

**Minutes of the Meeting**  
**10<sup>th</sup> Faculty Board of Studies of Engineering Sciences**  
**at 0930 hours on Thursday 10<sup>th</sup> March, 2016 (through Video Link)**

**Attendance**

**Present**

**BUIC:**

1.	Prof. Dr. M. Najam-ul-Islam	Dean (ES)	Chairman
2.	Prof. Dr. Muhammad Zafar	HOD(E&ES)	Member
3.	Prof. Dr. Shehzad Khalid	HOD(CE)	Member
4.	Assoc. Prof. Dr. Tamim Ahmed Khan	HOD(SE)	Member
5.	Assoc. Prof. Mr. Fazal Wahab	HOD(CS)	Member

**BUKC:**

6.	Prof. Dr. Mubarak Ali	HOD(E&ES)	Member
7.	Assoc. Prof. Dr. Haroon Rasheed	HOD(EE)	Member
8.	Asstt. Prof. Dr. Humera Farooq	HOD(CS)	Member
9.	Asstt. Prof. Engr. Majid Kaleem	HOD(C&SE)	Member

**BULC:**

10.	Asstt. Prof. Farhan Saeed Sheerazi	HOD(CS)	Member
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**In attendance**

**BUIC**

1.	Prof. Dr. Tahseenullah Khan	FM(EES)
2.	Asstt. Prof. Dr. M. Muzammail	FM(CS)
3.	Asstt. Prof. Dr. Khurram Shehzad	FM(CE)
4.	Asstt. Prof. Dr. Awais Majeed	FM(SE)

## Proceedings

### Commencement of the Meeting

1. The Chairman declared the meeting open at 0930 hours and welcomed the members. The chair urged the members to participate actively.
2. The minutes of the 9<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 prepared before the admission process and the case be moved on file by HOD(EE)BUKC.

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

## New Items

### Agenda Item # 1001

**Initiated by: HOD C&SE, BUKC**

#### **APPROVAL OF BCE CURRICULUM**

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

BCE program at Karachi campus was re-started in Fall 2013. BUIC has been offering the same program uninterruptedly for several years. Being part of the same university, the same roadmap (as mentioned in our prospectus) of BCE program was adopted for Karachi campus.

The interim PEC visit report of BCE program requires us to get “*Approval of curriculum from the statutory body of the university*” (implicitly for Karachi campus). Though they were shown ACM minutes highlighting approval of the changes we made from time to time and told that all changes are applicable at the university level offering the same program.

The DBoS unanimously recommends its approval from FBOS/ACM.

#### **Decision**

FBoS unanimously approved the agenda item and the case forwarded to ACM. The existing BCE roadmap at ISB campus may please be approved for BUKC.  
(The roadmaps is attached in file titled CSE\_KC\_annexure.docx)

**Action By: HOD(CSE)BUKC**

**STARTING PhD PROGRAM FOR SOFTWARE ENGINEERING**

**1. Background to the Case**

The current strength of PhDs in C&SE department is 3 in number and two of them are HEC approved supervisors. One more PhD will be inducted before Fall 2016. With this strength of PhDs in the department, launching PhD in Software Engineering would be an opportunity to strengthen our research culture and would attract MS (SE) students/FMs to enhance their academic qualifications in the said field.

**2. Financial Effect**

*(Financial aspects/break-even analysis is under progress)*

**3. Recommendations**

The DBoS unanimously recommends the initiation of PhD in SE (after getting HEC approval).

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

Nil

**Discussion & Decision**

The house desired that the department should prepare the case in all aspects before presenting it to FBoS / ACM. Relevant PhD faculty may be hired before applying to HEC. The case may be presented in the next FBoS.

**Action By: HOD(CSE)BUKC**

### **Agenda Item # 3**

**Initiated by: HOD C&SE, BUKC**

#### **ADDITION OF “ONTOLOGY ENGINEERING” & “UBIQUITOUS COMPUTING” IN THE LIST OF MS SOFTWARE ENGINEERING ELECTIVES**

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

Keeping the modern trend and applications in perspective and allowing students to broaden their knowledge, these two courses need to be included in MS (SE) roadmap. These courses are already available in MS (CS) roadmap (along with course code and outline).

CSC-779 Ontology Engineering  
CSC-504 Ubiquitous Computing

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

Nil

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

The DBoS unanimously recommends the inclusion of the said courses in the list of MS (SE) electives.

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

Nil

#### **Discussion & Decision**

The case is merged with agenda item titled as ‘Revision of MS-SE Roadmap’, and point dropped.

## **Agenda Item # 1004**

**Initiated by: HoD(CE), Islamabad Campus**

**Subject: Late appearance of student in Exams**

### **Background to the Case**

- There are some cases in which some good students are not able to reach the exam hall within 5 minutes due to some genuine reasons like unforeseen blockage of roads etc.
- Cases have come forward in which some students having very good track record were not allowed as they were 6 to 7 minutes late to appear in the exam cell.
- There are courses that are pre requisite to the other courses that are to be offered in for coming semester and thus students are not allowed to register in those courses resulting in delay of their degree.
- In another extreme instance, student was in his final year and was taking a course that is offered only once a year. The delay of 10 minutes has caused a penalty of an year in the award of his degree. He cannot even get the course offered by paying extra fees for other students.
- The case was deliberated in DBoS and FBoS and with majority vote, it is recommended for ACM consideration.

### **Recommendations:**

- Deadline time to appear in the exam paper may please be increased from 5 minutes to 15 minutes with no extra time at the end.
- No student should be allowed to leave the examination hall before half of total allocated exam time.

