Capital University of Science and 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

19th Meeting
Academic Council

Minutes of the Meeting held on April 20, 2020

- The 19th meeting of Academic Council, CUST was held on Monday, the 20th April, 2020 at 11.00 am in Conference Room, D-Block.

- Professor Dr. M. Mansoor Ahmed, Vice Chancellor, presided the meeting.

- The following were present in the meeting:

• Dr. Imtiaz A. Taj	Dean FoE	Member	
• Dr. Amir Qayyum	Dean QEC	Member	
• Dr. Mohammad Sagheer	HoD Math	Member	
• Malik Arshad Mahmood	Registrar	Member	

The following members were available in the meeting through Video Link:-

• Dr. M. Abdul Qadir	Dean FoC	Member
• Dr. Arshad Hassan	Dean FMSS	Member
• Dr. Nayyer Masood Dar	HoD CS	Member
• Dr. Aamer Nadeem	HoP SE	Member
• Dr. Ishtiaq Hassan	HoD CE	Member
• Dr. Noor M. Khan	HoD EE	Member
• Dr. M. Mahabat Khan	HoD ME	Member
• Dr. Sahar Fazal	HoD BI & BS	Member
• Dr. Mueen Aizaz Zafar	HoD MS	Member
• Dr. Muzaffar Abbas	HoD Pharmacy	Member
• Dr. Fazal ur Rehman	Professor, EE	Member
• Dr. Mazhar Iqbal	Professor, MS	Member
• Dr. Shaukat Iqbal Malik	Professor, BI & BS	Member
• Dr. Majid Ali	Professor, CE	Member
• Dr. Ansir Ali Rajput	Associate Professor, MS	Member
• Dr. Shafqat Hussain	Associate. Prof., Math	Member
• Dr. Mahboob Alam	Assistant Prof, Pharmacy	Member
• Mr. Hassan Mahmood Awan	CoE	Member

- Prof. Dr. Faisal Mustafa, Dean/Provost of University of Central Punjab (UCP) also attended the meeting by invitation.

- The meeting started with recitation from the Holy Quran by Dr. M. Mansoor Ahmed.

- Dr. Muhammad Masroor Ahmed, Assistant Professor, CS could not attend the meeting as he was not added in the team due to technical fault.

- The Vice Chancellor welcomed the members of the Academic Council and expressed gratitude to them for their attendance/presence in the 19th meeting of the Academic Council of the CUST. The Vice Chancellor also welcome Prof. Dr. Faisal Mustafa, Dean/Provost of University of Central Punjab (UCP) for participation in the meeting.

- Subsequently, the Council deliberated upon different items at length and took following decisions:-

Item #1   Review of the last meeting minutes

1.1 The Council reviewed the last minutes of the meeting of Academic Council held on 17-02-2020 and confirmed the same.

1.2 The Council while reviewing the evaluation of PLOs attainment of BS Computer Science Department indirect assessment vide item No. 3, 3.3 (b) of last meeting minutes of Academic Council, it was advised to the Dean and HoD, CS to go through the areas identified under this clause and take remedial measures. Action taken in this regard should be reported in the next meeting of the Academic Council and the QEC.

1.3 The Council while reviewing the evaluation of PLOs attainment of BS Software Engineering vide item No. 4, 4.1 (b) of last meeting minutes of Academic Council, it was advised to the Dean and HoD SE to go through the areas identified under this clause and take remedial measures. Action taken in this regard should be reported in the next meeting of the Academic Council and the QEC.

1.4 The Council while reviewing the evaluation of PLOs attainment of BS Biosciences program indirect assessment vide item No. 5, 5.1 (b) of last meeting minutes of Academic Council, it was advised to the Dean and HoD, Biosciences to go through the areas identified under this clause and take remedial measures. Action taken in this regard should be reported in the next meeting of the Academic Council and the QEC.

1.5 The Council while reviewing the evaluation of PLOs attainment of BBA vide item No. 6, 6.1 (a) & (b) of last meeting minutes of Academic Council, it was advised to the Dean and HoD Management Sciences to go through the areas identified under this clause and take remedial measures. Action taken in this regard should be reported in the next

meeting of the Academic Council and the QEC.

1.6   While reviewing the evaluation of PLOs attainment of MBA indirect assessment vide item No. 7, 7.1 (a) & (b) of last meeting minutes of Academic Council, it was advised to the Dean and HoD, Management Sciences to go through the areas identified under this clause and take remedial measures. Action taken in this regard should be reported in the next meeting of the Academic Council and the QEC.

