

QEC

NEWSLETTER

December 2015
Vol.1, No.1

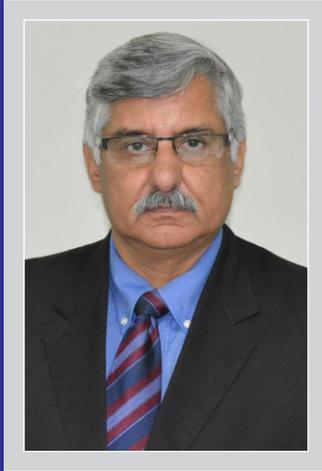
Capital University
of Science and Technology
Islamabad



Quality Assurance Committee

Director's Message

The concept of institutional effectiveness presumes that an institution is engaged in an ongoing quest for quality and is able to demonstrate how well it fulfills its stated purpose. Understandably, Higher Education Commission of Pakistan (HEC) and Pakistan Engineering Council (PEC) require every University to document quality and effectiveness by employing a comprehensive system of planning and evaluation in all major aspects of the institution. Planning and evaluation of teaching, research, public service, administration, and educational support should be thorough, broad-based, integrated and appropriate. Institutional effectiveness provides documentation of planning, assessment, and the action plan and analysis (use of the assessment results) in decision-making across the campus.



Quality Enhancement Cell (QEC) at Capital University of Science and Technology (CUST), Islamabad safeguards the academic standards and ensures highest quality learning, teaching, curricula, research and academic operations of the university to meet the

national and international expectations.

The QEC serves CUST's vision of becoming a reputable center of higher learning and research, and promoting the development of ethical, professional and skilled graduates with leadership qualities in all disciplines, who contribute effectively towards uplifting the quality of life for local and global communities.

At CUST the quality assurance and enhancement is achieved by the cooperation of all the stake holders including the students and faculty in accordance with the guidelines of HEC and PEC. The QEC is therefore upholding the education standards with strong foundations in basic principles of science and technology to meet the needs of a dynamic society and a fast growing economy.

Our graduates are proud to hold degrees from CUST because they know that they have achieved the same quality as the best known universities elsewhere in the world could have given them.

At the end, I must say that without the help and guidance of VC, and the Deans of various faculties at CUST, the efforts made by the members of QEC committees from each department would not have met the level of success that they are justly proud of.

Arif Vaseer
Director Quality Assurance

Aims and objectives

Q E C

Establishment of quality assurance system in higher education is a global concern now. There is a growing demand for Quality Assurance (QA) mechanisms at national, regional and global levels. Over the years, it is observed that there is an increase in the number of HE institutions and increased involvement of external stakeholders through changes in governance structures. The higher education institutions around the world have been introduced to quality assurance system internally with formal institutional approach and documentation. This has been done with the establishment of quality assurance agencies like accreditation bodies at the national level. The integration of Quality Assurance principles into higher education is also a matter of concern in Pakistan.

CUST has always been in the forefront for accepting and adapting best practices in the field of Education. Recognizing the role that it has to play in higher education sector, CUST has established a Quality Enhancement Cell. This cell has the responsibility to ensure that the university's quality assurance procedures are compatible with international standards and are designed to improve the quality of higher education.

QEC at CUST is taking deliberate steps to bring about continual improvement in the effectiveness of the learning experience of students. In QEC there is greater emphasis on Internal QA and the encouragement of an institutional "Quality Culture."

At CUST we believe, that quality enhancement and assurance is a collective responsibility requiring dedication, professional integrity and creativity.

The main objectives of QEC are:

- To provide quality teaching and learning environment in order to accomplish CUST's Vision and Mission.
- To devise and implement a CQI framework as prescribed by Higher Education Commission (HEC) for meeting international quality standards of higher education.
- To review quality standards and the quality of teaching and learning in each subject area.
- To develop quality assurance processes including methods of assessment, monitoring and evaluation for self-assessment and curriculum improvement.
- To ensure that administrative processes are followed

for smooth functioning of academic system.

- To foster faculty and staff development and capacity building through effective system of appraisal and development programs.
- To promote public confidence that the quality and standards of the award of degree are enhanced and safeguarded.
- To collect and maintain the university data/statistics for university/programs rankings or accreditation at national and international levels.

QEC Aims:

Quality Promotion

The development of a program of activities to institutionalize a quality culture in higher education and a commitment to continuous quality improvement.