### **Establishment / HR / Financial Effect**

Nil

### **Discussion & Decision**

The agenda item triggered a debate amongst the members with most of HoDs agreeing to the proposal. The members highlighted the pros and cons of the late arrival policy and its implementation at BU citing the traffic and security situation at all the campuses. The house agreed to forward the case to ACM to reconsider the '5' minutes deadline and relax it to '15' minutes with no extra time for any late comer.

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

## **Agenda Item # 1005**

**Initiated by: HOD – SE - ISB**

### **Proposal for adopting roadmap 2013 of HEC and realignment of MS SE Roadmap**

#### **Background:**

HEC has drafted and uploaded revised roadmap for MS Software Engineering programs in Pakistan. It is a requirement from HEC that we regularly revise roadmaps. For this purpose, a departmental committee headed by Dr. Awais Majeed was formed and the following members were included:

1. Dr. Awais Majeed (chairman Roadmap review committee)
2. Dr. Kashif Zia
3. Dr. Shahid Nazir
4. Mr. Bilal Ashraf Awan

Mr. Aleem was given additional duties to assist the chairman in clerical matters. The chairman of the committee presented the findings and discussion minutes are recorded. All participants' reservations are addressed and a revised and finalized roadmap is attached with this document.

#### **Recommendation:**

The roadmap and courses revision stands approved at the level of DBOS. This roadmap, if approved by ACM, shall be effective from Fall 2016 entry onwards.

#### **Establishments/HR / Financial Effect**

Nil

### **DISCUSSION**

The house agreed to the proposal, and the course revisions proposed by HOD(CSE)BUKC were also merged.

**Board's Decision:** The revised roadmap approved and forwarded to ACM.

**Responsibility:** HOD(SE)BUKC

## Agenda Item # 1006

**Initiated by: HOD SE - ISB**

### **Proposal for revision and realignment of MS EM Roadmap**

#### **Background:**

Department of Software engineering requested HEC for approval to launch MS EM program at BUIC and it was subsequently approved. The first batch of MS EM students was taken in Spring 2016. In order to review and improve MS EM curriculum, a departmental committee headed by Dr. Awais Majeed was formed and the following members were included:

1. Dr. Awais Majeed (chairman Roadmap review committee)
2. Dr. Kashif Zia
3. Dr. Shahid Nazir
4. Mr. Bilal Ashraf Awan

A meeting was convened where Dean (ES) was requested along with all HODs and a faculty members were requested through a memo from SE, CE, EE and Management sciences to help improve the roadmap. Their comments and suggestions are incorporated in the finalized roadmap.

Mr. Aleem was given additional duties to assist the chairman in clerical matters. The chairman of the committee presented the findings and discussion minutes are recorded. All participants' reservations are addressed and a revised and finalized roadmap is attached with this document.

#### **Recommendation:**

The roadmap and courses revision stands approved at the level of DBOS in consultation with Dean (MS). This roadmap, if approved by FBOS and subsequently by ACM, shall be effective from Spring 2016 entry onwards.

#### **Establishments/HR / Financial Effect**

Nil

#### **DISCUSSION**

The house agreed with the proposal.

**Board's Decision:** Recommended for approval at ACM.

Responsibility: HOD(SE)BUIC



**Agenda Item # 1007**

**Initiated by: HOD-SE-BUIC**

**Program Educational Objectives and Program Learning Outcomes for Bachelors Programs**

**Background:**

Objectives are brief clear statements that describe learning outcomes of an educational program whereas the learning outcomes are the statements that describe signification and essential learning that the students should achieve and reliably demonstrate at the end of the course or the program.

Pakistan Engineering Council is adopting OBE system from year 2018 onwards. For that matter, a committee was formed by the Dean (FoES) as follows:

1. Dr. Tamim Ahmed Khan,
2. Dr. Amina Jamil
3. Mr. Imran Farid

The committee as formulated PEOs and PLOs and submitted for approval to respective DBOS. PEOs and PLOs for all engineering departments were submitted for discussion and approval.

**Recommendations and discussion:**

The PEOs and PLOs are to be shared with departments at BUKC. The detailed (and revised, if required) be presented in the next FBoS.

**Responsibility:** HOD(SE)BUIC

## Agenda Item # 1008

**Initiated by: HOD SE BUIC**

### Inclusion of Courses in PhD Roadmap

MS SE roadmap is revised such that the following courses are added in the MS roadmap that can be taught at the PhD level.

1	SEN-758	Component-based Software Engineering	3
2	SEN-760	Complex Adaptive Systems	3
3	SEN-761	Semantic Web	3
4	SEN-762	Advanced Data Analytics and Business Intelligence	3
5	SEN-759	Software Re-Engineering	3

They may be included in PhD roadmap as well.

**Board's Decision:** Approved and forwarded to ACM

**Responsibility:** HOD(SE)BUIC

## Agenda Item # 1009

**Initiated by : HoD(CS), Karachi Campus**

**Subject:**

Adding Lab Hours as a Teaching load of Lecturer or Lab Engineer

1. **Background to the Case**

**In Existing Model:**

1. The Lecturer is responsible to prepare complete Lab material (tasks, assignments, quizzes, exams, projects), have to go Lab in first hour , mark attendance, assign and monitor projects (practically engage for 3 hours in the lab)
2. Lecturer is responsible to evaluate all marks and submit to the exam department
3. In this model, the Lab Engineer remains in the Lab for 3 hours (1 CH + 2 Contact Hours), monitor the students for the completion of their task

**Drawback of Existing Model**

1. The Lecturer taking Labs with the course is actually teaching 2 courses (the labs are of 50 marks that include quizzes, assignment, exam and projects)
2. Lab Engineers are not getting any teaching experience with regards to their presence in the lab and most of them apply for Faculty position after completion of their masters
3. It is also getting Time Table constraints

