

Capital University of Science & Technology

Islamabad

Expressway, Kahuta Road, Zone-V, Islamabad Phone: 92-51-111-555-666 Fax:92-51-4486705 Email: info@cust.edu.pk Website: http://www.cust.edu.pk

> Ref: CUST-FoE-BoF-06 Dated: June 26, 2020

# <u>6<sup>th</sup> Board of Faculty (BoF) Meeting</u> Minutes of the Meeting held on June 25, 2020

- The meeting was convened on June 25, 2020 (Thursday) at 11 a.m online on Microsoft Teams. Prof. Dr. Imtiaz Ahmad Taj, Dean Faculty of Engineering (FoE) chaired the meeting.
- The following members attended the meeting.

<ul> <li>Dr. Imtiaz Ahmad Taj</li> </ul>	Dean, FoE (Convener)
• Dr. Rizwan Alim Mufti	Professor, PIEAS
• Dr. Ayub Elahi	Professor, UET Taxila
• Dr. Noor. M. Khan	HoD, Electrical Engineering (EE)
• Dr. Ishtiaq Hassan	HoD, Civil Engineering (CE)
• Dr. Mahabat Khan	HoD Mechanical Engineering (ME)
• Dr. Amer Iqbal Bhatti	Dean ORIC / Professor, EE
• Dr. Amir Qayyum	Dean QEC
• Dr. Fazal ur Rehman	Professor, EE
• Dr. M. Ashraf	Professor, EE
• Dr. Majid Ali	Professor, EE
• Dr. Irfan Manarvi	Professor, ME
• Dr. Saif ur Rehman	Professor, ME
Dr. Salman Warsi	Assistant Professor, ME
Dr. Shujaa Safdar	Assistant Professor, CE
• Mr. Jahanzeb Sarwar	Research Associate, FoE

- The meeting started with recitation from the Holy Quran. The Dean FoE welcomed all the participants to the sixth Board of Faculty meeting. He expressed his gratitude to the External Board members for their participation.
- The Convener informed the house that the meeting was convened as a follow up of the guidelines given the Executive Committee (Senate) and the Academic Council of the University regarding implementation of Virtual Learning Environment (VLE). He further explained that CUST adopted VLE from 18<sup>th</sup> March, 2020 and the Teaching/Learning and Assessment System was approved in the 17<sup>th</sup> meeting of the Executive Committee. The follow up meetings of the Academic Council including its 19<sup>th</sup>, 20<sup>th</sup>, and 21<sup>st</sup> meetings, further elaborated on different implementation aspects of the VLE and issued broad guidelines to all the departments of the university. The Academic Council authorized the departments to devise their plans and SOPs in various facets of VLE according to the guidelines of their respective accreditation or regulatory bodies. The Engineering departments were also asked to devise plans for teaching/learning and assessment of theory and lab courses, assessment of final year

projects, assessment of internships and other such activities according to the guidelines of PEC and HEC.

- The Convener further informed that the three departments of FoE have worked rigorously on the implementation aspects of VLE and finalized their SOPs. He informed that this meeting is called with only one main agenda, i.e. to review these SOPs and advise changes wherever felt necessary. He also proposed that the Board should finalize a common set of SOPs to all three departments of Engineering as they are all following same guidelines by Academic Council, and by HEC and PEC. Therefore, different aspects of VLE were divided into common heads/points and were thoroughly reviewed and approved separately under these heads as follows.

# 1. Teaching Learning and Assessment (TLA) of Theory Courses:

HoDs of the three departments briefed about the TLA of theory courses. After thorough discussion the following implementation plan for the assessment of theory courses was approved.

# Normal Assessment:

- 1. Quizzes and examinations (midterm and final term) are taken online and the questions are open book type.
- 2. Questions are framed to assess the conceptual understanding of students and numerical questions are based on registration number of each student to effectively check concepts and solutions of students.
- 3. Separate papers for individual students or group of students may also be prepared.

#### **Problem Based Learning:**

1. Class Projects, Open-Ended Labs and the activities involving Complex Engineering Problems have been increased in VLE; as such activities can easily be supervised online through literature review and critique, methodology analysis, design procedures and simulation results.

List of changes made by all the three departments in the execution of theory courses and their assessment is attached in **Annexure A**.

#### 2. Labs Courses Execution and Assessment:

Regarding lab courses, HoDs of all three departments informed the house about various changes in the execution and assessment of Lab Courses in their respective departments, especially the psychomotor part as per guidelines of PEC. It was generally agreed the scope and contents of lab courses should be changed where psychomotor part can be replaced by the simulation/emulation type experiments without compromising on the learning aspect. In this regard, it was informed that all three departments have evaluated the contents of each lab course and have made decisions regarding how much of its contents are to be shifted to simulation/emulations. The following execution SOPs were approved after thorough discussion.

# Labs Courses fully shifted to Computer Simulations

- 1. Lab / Practical courses whose experiments are mostly computer-oriented are shifted to computer simulations requiring no Hands-on Activity.
- 2. For these courses, Assessment may be concluded using defined rubrics for

Affective and Cognitive Skills. Moreover, their final assessment will be held online by assessing laboratory activities through defined rubrics as well as open-ended lab activities given individually or in groups to students.