Capacity Development

The development and implementation of initiatives to build and strengthen the capacity for high quality provision at institutional, learning program and individual levels.

Faculty Assessment

Measurement of the expected outcome/ performance from individual faculty member through standard internationally evaluated and tested procedures after having provided the requisite teaching and research infrastructure and facilities.

Departmental Reviews

Measurement of the performance of each Academic Department/Institute/Center by conducting annual review based on the standard parameters set for this purpose.

QEC Functions

1. The quality enhancement cell (QEC) is headed by the Dean QEC who is reporting directly to Vice Chancellor/Rector of the University. The Dean QEC is correspondent with the outside bodies and is responsible for internal Academic Audit as well.
2. QEC is responsible for promoting public confidence that the quality and standards of the award of degrees are enhanced and safeguarded.
3. QEC is responsible for the review of quality standards and the quality of teaching and learning in each subject area.
4. QEC is responsible for the review of academic affiliations with other institutions in terms of effective management of standards and quality of programs.
5. QEC is responsible for defining clear and explicit standard as points of reference to the reviews to be carried out.
6. QEC is responsible to develop qualifications framework by setting out the attributes and abilities that can be expected from the holder of a qualification, i.e. Bachelors, Bachelor with Honors, Master's, M.Phil, and Doctoral.
7. QEC is responsible to develop program specifications. These are standards set of information clarifying what knowledge,

understanding, skills and other attributes a student will have developed on successfully completing a specific program.

8. QEC is responsible to develop quality assurance process and methods of evaluation to affirm that the quality of provision and the standard of awards are maintained that foster curriculum, subjects and staff development, together with research and other scholarly activities.
9. QEC is responsible to ensure that the university's quality assurance procedures are designed to fit in with the arrangements in place nationally, for maintaining and improving the quality of Higher Education.
10. QEC is responsible to develop procedure for the following:
 - Approval of new programs
 - Annual monitoring and evaluation including program monitoring, faculty monitoring, and student perceptions.
 - Departmental review.
 - Student feedback.
 - Employer feed back.
 - Quality assurance of Master's, M.phil and Ph.D degree Programs.
 - Subject review.
 - Institutional assessment
 - Program specifications.
 - Qualification framework.

ACCREDITATION COUNCILS

The goal of accreditation is to ensure that education provided by institutions of higher education meets acceptable levels of quality.

Accreditation in higher education is a process of external quality review to scrutinize universities, and educational programs for quality assurance and quality improvement. In Pakistan, accreditation is carried out through regulatory body such as PEC, NBEAC and Computing Council etc. designed for this specific purpose. CUST is accredited through these bodies and Higher Education Commission of Pakistan.

The Accreditation Councils are serving the purpose of ensuring quality of the programs offered at institutional level. There are independent professional councils while other relevant councils have been established under Higher Education Commission.

According to the Powers and Functions of the Commission as stated in Ordinance No. LIII of 2002, Para 10, Clause e “the Higher Education Commission may set up national or regional evaluation councils or authorize any existing council or similar body to carry out accreditation of Institutions including their departments, facilities and disciplines by giving them appropriate ratings. The Commission shall help build capacity of existing councils or bodies in order to enhance the reliability of the evaluation carried out by them.”

Accreditation Councils Established by HEC:

1. National Computing Education Accreditation Council (NCEAC)
2. National Business Education Accreditation Council (NBEAC)

Important factors in realizing a successful career is choosing a reputable university that has gone through the accreditation process and as such is more likely to offer degrees that employers and recruiters recognize. Companies want to know that you have a quality education and that you will have something to bring to the table when you join their team. For this purpose, Accreditation enables companies to filter those individuals, who have obtained a degree from an accredited institution, from those who have not. The accreditation process also offers students a better chance of having their credits transferred to other reputable institutions should they decide to obtain a graduate or doctoral level education.