**Proposed Model I**

1. The Labs should be conducted by the Lab Engineers independently. Lab Engineer should responsible to explain the task , check the Lab Manuals and conduct the Lab quizzes and assign the projects
2. The Lecturer will engage in designing tasks with their solutions, approve Lab quizzes and projects and monitor all activities of Lab including attendance. The final marks should convey to the Exam department by the Lecturer.
3. The QA evaluation will be done for Lab Engineer not for the Lecturer

### **Proposed Model II**

1. Add the work load of Lab into the normal load of a FMs. For example if faculty is taking one lab based course then it should be equal to half Credit Hours of the total.
2. The fresh graduate FMs should assigned workload with the combination of Labs and courses. For example: 3 Labs (3 hours each) and one complete course

2. **HR Effect(s):**

Yes

3. **Financial Effect:**

Yes

4. **Recommendation(s):**

It is recommended to consider the above proposed models

### **DISCUSSION**

The house discussed the issue at length while emphasizing the need of faculty members' presence in the labs. HOD-CS-IC informed his counterparts that the proposal of Faculty members conducting the labs along with the Lab Engineers has already been approved by the competent authority at BU.

**Council Decision:** HOD-CS-IC to share the details with HOD-CS-KC. Point dropped.

**Action By:** HOD-CS-BUIC, HOD-CS-BUKC

## Agenda Item # 1010

**Initiated by : HoD(CS), Karachi Campus**

**Subject:**

Addition of Elective: “Special Topics in CS” for BS(CS) program and “Special Topics in IT” for BS(IT) program

1. **Background to the Case**

Due to rapid changes in the software tools and technologies used in Computing and Technology field, the students always demand for recent tools / courses to be added as electives.

It is very difficult to change the elective list in every 6 months. The special topics in CS/IT will be a course that will work dynamically and consist of recent trends in CS/IT

2. **HR Effect(s):**

Nil

3. **Financial Effect:**

Nil

4. **Recommendation(s):**

It is recommended to consider the above proposal

### DISCUSSION

As the revision of the roadmap is also under consideration of the FBoS, the house agreed to consider the courses along with the roadmap revision case.

**Council Decision:**

HoDs of CS departments at Lhr, Khi, and ISB campus to add the courses in the revised roadmaps, if required. Point dropped.

**Action By:** HOD-CS-BUKC

## Agenda Item # 1011

**Initiated by : HoD(CS), Karachi Campus**

**Subject:**

Inclusion of Machine Learning course as a core course in MS(CS) instead of advance Operating System

1. **Background to the Case**

The Machine Learning Course is considered as a very important course in different research areas of Computer Science. In current road map of MS(CS) it is an elective course. On the other hand Advance Operating System is a core course having very few research directions (almost none). Due to this reason, the students register in different advance courses face difficulty while doing different research activities due to lack of Machine Learning concepts.

2. **HR Effect(s):**

Nil

3. **Financial Effect:**

Nil

4. **Recommendation(s):**

It is recommended to add Machine Learning as a core course rather than Advance Operating System in MS(CS)

### DISCUSSION

Clubbed with MS-CS roadmap revision, and point dropped.

**Council Decision:**

Clubbed with MS-CS roadmap revision proposed by IC. Point dropped.

## Agenda Item # 1012

**Initiated by : HoD(CS), Karachi Campus**

**Subject:**

Deficiency Courses / Crash Courses should be introduced in different Programs

1. **Background to the Case**

In present school and college education a prominent difference has been noticed in the quality of education. The Bahria University inducts students from different school/colleges without considering the different ways of teaching. This difference grows up with the students especially for those who come from lower quality education of school/college. This difference brings students to drop/withdraw conditions from different programs.

With the passage of time this difference is becoming wider hence the university requires an immediate solution to narrow this gap among students. One solution is to propose deficiency / crash course for minimum 1 week to maximum 1 month for all students.

These courses might be designed according to the requirement of different programs

2. **HR Effect(s):**

Nil

3. **Financial Effect:**

Nil

4. **Recommendation(s):**

It is recommended to consider above proposal

### DISCUSSION

The house didn't agree with the proposal. Some other options were suggested such as: arrange tutorials for the first semester students, counselling sessions etc. The house also thought that the publicity of such move may prove counterproductive as far as the admissions are concerned.

**Council Decision:**

Not approved in the current form. The department may come up with a detailed proposal along with financial effects, if deemed necessary.

### Agenda Item # 1013

**Initiated by : HoD(CS), Karachi Campus**

**Subject:**

Revision of Descriptions of different courses in Prospectus

1. **Background to the Case**

Due to updated version of books and rapid change in the technologies, there is a need to revise the course descriptions of different courses in BS(CS). These changes should become part of upcoming prospectus.

2. **HR Effect(s):**

Nil

3. **Financial Effect:**

Nil

4. **Recommendation(s):**

It is recommended to make a committee from all campuses to design new descriptions of the courses.

### **DISCUSSION**

The chair informed the house that the description of the courses is approved in the ACM, and no one is authorized to change it all together. The faculty members with the approval of the Cluster Head / HoD may update the contents up to 20% as is the academic norm across the globe. The computer science departments may revise any course outline during the ongoing exercise of curriculum revision. In case of any conflict / deficiency, Dean may be consulted.

**Council Decision:**

The agenda item merged with curriculum revision of BS-CS. Point dropped.