Item #2   <u>**PEC Policy guidelines for Online Teaching, Learning and Assessment (TLA)**</u>

2.1   The policy guidelines notified by the PEC on 16-04-2020 to facilitate the Engineering students of Universities which are engaged in Academic Activities from home came under the detailed discussion of the Council. The salient features of PEC guidelines are as under:-

     i.   All programs are to ensure the attainment of the 12 Program Learning Outcomes (PLOs) as stipulated in the Accreditation Manual-2014. All alternative TLA mechanisms must be designed or formulated based on the intended Learning Outcomes to demonstrate by the respective program along-with record of evidences. Scenarios or case study types of questions/ assignments/PBL/CEPs including Open Book exams through specially designed questionnaire by the concerned faculty/instructor could be used as an alternative assessment (cognitive domain) to ensure the desired Taxonomy as per set CLOs/PLOs for the courses offered during the pandemic. The overall teaching-learning and assessment methods shall be appropriate to, consistent with, and support the attainment or achievement of the PLOs.

     ii.   For Psychomotor domain, the concept of learning via e-labs or simulation-based laboratory experiments may be considered only. However, labs/ experiments which can't be implemented online may be offered on campus after resumption of normal academic session in an accelerated teaching including final exam ensuring attainment of program and course learning outcomes. Accordingly necessary arrangements are required to revise the existing practice of course offerings to include less lab-intensive courses form the current/succeeding semester(s). Similarly, activities related to Affective Domain may be revised/ re-shuffled during the COVID19 pandemic.

iii. As per PEC, HEIs are advised that all courses should be planned and implement with a clear mechanism of substantial equivalent for the partial segment of assessments to the current direct assessments in face-to-face TLA system. Continuous assessments implemented during the on-going spring semester could be continued with assignments and Take-home exams (system controlled MCQs, Open book OHTs, quizzes, PBLs, simulation-based e-labs including other demonstrated type of labs as approved by HEI statutory committee ie. Academic Council and BoS in-line with this interim PEC guidelines) covering part of online assessments (upto maximum of 50%), however Final Term Exam of 40%-50% weightages (including the hardcore labs) be conducted at normalization of the pandemic crisis. Accordingly a blended/ hybrid mode of TLA is therefore proposed by adopting a condensed/ accelerated teaching of period to be decided by the respective HEI. The whole process in an online program delivery and assessment is desired to undertake precautionary measures in handling integrity issues at both ends of students and faculty by evolving suitable monitoring and evaluation system. It is expected that programs show evidence on the attainment of all the 12 Program Learning Outcomes with a systematic Quality Management System (QMS).

iv. All programs must ensure a minimum level of accessibility to all students in their deployed e-learning (synchronous or asynchronous) process and online limited/ partial assessments as mentioned above, if the online TLA is opted to be implemented by an HEI.

2.2 The essential requirements are as under:-

i. **IT infrastructure:** The HEIs must have basic secured LMS, Bandwidth and IT Support to enable satisfactory and sustained delivery of online classes while maintain QA processes including time-tables, class held status, students' participation, availability of course material in real time as well as in recorded fashion (synchronous/ asynchronous mode).

ii. **Class size:** Online class size should not be greater than 100 for engineering and 240 for non-engineering courses. This flexibility is extended in order to accommodate appropriate number of students/sections in parallel sessions which will require sufficient bandwidth.

iii. **Content Delivery:** Faculty must be trained and assessed by a senior committee formed within the HEI to deliver courses online properly including handling of basic IT principles, for example, audio, video and sharing of screens and materials.

iv. **Attendance:** HEIs are responsible to introduce suitable monitoring & feedback evaluation mechanism to record/ log students' participation and time spent on course platforms. This may include off-line listening to recorded lectures and timely addressing assignments etc.

v. **Assessments and Quizzes:** Assessments, number of quizzes and type of assignments/PBLs/CEPs must be innovative enough to cover CLOs to attain respective PLOs of the courses appropriately. They should be assessed on time and the assessments must be shared with students online. The results and evidence must be maintained by the HEIs for record (Reference: General Guidelines, para 2(iii).

vi. **Final Year Design/Capstone Project (FYDP):** All FYDPs need to continue as per the relevant clauses in the PEC Accreditation Manual-2014. For PEC accredited engineering programs, capstone projects can be conducted/considered using computer-based simulation, presenting literature critiques or system designs etc. utilizing appropriate modern tool usage and technologies.