# Labs Courses not shifted to Computer Simulations

- 1. Lab / Practical courses in which experiments include hands-on activities and cannot be shifted to computer simulations should conduct Affective and Cognitive domain assessment only in the present scenario of VLE.
- 2. Since the Psychomotor assessment cannot be conducted in present scenario, the overall assessment and grading of these courses cannot be concluded.
- 3. Therefore, the students registered in these courses will be awarded I grade for the time being and their psychomotor assessment will be concluded later in Summer semester or early days of Fall semester. For this purpose, an on-campus crash plan will be designed and followed by all three departments for the execution of these lab courses ensuring that the safety SOPs are also fully complied with.
- 4. However, the graduating students will be assessed and their grading will be concluded under VLE as per guidelines of the PEC. The psychomotor skills for final year lab courses are therefore recommended to be assessed on alternate-to-practical equivalents.

List of changes made by three Departments in the execution and assessment of Lab Courses are attached in Annexure B.

# 3. <u>Design Projects / Final Year Projects (FYPs)</u>

- 1. HoD CE, HoD EE and HoD ME briefed the house that the scope of most of the Design Projects / Final-Year Projects involving hands-on activities and hardware implementation has been changed to computer simulation/emulation and numerical intensive equivalent projects. After thorough discussion on each case the house approved the recommendations of departments to change scope of FYPs.
- 2. It was also decided that the assessment of the FYPs will be done after the end of Final exam. For most of the FYPs, the respective group members will present their work online before the approved panels of evaluators including external industrial examiners who will assess their presentations, project demonstration and project reports through viva-voce using defined rubrics addressing specific PLOs. Filled rubric forms, videos of the working of the projects and project reports will be kept for the purpose of record. For a few FYPs for which most of the practical work was already concluded before the lock down, the groups may be invited to university campus for their final presentation.
- 3. Dr Ayub Elahi pointed out that while reviewing the scope of the projects, the definition of FYPs and their requirements should be considered as per PEC accreditation manual. The house therefore advised all departments to keep into consideration this important point while changing the scope of FYPs.

There are total of 22 Design Projects in CE, 23 in EE and 27 in ME registered in the current semester. The change made in their scopes and/or revised titles are attached in **Annexure C**.

# 4. <u>Internships:</u>

The Board was informed that there will be 63 CE, 84 ME and 40 EE students who will be eligible for internship in Summer 2020 semester. As per guidelines provided by Academic Council in its 21st meeting, the departments are exploiting the following options to accommodate the students in getting internships in Summer 2020 semester.

- 1. Arranged Internship by the Departments
- 2. Self-Arranged Internship
- 3. Online Internship (with the consent of internship coordinator)
- 4. Internship on Research Funded Projects
- 5. Professional Certifications approved by the respective Department as a substitute of internship

The board agreed that as Internship is a compulsory activity for award of degree, so it cannot be waived off. Students will have to undertake it now or later. The above five options were approved and the departments were advised to consider the last option only in cases where no other option is workable. It was also decided that the students who are not willing to opt for internship in this summer, they may be allowed so and they will be required to do the internship in Summer 2021 semester.

# 5. <u>MS / PhD Students and their Thesis:</u>

Regarding the Graduate Program, it was decided that the university-vide SOPs will be fully followed in all departments of FoE as advised by Executive Committee and Academic Council. In this regard the house was informed that progress on following fronts have been made.

- 1. All the theory classes of MS/PhD students are being executed successfully on VLE.
- 2. The supervisors of MS and PhD students registered in thesis are in contact with the students and are having regular periodic meetings with them through MS teams.
- 3. MS Thesis defense of 08 MS CE, 01 MS EE and 01 MS ME students have been conducted online as per arrangements of Graduate Office. However, most of the PhD Thesis defense are carried out at university premises following strict safety SOPs.
- 4. HoD CE department informed the house that the department carried out Eight (08) graduate seminars are online to exchange progress and knowledge sharing with MS and PhD students. In EE and ME departments, regular online meetings and seminars are being arranged at the research group level.

HoD CE pointed out that some of the MS/PhD students registered for thesis are not being able to conduct their experiments as the university is closed for students. Therefore, if possible, their visits to the university under the safety SOPs may be allowed so that their research is not affected further. It was decided that this issue will be raised by the Dean FoE with the Competent Authorities of the University.

# 6. <u>VIS (Volunteer-In-Service) Requirement of Graduating Students:</u>

Dean FoE informed the house the Academic Council has given the exemption in the VIS hours due to Covid 19 to the graduating students who have not completed their VIS hours.

The house agreed and appreciated the decision of Academic Council. Therefore, as follow up of this decision, the VIS requirements of the graduating students who have not completed their VIS hours as listed in the **Annexure D** have been exempted.

# 7. <u>Survey Camp of CE Department:</u>

HoD CE informed the board that Survey Camp is arranged in every summer at Khanspur for 02 weeks. But in this summer (for batch 2018), it seems that it is not possible to undertake this activity and it has been postponed. He further informed that as Survey Camp is a degree requirement for Civil Engineering students, the department will evaluate the following options to fulfill this requirement as per situation.

- 1. To conduct the Survey Camp either in Semester break (in February 2021), or Next summer (July 2021)
- 2. The survey camp shall preferably be held outstation but its arrangement can be done within the university in case of prolonged continuation of current situation or severe weather conditions at outstation.
- 3. Ten working days with reduced scope of work in survey camp may also be considered.

The house agreed on the suggestions of HoD CE and approved the plan regarding the execution of Survey Camp.

Being no further item for discussion, the meeting was adjourned at 1.00 pm with a vote of thanks to all.

# Minutes recorded by:

Mr. Jahanzeb Malik Research Associate

Approved by:

Dr. Imtiaz Ahmad Taj Dean FoE

# **Distribution:**

- VC Office
- Dean QEC
- Dean ORIC
- Registrar Office
- All BoF Members