## Agenda Item # 1014

**Initiated by : HoD(CS), Karachi Campus**

**Subject:**

Inclusion of a separate medals for MS by research

1. **Background to the Case**

The good students always look for awards and medals. The same students are good in research. However, Bahria University considers the whole batch for medals. The research students most of the time missed this opportunity due to many constraints like submission delay, examiner report delay, Viva delay etc.

Comparatively, the research student put double effort to get a MS Degree. These students and their research also play a role in overall ranking of the university. Additionally, this factor also not in favor of taking research in MS program.

2. **HR Effect(s):**

Nil

3. **Financial Effect:**

YES

4. **Recommendation(s):**

It is recommended to include separate medals for MS by research.

### DISCUSSION

The chair informed the house that the proposal has already been approved by ACM.

**Council Decision:** Point Dropped.

## **Agenda Item # 1015**

**Initiated by:** HOD CS, Islamabad Campus

### **SUBJECT: LAUNCH OF NEW MCS (MASTER OF COMPUTER SCIENCE) PROGRAM**

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

- The program is 2 ½ year master of computer science degree program especially designed for candidates having bachelor degree (14 years) offered by Government Colleges in all provinces either in cities as well as in capital territory. The main objective of this program is to equip these students with the requisites computing skills and knowledge to develop and design software products in the software/IT industries within the country as well as abroad. Graduates with this degree will also strengthen our MS (CS) and MS (T&N) programs intake. Graduates of this program will also be able to meet the challenging requirements of IT industry in Pakistan special after completion of China-Pakistan Economic Corridor.
- This program is successfully running in the following public sectors Universities:
  - a. Quaid-e-Azam University, Islamabad
  - b. International Islamic University, Islamabad
  - c. Fatima Jinnah Women University, Rawalpindi
  - d. Arid Agriculture University, Rawalpindi
  - e. NUML University, Islamabad
  - f. University of Peshawar, Peshawar
  - g. University of Punjab, Lahore
- The detailed road-map, cost-benefit analysis, budget and feasibility of the program is attached as 'MCS.docx'

#### **2. Discussion and Decision in FBoS**

The case was presented by HOD (CS), Islamabad Campus and was strongly supported by HODs (CS) Karachi and Lahore Campuses.

All other members of the FBoS had strong observations including:

- The program doesn't match with the long term vision and plan of the university, and faculty of Engineering Sciences
- The universities are moving to 4 years BS and 2 years MS programs and none of the reputed universities has launched the said program during the last 10 years.
- The agenda has twice been declined at FBoS and ACM in the last couple of years and nothing has changed since then to launch the program.

#### **3. Recommendations**

Although the majority of the FBoS members didn't agree with the proposal, the agenda is tabled in ACM for deliberation as all CS HoDs supported launching of MCS.

**4. Establishments/HR Effect if any**

Cluster Head and Student Advisor will be appointed for this program.

**5. Financial Effect**

Attached as 'MCS.docx'

**Responsibility:** HOD-CS-BUIC

## Agenda Item # 1016

Initiated by: HOD CS, Islamabad Campus

### **SUBJECT: Curriculum Revision of MS (CS) Program**

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

Revision of the Curriculum is continuous process as per HEC guidelines. MS (CS) program was launched in Fall 2013 and now the first batch is at graduation stage. Curriculum revision will bring improvement in the program as well as making strong alignment of Road-Map and Curriculum of MS programs with HEC guidelines promulgated from time to time.

#### **2. Recommendations to ACM**

The case was presented by HOD (CS), Islamabad Campus in the FBOS meeting and the following revisions are recommended for approval:

##### **a. Revision in Core Courses:**

Only two core courses are recommended as core courses along with one University Requirements course Research Methodology.

##### **b. Adding New Elective Course “Cloud Computing”**

CSC-718 Cloud Computing (3 credit hours)

(Revised road-map of MS (CS) is attached at ‘MS\_CS\_roadmap.docx’).

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

**Nil**

#### **4. Financial Effect**

Nil

**Responsibility:** HOD-CS-BUIC

## Agenda Item # 1017

Initiated by: HOD CS, Islamabad Campus

### **SUBJECT: Curriculum Revision of BS (CS) Program**

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

Revision of the Curriculum is continuous process as per HEC guidelines. Curriculum revision will bring improvement in the program as well as making strong alignment of Road-Map and Curriculum of BS (CS) program with HEC guidelines promulgated from time to time. It will also help us in getting *highest category of accreditations*.

#### **2. Recommendations to ACM**

The case was presented by HOD (CS), Islamabad Campus in the FBOS meeting and the following revisions are recommended for approval

##### **a. Courses Deleted:**

The following courses are recommended to be removed as per HEC guidelines from the BS (CS) road-map:

GSC-105 Mathematics  
CSC-110 Computing Fundamentals  
CSL-110 Computing Fundamentals Lab  
GSC-113 Applied Physics  
GSL-113 Applied Physics Lab  
SEN-213 System Analysis and Design

##### **b. Adding New Core Courses**

CSC-111 Introduction to Information & Communication Technology (2 cr. Hrs)  
CSL-111 Introduction to Information & Communication Technology Lab (1 cr. Hrs)  
CSC -307 Professional Practices (2 credit hours)  
CEN-321 Microprocessors and Interfacing (2 credit hours)  
CEL-321 Microprocessors and Interfacing Lab ( 1 credit hour)

##### **c. Adding New Course to Electives List**

CSC-341 Introduction to Cloud Computing (3 credit hours).

d. **Moving Course from Core to Electives List**

CSC-444 Computer Graphics (2 credit hours)

CSL-444 Computer Graphics Lab (1 credit hours)

(Revised road-map of BS (CS) along with course details of added courses is attached as 'BSCS.docx')

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

Nil

4. **Financial Effect**

Nil

**Responsibility:** HOD-CS-BUIC

## **Agenda Item # 1018**

**Initiated by:** HOD CS, Islamabad Campus

### **Subject: Integrating Community Service into Curriculum**

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

Bahria University has initiated a “Community Support Program” to instil a spirit of service and active citizenship in its students. The Community Support Program deals with the involvement of students in different activities that help in facilitating the deprived ones, generating a sense of responsibility towards their community. The community support program is mandatory for all undergraduate students admitted in Bahria University w.e.f. Spring 2013 in-take. The students have to complete 40 hours of community work during their 4 years of undergraduate studies.