Ongoing capstone projects at the final semester and focusing on experimental projects can still be carried out with possibility of extension of time to complete. Whilst ongoing capstone projects at the initiation stage which focused on experimental projects are encouraged to realign as simulation work or computer-based technologies and system designs etc. relevant to the offered engineering discipline

vii. **Complex Engineering Problems/ Class Projects:** All semesters involving Complex Engineering Problems and Activities, class projects/ OELs in core areas/ breadth and depth courses and meeting specific needs of their already mapping and designed CLOs/PLOs as per the academic curriculum, the teamwork efforts of student groups with concerned supervisor should continue accordingly. The scope may be considered complete to the extent of producing prototyping design and equivalent instead of the real prototype model for testing/calibration. Computer- based simulation and presentation of critical design problem solving are

acceptable in all such culminating projects.

viii. **Grading:** In order to cater for the circumstances that the partial assessments through assignments, quizzes, OHTs are conducted in virtual environment, it is therefore, proposed that relative grading system within class cohort may be adopted to avoid any discrepancy for those students who are not well versed with this new paradigm of implementing TLA for the time being.

ix. **Quality Assurance:** HEIs will be responsible to record all evidence of class delivery, assignments and quizzes of all online courses, as per PEC course instructions of Accreditation Manual. All approvals of the conduct of online classes will be subjected to a confirmation of the HEI Online Coordination/Quality Committee responsible for training and assessment of the course instructor. Evidence to this effect will also be made available to PEC as and when required. The entire QMS/LMS be shared with PEC as advised in General Guideline above after internal review mechanism by the Online Coordination/Quality Committee.

x. **Practical Labs:** Lab-intensive courses where laboratory experiments cannot be implemented online during lockdown period, they can be replaced later when the situation permits/normalizes to demonstrate attainment of psychomotor domain. Universities may defer practical component of such hardcore labs courses in-line with general guidelines given above (Reference: General Guidelines, para 2(ii)).

xi. **Acceptability and Accessibility:** Feedback of students for a guided response to motivate them for online TLA be exercised to a reasonable sample of enrolled students in a program. Students are more conscious about well-preparedness/ delivery mechanism to be ensured from the internal QMS/LMS system and capacity building of concerned faculty to respond students' questions and interactive engagement.

In order to ensure student accessibility, all lectures and course material must be available online in recorded format as well to the students (synchronous/ asynchronous mode). Still, if a student wants to withdraw based on inaccessibility or any other inability, he may be allowed to do so, without having any adverse impact on the promotion of the student, provided a minimum of 2.0/4.0 CGPA is maintained.

In such a case, the course(s) will be treated as "freezed" and no fee shall be charged by the HEI for re-enrolment at a later stage for the students who are interrupted in an ongoing semester.

2.3 The Council deliberated in-depth on each clause of the PEC guidelines and decided to adopt the same for implementation at CUST. The Council also assessed ongoing VLE process and showed satisfaction because the adopted process is in harmony with PEC guidelines. The Council advised the Dean and all HoDs of Engineering Departments of CUST to comply with the guidelines and to ensure their implementation for all courses of engineering domain. Report in this regard will be presented in the next meeting and QEC as well. It was assured by the Vice Chancellor that the University Management will provide all possible help to meet the targets.

2.4 **HEC COVID-19 Policy:**

The HEC COVID-19 Policy Guidelines No. 5, came under the detailed discussion of the Council. It has been mentioned in the guidelines that the HEC has allowed universities and degree awarding institutes to continue teaching and learning during the interrupted Spring Semester 2020 by using a variety of distance-learning approaches.

2.5 The HEC categorized the quality of distance learning education in 3 categories i.e Basic, Effective and Exemplary.

Basic	Effective	Exemplary
Requirements met superficially. Difficult to access course info, or interact with faculty or students	Requirements met substantively. The system optimizes access, links to evaluation, accepts diversity, encourages feedback	Requirements met in letter and spirit. In addition, there is a continuous learning system involving both students and faculty

2.6 In order to create a simplified structure for online education, HEC used the concept of **"online readiness".**

	#		Y	N	Remarks
University Readiness	1.1	Has the University formally adopted a policy for approval of courses that can be delivered online?	✓		Executive Committee in its meeting held on March 30, 2020 approved policy for VLE
	1.2	Has the University formally adopted standard operating procedures	✓		SoPs to be notified as per following list:

		(SOPs) for the approval of courses for online delivery?			a. Course for online delivery to be ready and a certificate to be exercised by the HoD duly endorsed by the Dean and approved by the Vice Chancellor
					b. Availability of course delivery on portal.
					c. Provision of online communication tool such as MS team software.
					d. Appropriate Training of faculty members regarding online lecture delivery.
					e. Creation of Accounts for all the students on outlook MS Office 365
					f. Creation of groups on Microsoft teams for each course.
					g. Communication to the students about the creation of group.
					h. To ensure the conduct of classes as per approved timetable.
					i. To ensure that there is a suitable link and networking facility at both the end i.e students and instructors.
					j. To make a decision about the online lecturing methodology: i. Mixed synchronous mode
					k. To ensure the availability of any other tool required for a given course.
	1.3	Has the University notified a governing system (e.g an "Online Academic Council/OAC) responsible for approving online courses?	✓		The University notified its Academic Council to function as Online Accreditation Committee (OAC) responsible for approving online courses
	1.4	Does the University have an operation Learning Management System (LMS)	✓		Microsoft Teams 365

				✓		
Course Readiness	2.1	How many courses have been authorized for online delivery?		✓		The courses ready for online delivery were evaluated for each program by the respective HoDs and endorsed by the Dean and after the approval of Vice Chancellor, they were uploaded and their list is available on the University website
	2.2	For each course that has been authorized for online delivery, please certify that the following elements have been uploaded onto the LMS: 1. Introduction to the course 2. Learning Objectives 3. Textbooks to be used for the course 4. Description of the system of evaluation (exams, etc.) 5. Detailed lesson plans for each remaining lecture 6. Key dates, time and venue of meetings		✓		Checked and verified
Faculty Readiness	3.1	For each course authorized for online delivery, please certify that the faculty member or faculty members concerned have successfully completed an introductory course in online teaching, advised by NAHE.		✓		Number of trainings were conducted under the supervision of Technical and Monitoring Committee
Technology Readiness	4.1	Has the University acquired certificates for all required software, including the LMS, and, as needed, MS Teams, Zoom or Google classroom?		✓		Microsoft 365 licensed
	4.2	Has the University provided all faculty members and students access to the Virtual Private Network (VPN) to enable them to access required material offline?		✓		Material is provided to the faculty and students on their demand through email. However, the University is preparing a system where student and faculty can access the materials offline
	4.3	Has the University set up a tech support system (for trouble-shooting and real time assistance to faculty and students in online		✓		The University has notified Office for Online Information Technology to function as Technology Support Committee

		classroom management)?			
Library Readiness	5.1	Does the University have a valid subscription to HEC's Digital Library?	✓		The University has valid subscription of HEC Digital Library
	5.2	Are the required martials for all courses available through the online library system?	✓		Yes, all the required material for all courses is available on the University portal and online library system
Student Readiness	6.1	Has the University collected the information on the online readiness of its students, including the following:- i. Place of residence ii. Contact information (email, mobile, WhatsApp numbers) iii. Type of internet access (landline, mobile) iv. Preferred Mobile Service Provider (Jazz, Zong, Telenor) v. Nature of devices (desktop, laptop, table, smart Phone)	✓		The University has a valid attendance system. The class attendance of students for online lecture is 75% plus. Moreover, all the required infrastructure is available with the University
	6.2	Has the University distributed required certificates to all students (e.g, MS Teams, Zoom, Google Classroom)	✓		Yes, University prepared and distributed the email accounts to the students
	6.3	Has the University established a system under the Director of Student Affairs to address student's complaints regarding connectivity and other problems with online education?	✓		University has notified on 13-04-2020, VLE Monitoring Committee
Evaluation Readiness	7.1	Has the University adopted a uniform policy for student evaluation in online courses?	✓		Will be taken up as an agenda for approval by the next Academic Council meeting

Laboratory Readiness	8.1	Has the University coordinated with professional councils on possible and permissible alternatives modes of delivery psychomotor information, e.g, with regard to laboratory requirements?	✓	PEC and Computing Council

2.7 After detailed deliberations and in-depth discussions the Academic Council unanimously agreed to adopt the HEC COVID-19 Policy Guidelines No. 5 for implementation at CUST in order to run the online classes more efficiently. The Council noted with the satisfaction that the University is on the same track as per HEC policies pertaining to the Online Learning and Assessment during current COVID-19 Pandemic.

