b>

## Agenda Item # 1245

**Initiated by: HoD.CS(BUIC)**

### **Launch of PhD (Mathematics) Program**

#### **1. Background to the Case**

Proposal for the launch of PhD (Mathematics) program along with its roadmap is prepared by Dr. Ramzan. The roadmap is attached at Anx-G.

#### **2. Financial Effect**

To be worked out.

#### **3. Establishments/HR Effect if any**

To be worked out.

#### **4. Recommendations**

Approval for launch of PhD (Mathematics) program along with its roadmap is requested.

### **Discussion & Decision**

97. Dr. Shahzad Khalid strongly recommended the agenda and mentioned that there is no financial risk in launching the new program. Moreover, it will increase the number of publications and consequently the ranking of the university.
98. The chair commented that it's better to launch it in Fall 2018.
99. The Case is forwarded to ACM for approval and for further submission to HEC.

**Action By: HoD. CS(BUIC)**

## Agenda Item # 1246

**Initiated by: HoD(CS) BUKC**

### **Addition of Courses in BS(CS) and BS(IT) Elective List**

#### **1. Background to the Case**

Due to emerging field of Computer science there is always need of new courses. Based on the market survey and technology demand following courses are recommended in DBOS for the addition in Elective List of BS(CS) and BS(IT) program:

- 1) Big Data Analytics
- 2) Introduction to Data Science
- 3) Enterprise Resource Planning
- 4) Ubiquitous Computing

5) IP Telephony

The detailed descriptions of above mentioned courses are attached in Annex A.

**2. Financial Effect**

Nil.

**3. Recommendations**

It is recommended to consider the above courses as an Electives in BS(CS) and BS(IT) program from Fall 2017 semester.

**Discussion & Decision**

100. The sponsor of the case was asked to present the detailed course outlines in the next FBoS

**Action By:** HoD.CS(BUKC)

**Agenda Item # 1247**

**Initiated by: HoD.CS(BUKC)**

**Addition of Advance Big Data Analytics in the Elective List of MS(CS) program**

**1. Background to the Case**

Due to emerging field of Computer science there is always need of new courses. Based on the market survey and technology demand it recommended in DBOS for the addition of Advanced Big Data Analytics in Elective List of MS (CS) program.

**2. Financial Effect**

Nil.

**3. Recommendations**

It is recommended to consider the above course as an Elective in MS(CS) program from Fall 2017 semester.

**Discussion & Decision**

101. The sponsor of the case was asked to present the detailed course outlines in the next FBoS

**Action By:** HoD.CS(BUKC)

### **Closing the Meeting**

There being no further points, the Chair brought the meeting to close at about 17:15 hrs, thanking the participants for their wholehearted participation.



**Prof. Dr. M. Najam-ul-Islam**  
Dean (ES), Head FBoS

16<sup>th</sup> February 2016

### **Distribution:**

BUHQ:	Rector, Pro-Rector, Registrar, DAA, DE, DQA, D(ORIC)
BUIC:	DG BUIC, DIC, HOD(EE), HOD(SE), HOD(CE), HOD(CS), HOD(EES)
BUKC:	DG BUKC, DKC, HOD(EE), HOD(CSE), HOD(CS), HOD(EES)
BULC:	DLC, HOD(CS)