Currently, the Student Resource Centre (SRC) deals with the CSP, however, to engage the large number of undergraduate students of Bahria University in meaningful community service initiatives, is extremely difficult to be managed by SRC. Hence, it is proposed that CSP be made a part of the curriculum similar to NUST and Fatima Jinnah Women University, Rawalpindi.

#### **2. Recommendations:**

After detailed discussions the following are recommended for approval of the Academic Council:

- a. CSP may be integrated into all undergraduate program curriculum as non-credit course preferably in the 3<sup>rd</sup> or 4<sup>th</sup> Semester.
- b. SRC may be strengthen to run this CSP activity effectively and efficiently.
- c. CSP may be integrated into the schedule of SRC activities in every semester and should be available to departments before the start of semester to integrate in the time table.
- d. CSP may be registered by the students in Campus Management System as non-credit hours course
- e. CSP may be reflected on transcript similar to Internship.

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

#### **4. Financial Effect**

Cost of Strengthening of SRC at every campus.

**Responsibility:** HOD-CS-BUIC

## **Agenda Item # 1019**

**Initiated by:** HOD CS, Islamabad Campus

### **Subject: LAUNCH OF NEW MS (INFORMATION SECURITY) PROGRAM**

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

MS (Information Security) is a new 2 year master's degree program that intends to equip students with the strong foundation of theoretical and practical concepts eminent for understanding threats, attacks and countermeasures along with policies and standards related to information security. The program will provide the ability to identify, develop, and implement secure information systems that are in line with organizational requirements.

Bahria University has recently collaborated with Yasar University Izmir Turkey for further strengthening its academic and research profile. In this regard, it is worth mentioning that MS Cyber Security is a well-established program in Yasar University. The launch of MS (Information Security) program at Bahria University will provide its students and faculty to utilize the expertise of Yasar University in the domain of information security.

#### **2. Recommendations to ACM:**

The following are recommended for approval of the Academic Council by the FBoS:

- a. MS (Information Security) program may be approved in principle to go ahead with following tasks:
  - i. To finalize MS (IS) road-map in consultation with Yasar University
  - ii. To establish lab for the program
  - iii. To apply for NOC from HEC

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

Two Ph.D. Faculty Members will be required.

#### **4. Financial Effect**

Feasibility of MS (Information Security) is attached as 'MS\_IS.docx'

**Responsibility:** HOD-CS-BUIC



**SUBJECT: REVISION OF SCHOLARSHIP CRITERIA TO GPA 2.5 FROM GPA 2.75 FOR BAHRIA UNIVERSITY FINANCIAL ASSISTANCE**

**1. Background**

The scholarship criterion for Bahria University Financial Assistance was at maintaining CGPA 2.5. However, it was taken to GPA 2.75 in Fall 2015. Due to this change, many student who were availing Bahria University Financial Assistance with GPA 2.5 were not able to continue the same in the subsequent semesters.

**2. Rationale**

- a) It has been observed that there are deserving students at Bahria University who are not only trying hard to cope up with standard of studies at BULC but also working in part time shift jobs to meet their academic and day to day expenses.
- b) It is pertinent to note that for meeting GPA 2.75, a student has to achieve at minimum 04 B's and 01 C+ grade in a semester comprising 05 courses. This corresponds to an average of 68% marks in all subjects. For needy students who are also engaged in part time jobs / tutions, availing this percentage is an uphill task. It is also to be noted that CGPA required for award of degree at undergraduate level is 2.0, which corresponds to 60% marks. It has also been observed that a minimum criterion for filing a case for PEEF Scholarship is also 60% marks in FSc.

**3. Recommendations by DBoS**

Based upon the recommendations of the DBOS, the following is recommended

- a) The GPA criterion may please be revised to 2.5 instead of 2.75.

**4. Establishments/HR Effect if any**

Nil

**5. Financial Effect**

There will be an increase of 5% in BUFA scholarship cases at campus level.

**6. Discussion & Decision at FBoS:**

The house didn't agree with the proposal and was of the opinion that the minimum CGPA of 2.75 would help the students to work hard. The house also suggested the

departments supporting the proposal to wait for couple of semesters and observe the allocation / utilization of funds / scholarships before house can decide whether to forward the case to ACM or not. The chair also suggested that separate case for Lahore campus can be moved on file, if required, after finding out the needy cases.

Point Dropped.

**SUBJECT: SUBMISSION OF INTERNAL MARKS DURING 15<sup>TH</sup> WEEK INSTEAD OF 14<sup>TH</sup> WEEK**

**1. Background**

Sessional marks before Fall 2015 were used to be submitted in the last academic week. In Fall 2015, it was changed to 14th Week. Due to this, many teachers were unable to include the marks of the final phase of the course project, which generally contains the topics from the last contents of the course outline.

**2. Rationale**

A semester is constituted of 16 weeks. The course outline is planned at 15 weeks of teaching activities and 01 week for presentations and viva related final projects. In case of marks submission in the 14th week, it was observed that sessional marks were not containing the assessment of the final phase of the course projects. Secondly, 14th Week is aimed at completion of the course outline along with arrangement for makeup sessions. Hence, submission of sessional marks in 14th week compromise the quality of project assessment and completion of course outline.