2.8 The Academic Council discussed indepth and finally formulated the following policy for the approval of Online Courses:-

1. The University shall establish an online Academic Council which shall be responsible to check the readiness of a course to be offered through distance (online) learning.

2. There shall be a Directorate called as Virtual Learning Environment (VLE) Directorate and it shall be headed by a Dean or a Senior Professor the University.

3. There shall be a committee called as VLE Monitoring Committee comprising of various members at least one from each Department desirous to enter into online education.

4. The VLE Monitoring Committee shall ensure the implantation of the University policy adopted for online education and it shall also ensure the compliance with the policies/guidelines issued by the regulatory bodies from time to time such as HEC/PEC etc.

5. A course shall be cleared as an Online Course/Lab, if it met all the requirements defined for the purpose, which shall be certified by the concerned HOD and endorsed by the respective Dean of the Faculty.

6. Only those courses/labs can be offered which are supported by the University Learning Management System (LMS). The LMS must contain, as a minimum, the following information regarding a specific course/lab:-

1.   Introduction of the course
2.   Course learning objectives
3.   Course description
4.   Course resources, i.e. course books, reference books and other material
5.   Lesson plan
6.   Grading policy
7.   Key dates
8.   Course progress report

7. The Department shall ensure that an appropriate communication tool is available to conduct the class remotely, such as: Zoom/Team software etc.

8. The University should arrange licensed copy of such tools to ensure their maximum utility.

9. The Department shall ensure a connectivity mechanism between the relevant instructor and the student of a course by providing/creating accounts of its members (Course Team Creation).

10. The HOD shall also ensure that all information regarding Online Timetable, Assessment Policy and Grading Policy etc. must be communicated/known to the students.

2.9   The Council resolved that the above policy may be circulated by the Registrar Office and disseminated through Website and LMS for the information of students.

Item #3   **Portal Status and Future Weekly Reporting Mechanism**

3.1   The Portal Status Report pertaining to the Class Activities came under the detailed consideration the Council. It was apprised to the Council that as per the University policy, it is mandatory for the instructor to upload 2 Quizzes and 2 Assignments marks on portal.

3.2   After reviewing the Portal Status Report, the Council observed that the marks of class activities of some instructors are not uploaded on the portal so far. Therefore, it was advised to the HoDs to get the marks uploaded on the portal within one week.   All HoDs

3.4   It was noted with satisfaction by the Council that portal status was quite healthy.

Item #4   **Midterm, Final Term, Labs, Senior Year Design Projects Assessment Mechanism**

4.1   The Council considered the Midterm Examinations keeping in view the COVID-19 and unanimously decided that in order to save the students from any educational loss, we should go for online midterm examinations as per already announced Academic Calendar. The Instructors will dedicate one scheduled class specifically for midterm exam.

4.2   It was advised by the Council that utmost efforts should be made to facilitate the students.   All HoDs

Item #5   **Ramzan Timing**

5.1   The Ramzan Timetable for Spring-2020 was presented to the Academic Council. It was apprise to the Council that during the holy month of Ramzan, the duration of the Online Classes will be 60 minutes. He further briefed that the morning shift will start at 08:00 am and will be closed at 02:45 pm. Similarly, the evening shift will be started at 03:30 pm and will be wrapped up at 05:35 pm.

5.2   The Council Considered the Ramzan Timetable and approved the same as per **Annex-A.**

Item #6   **Review of Graduate Office Activities**

6.1   The Director Graduate Studies (DGS) briefed the Council that during Spring-2020, 99 MS thesis were received, 63 MS defense have been conducted so far. 26 results have been sent to the CoE. 37 final copies are awaiting. He further briefed to the Council that on the instructions of Vice Chancellor, so far 7 MS defense are carried out through Video Link.

6.2   While briefing regarding PhD Synopsis, DGS apprised the Council that total 5 synopsis were received, 1 defense has been conducted and 3 synopsis have been dispatched to the examiners. Similarly, 16 thesis were received for foreign evaluation. 13 thesis have been sent and 9 reports have been received so far.

6.3   He added that 7 thesis were received for final PhD defense.

6.4   The progress report given by the DGS was found satisfactory. The efforts made by the Graduate Office were appreciated. It was advised by the Council that arrangements may also be made for the Online conduct of PhD defense.   DGS

The meeting ended with a vote of thanks to the Chair.

Malik Arshad Mahmood
Registrar

Prof. Dr. Muhammad Mansoor Ahmed
Vice Chancellor