**3. Recommendations by DBoS**

Based upon the recommendations of the DBOS, the following is recommended

- a) Deadline for submission of sessional marks may be reduced by one week i.e 15<sup>th</sup> Week for the preservation of quality in assessment and completion of course outline.

**4. Establishments/HR Effect if any**

Nil

**5. Financial Effect**

Nil

**6. Discussion:**

The deadline to submit the internal / sessional marks is one week before the start of the final exam i.e. start of 16<sup>th</sup> week, the house was informed. CS-BULC was suggested to review the agenda item and take help of Dean – ES, if there was any issue with the implementation of the policy at BULC.

**7. Decision:**

Point Dropped.

**SUBJECT: LAUNCH OF MS-INFORMATION TECHNOLOGY AT LAHORE CAMPUS**

**1. Background**

Department of CS & IT was established at BULC in Fall 2014. Initially it launched two programs namely BSCS and BSIT. Both the programs received an overwhelming interest from Lahore and a total of 350 students were enrolled in the stated programs by Spring 2016. At present CS & IT programs at BULC have attained the maturity level of 4<sup>th</sup> Semester. The Case for MSCS was approved in 25<sup>th</sup> ACM and is awaiting approval from HEC. Keeping into consideration of the time taken by HEC in approving a program, the case for MSIT is being presented for ACM approval so as to make possible its launch in Fall 2016

**2. Rationale**

Keeping into consideration the confidence of students in the CS & IT programs of Bahria University at BULC, it was envisaged in the DBOS that diversity in CS programs will help raise the flag of Bahria University in Lahore. To serve this aim of diversity, it was discussed that MS Computer Science, to be launched from the platform of Bahria University Lahore Campus. In recent years, the immense growth of numerous industries resulted in the instant need for young and vigorous IT professionals, who could utilize their skills internationally to support IT industry exports. The need for developing essential technologies remains, a new challenge for this century is knitting technology into the structure of society in supportive ways. Future scientific leaders and managers must not only understand how to program and mine for data, but also know when and how to apply a fastidious result to a fastidious problem.

Currently, in Lahore the program is being offered by the following institutions

- Information Technology University
- University of Engineering and Technology
- Comsats
- University of Lahore
- Lahore Garrison University
- Superior University

- Virtual University

Being the program for post graduate studies, this program is specifically aimed towards the CS & IT professionals who are working in the industry. It was also observed that it has received an encouraging response from professionals and researches who aims to continue their studies to the higher level.

### **3. Recommendations by DBoS**

Based upon the recommendations of the DBOS, the following is recommended

- a) Two years degree program namely MS-Information Technology to be launched from BULC in Fall 2016 as an Evening Program. Feasibility study of the program including Eligibility Criteria and Road Map is annexed at Annex 'A'.
- b) To ensure quality, student's strength may be capped at 30 students thus making a provision of one section of the program in each admission intake. Furthermore, MS-Computer Science may be offered only in Fall Session in order to ensure quality.

### **4. HR Effects**

- a. 02 further Faculty Members having Ph.D will be required

### **5. Discussion**

The house suggested that the CS-BUKC should first wait for the approval of MS-CS program from HEC before applying for another program. Moreover, the faculty requirements be met before tabling the case at ACM. The house also desired that the case may only be forwarded to FBoS once it is in appropriate format as per BU requirements.

### **6. Decision**

The case may be tabled again, once MS-CS has established at BULC. Point Dropped.

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## Agenda Item # 1023

Initiated by: HOD EE, Karachi Campus

### **LAUNCH OF WEEKEND MS EE and MS Engg MANAGEMENT PROGRAM**

#### **1. Background and discussion at FBoS**

- EE Department Bahria University Karachi Campus is offering MSEE program since Fall 2011 with four different specializations.
- There is an increased demand for MSEE weekend program from students who cannot spare themselves on week days.
- MS Engg Management is already approved in BUIC. EE department BUKC is also keenly interested to offer new program in evening or week end. The agenda is tabled for principle approval of the ACM.

#### **2. FBoS Decision**

- Principle approval is requested to start these programs and the case is to be tabled at ACM. EE-BUKC is to provide all the details required as per BU format as soon as possible.

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

HoD-EE-BUKC to update before ACM

#### **4. Financial Effect**

HoD-EE-BUKC to update before ACM

**Responsibility:** HOD-EE-BUKC

## Agenda Item # 1024

Initiated by: HOD EE, Karachi Campus

### **REVISED ROADMAP AND CURRICULUM FOR MSEE PROGRAM.**

#### **1. Background**

- Bahria University is offering MSEE program since fall 2012 in four different specializations.
- With passage of time, it has been pertinent to revise and update the MSEE roadmap and curriculum in order to synchronize with the current and future trends.
- Keeping in view, HoDs at both campuses revised the roadmap in consultation with their Faculty.
- The proposed roadmap is approved by FBoS and tabled for the approval of ACM.

#### **2. Decision**

- FBoS approved the case and forwarded to ACM for consideration. The roadmap is attached as file 'MSEE\_roadmap.docx'

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

NIL.

#### **4. Financial Effect**

NIL.

**Responsibility:** HOD-EE-BUKC

## Agenda Item # 1025

Initiated by: HOD EE, Karachi Campus

### **CONSIDERATION OF SENIOR PROJECT DESIGN I AND II COURSE IN FACULTY COURSE LOAD**

#### **1. Background**

- Students in Engineering programs mandatorily register for senior design projects I and II (ESC-448 and ESC 449) in 7<sup>th</sup> and 8<sup>th</sup> semester respectively. However, their progress only can be monitored on monthly basis.
- It has been observed that students only make efforts once the progress presentation date is near.
- Bahria University is very much focused and giving stress to uplift the quality of FYP projects.
- In addition to the above, administration is also have concern over student's communication and presentation skills as well.
- Currently, these two courses with 0+3 CH are not being assigned to faculty normal loading.

#### **2. Recommendation by DBoS**

- Project I and II courses are recommended for normal loading assign to the faculty most probably FYP coordinator.
- An appropriate syllabus can be designed to overcome the student's short coming both in presentation or their lab work.

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

**NIL**

#### **4. Financial Effect**

NIL

**Discussion at FBoS:** The house didn't agree with the proposal as the supervisors are primarily responsible for the project. The students should focus on project instead of going through syllabus. FYP coordinators are to play an active role and they have been given one teaching course waiver to carry out their duties in professional manner.

**FBoS Decision:** Not approved, point dropped.



**PROPOSED AMENDMENTS IN BEE ROADMAP 2014**

**1. Background**

- In Departmental board of studies, following points are discussed and forwarded for rectification to FBOS.
  - i. Course Outline of “Introduction to Computing “is not appropriate. Need to be revised.
  - ii. Addition of two courses “Introduction to Power Engineering” and “Linear IC and Applications” in the list of electives.
  - iii. Course outline of “Instrumentation and Measurement” is inappropriate and needs revision.
  - iv. Theory and Lab outline of VLSI course needs modification.
  - v. Some courses with 3+0 should be introduced as we don’t have labs for all the courses mentioned in Electives.
  - vi. Computer Networks course Pre requisite should be Data com and networks not intro to computing.
  - vii. Pre-requisite for Mobile and Pervasive Computing should be Wireless Communication.
  - viii. Pre-requisite for information theory should be Probability methods in Engineering.
  - ix. Pre-requisite for Transmission and Switching Systems should be Digital Communication.
  - x. Electrical Machine Course Pre requisite should be “Electro Magnetic Theory”

**2. Recommendation by DBoS**

These points were discussed in DBOS and after thorough deliberation it is recommended to FBOS for further debate.

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

NIL.

**4. Financial Effect**

NIL.

**DISCUSSION**

Both the EE departments should work together and table a joint proposal in the next FBoS.

**FBoS Decision:** The EE departments at KC and IC to work together through their curriculum review committees and table a joint proposal in the next FBoS.

**Action By:** HOD-EE-KC, HOD-EE-IC

## Agenda Item # 1027

Initiated by: HOD EE, Karachi Campus

### **REVIEW OF CREDIT TRANSFER POLICY**

#### **1. Background**

- Credit Transfer is a normal procedure in universities admission process.
- Before 2015, Credit transfer process in UG and PG programs used to perform and approved by Course Coordinator and FDRC respectively.
- However it is observed that this process is taking almost six months in correspondence and to complete as it is required that Head quarter will now check and approve this routine practice.
- Ultimately, the end user i.e., Students do suffer and waste their time in asking the result and moving here and there for nothing.

#### **2. Recommendations by DBoS**

- Previous practice should be employed that was if the campus recommended the case that will get approve.
- If this is not feasible than reduce the time maximum one month for taking decisions.

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

**NIL**

#### **4. Financial Effect**

NIL

**Discussion:** PG rules are quite clear about credit transfer policy, the chair informed the house. The house didn't agree with the proposal to amend any of the credit transfer rules.

**FBoS Decision:** Not approved, Point Dropped.

## Agenda Item # 1028

Initiated by: HOD EE, Karachi Campus

### **MINIMUM PASSING MARKS FOR PG PROGRAM**

#### **1. Background**

- Considering 23<sup>rd</sup> ACM item number 2321 para 197.a “Minimum passing marks for PG programs be changed to 60% from 50%”. This decision was effective from spring 2015. However, in 24<sup>th</sup> ACM this point was again raised in item number **2415** and also in 25<sup>th</sup> ACM as item number **2522** specifically for MBA program.
- It has been observed that even EMS system is upgraded and assigning F grade to the students securing less than 60 marks. Although, it was obvious that the decision will be applied from spring 2015 intake.
- Moreover, faculty handbook, examination sheets etc., are mentioning the previous criteria for marking that is 50-59 will be D grade.

#### **2. Recommendation by DBoS**

- Rectification is required in both print material and software. Additionally, post graduate program may also clarify the new passing marks like Management Sciences did.

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

NIL

#### **4. Financial Effect**

NIL

**FBoS Decision:** The concerned offices may be informed of any discrepancy through file / memo, as many of the documents have been updated. Point dropped.

**CHANGE OF SCOPE IN BEE PROGRAM**

**1. Background**

- Bahria University Karachi Campus is allowed 120 seats in BEE program by PEC.
- It is pertinent that campus can handle 160 students adequately through labs, classes and faculty perspective.
- PEC has imposed tough restriction on allowable intake and put fine over excess admission.

**2. Recommendation by DBoS**

- One more section with 40 students are proposed to induct from intake of Fall 2016.
- Necessary documentation for change of scope visit has been done and will be forwarded to HQ for further deliberation.

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

NIL.

**4. Financial Effect**

NIL.

**DISCUSSION**

FBoS agreed with the proposal in principle and suggested that the department should prepare well before applying to PEC.

**FBoS Decision:** The department should device a comprehensive strategy to get approval from PEC. The labs, classrooms and faculty requirements be met as per PEC regulations.

**Action By:** HOD-EE-BUKC

**Agenda Item # 1030**

**Initiated by: HoD(EE), Islamabad Campus**

**Subject:**

**Request for formation of Research group on Pedagogical innovation**

**Background to the Case**

1. With reference to the letter No. FCP/0915/16/0942 ,regarding the follow up action after training organized on “pedagogical innovations” for the faculty members of Bahria university, the worthy registrar directed that each department should formulate a research group on Pedagogical innovations.
2. The group would be responsible for improving educational experiences through better alignment of Curriculum and to educate people within their own department regarding changing trends in teaching pedagogies.

**Financial Effect**

- Nil

**Recommendation by DBoS**

- Departmental Board of Studies recommended that the research group on Pedagogical Innovation should be formed at faculty level.

**Establishment / HR Effect if any**

Nil

**DISCUSSION**

Some of the departments had already constituted the said group, and hence faculty or campus wise group formation was not possible at this stage as some departments didn't show any interest to merge the groups.

**FBoS Decision:** Not approved, dropped.

## **Agenda Item # 1031**

**Initiated by: HoD(EE), Islamabad Campus**

### **Subject: Proposed Changes in MSEE Road Map**

#### **Background to the Case**

1. The EEKC proposed some major changes in MSEE Road Map in last FBOS.
2. The main changes are observed to be required in third and fourth semesters of MSEE program.
3. According to the proposed Road Map the students will register for 6 credit hrs of course work (one elective and one research study course) in third semester.
4. After completion of 24 credit hrs of course work the student will register for 6 credit hrs of thesis in fourth semester.
5. The Road map also proposed to merge few MSEE elective courses.
6. The Proposed Road Map is attached.

#### **Financial Effect**

- Nil

#### **Recommendations by DBoS:**

- The Board has no objection on merging of elective courses in MSEE.
- The Board also noticed that two courses with same name (Modern control theory) are being offered in MS and PhD. The MS course is 5xx level and PhD course is 7xx level. It is recommended to replace the 5xx level MS course with 7xx level PhD course.
- The Board has following reservation on addition of research study courses
  - It will be difficult to offer same course to a number of students who wants to do thesis in totally different research areas.
  - This course looks like a literature review instead of a regular course. The literature review should be part of the thesis. By having such a course we are actually reducing the number of taught courses to 21 credits. HEC requires minimum of 24 credits of taught courses in an MS Program.
- The Board also has reservations on having all 6 credit hrs of thesis in only the 4th semester. Our FG Rules require a student to take approval of his thesis proposal followed by the approval for final defense. This process normally takes more than one semester. Having all 6 credits of thesis in one semester will not help student getting approval faster. If the thesis is registered 3<sup>rd</sup> and 4<sup>th</sup> semesters, the student can easily get timely approvals.

**Establishment / HR Effect if any:** Nil

**DISCUSSION**

Point clubbed with MS-EE roadmap revision by EE-BUKC

**FBoS Decision:** Merged with MS-EE roadmap revision by BUKC. Point dropped.

## **Agenda Item # 1032**

**Initiated by: HoD(EE), Islamabad Campus**

**Subject: Addition of PhD elective course**

### **Background to the Case**

1. PhD-EE students pursuing research in Control Systems have few courses available in the PhD roadmap.
2. HEC has also desired to update and increase the elective courses of PhD program.
3. The Control Systems – Research Group has proposed elective course ‘EEN-828 Advanced Nonlinear Control Systems’. The course outline as per the existing format are attached
4. The proposal is endorsed by DBoS and FBoS.

### **Financial Effect**

- Nil

### **Recommendations to ACM:**

- “EEN-828 Advanced Nonlinear Control Systems” may please be added as Elective course in PhD-EE program.

The course outlines are attached as ‘PhD\_elective\_Advanced\_Non-Linear\_control\_Systems.docx’

### **Establishment / HR / Financial Effect**

Nil

## **DISCUSSION**

The case supported by all departments.

**FBoS Decision:** Approved and forwarded to ACM.

**Responsibility:** HOD-EE-IC



## **Agenda Item # 1033**

**Initiated by: HoD(EE), Islamabad Campus**

**Subject: Proposal for Launching MS Mathematics Program in Bahria University**

### **Background to the Case**

1. Over the past decade, the demand for mathematicians has expanded greatly in both industry and academia, primarily as a result in the availability of more complex technology and new potential applications in a myriad of fields.
2. Recognizing these needs, Bahria University's Electrical Engineering department has taken the initiative to start a Master program, which will help promote new methods for integrating people from engineering and management sciences into mathematics program.
3. The department wants to start MS mathematics program with special emphasis on computational mathematics in order to fill the gap between academia and industry. Major aim is, not to replicate exactly what the other universities are already doing to achieve the aforementioned objective, but to complement what is missing.
4. The proposed program will help increase enrollment at Bahria University; increase Bahria's visibility through the addition of this modern interdisciplinary program; and stimulate research collaborations and funding within Bahria and between the University and industry.
5. The departments will need two PhD's to run the program
6. The curriculum/ syllabus of proposed program is forwarded to ACM after the approval of FBOS for consideration.

### **Financial Effect**

- Honorarium of the two PhDs.

### **Recommendations to ACM:**

- The program may be started after getting approval from HEC.  
The details are attached as 'MS\_Maths\_program.docx'

### **Establishment / HR Effect if any**

- Hiring two PhDs to run the program.

## DISCUSSION

The Engineering departments should focus on their own disciplines only. A separate mathematics department may be established at BU. The research output should be in focus of maths department.

**FBoS Decision:** Recommended for approval to ACM.

**Responsibility:** HOD-EE-IC

## 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

24<sup>th</sup> March 2016

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