2. Self Assessment Report Preparation

Higher Education Commission, Pakistan Engineering Council and other accreditation bodies require Self-Assessment Report during Audit. The Quality Enhancement Cell of the university decided to prepare SAR for Fall 2015 for all the degree programs offered in CUST, Islamabad. Self-assessment Report documentation of Higher education Commission was decided to be used as reference. Quality Enhancement Cell tried to make this tiresome task easier by dividing all criterions of Self Assessment Report (SAR) into smaller milestones and released a calendar for the accomplishment of these milestones. This document comprises Eight criteria including: Criterion 1: program Mission, Objectives and Outcomes, Criterion 2: Curriculum Design and Organization, Criterion 3: Laboratories and Computing Facilities, Criterion 4:

Student Support and Advising, Criterion 5: Process Control, Criterion 6: Faculty, Criterion 7: Institutional Facilities, Criterion 8: Institutional Support. The procedure started with launching a training workshop by the VC Prof. Dr. Mansoor Ahmed and Prof Dr. Imtiaz Taj to make faculty members familiar with Program Educational Objectives (PEOs), Program Learning Outcomes (PLOs), Key Performance Indicators (KPIs) and evaluation criteria based on Course Learning Objectives (CLOs). Departments were advised by Registrar to nominate Departmental Program Teams (DPT) comprising HoD, QEC member and one or two faculty members to prepare the SAR document and get it approved by QEC through QEC member as per schedule launched by QEC. In this regard Criterion 1 of QEC was launched on September 28, 2015 and approved by QEC committee on October 12, 2015. General procedure is to launch the criterion in QEC meeting to be submitted in fifteen days. The same criterion was approved after discussion in subsequent QEC meeting. As per plan QEC will be able to produce Consolidated SAR document by the end Spring Semester 2016.

3. Outcome Based Education (OBE)

OBE is a new learning philosophy which is “student centered” and focuses on measuring students performance empirically through outcomes that are clear measureable learning results such as knowledge, skills, values and behaviors. These outcomes, which a learner has to demonstrate, are the end points of significant learning experiences. Outcomes follow a hierarchy starting from the University Level where the mission and vision statements are defined, which become the attributes expected from all graduates. At program level, PEOs i.e. program educational objectives describe what graduates are expected to attain within three to five years after graduation. Similarly PLOs i.e. program learning objective describe what students know and can do after graduation. Ultimately at course level, CLOs i.e. course learning objectives describe what the students know and can demonstrate at the end of each course.

These objectives, which are shown as outcomes, are the key elements in the designing and delivering curriculum course. To achieve the objectives, of teaching methodology, learning activities, topics and assessment tools must be aligned with the outcomes. At the end of the course or program, an assessment must be done to determine whether the outcomes

were achieved or not. The purpose of assessment is to provide a continuous process of planning, measuring, analyzing results, and using the results to make informed decision that, preferably, lead to improvements. As Capital University of Science and Technology is moving from Content Based Learning (CBL) to Outcome Based Education (OBE), hence in this phase faculty is redefining course syllabi as per accordance with OBE.

4. Approval of PLOs & CLOs

As a first step towards Outcome Based Education, all Faculties (Faculty of Management, Faculty of



Computing and Faculty of Engineering) were advised to make Program Educational Objectives and Program Learning Outcomes of all the offered degree programs. The SAR criterion 1, as per template of HEC, was launched on September 28, 2015. In 10th meeting of QEC held on October 12, 2015, QEC committee approved the proposed PEOs and PLOs for each program. In the second phase CLOs of the courses offered in Fall 2015 were proposed in the 11th meeting of QEC held on October 26, 2015, whereby QEC committee approved the CLOs and their mapping with PLOs and PEOs.

5. PEC Visit to Mechanical Engineering Department

A team of experts from Pakistan Engineering Council (PEC) visited Capital University of Science and Technology on August 07-08, 2015 for accreditation purposes of BS Mechanical Engineering Program. The evaluation team comprised around fifteen experts,

with diverse backgrounds from both academia and industry and was headed by Dr. Muhammad Babar



Saeed, CAE, NUST Risalpur and Dr. S. Kamran Afaq, HITEC University, Taxila. Welcome note was given by Dr. M. Mansoor Ahmed, VC of Capital University of Science and Technology in which he also briefed the team about the infrastructure, various academic programs and facilities available in university. Comprehensive presentation was given to the PEC team by Dr. Amir Qayyum, Dean Faculty of Engineering, CUST regarding academic programs, teaching methodology, faculty, students, R&D activities, quality assurance, and student support program. The accreditation team also visited



labs, class rooms, libraries, cafeteria, and other facilities available in the university. The evaluators highly appreciated the state of the art infrastructure and quality of education being maintained by the University.

HEC 2-days workshop for the preparation of Self-Assessment Report

QAA HEC, conducted a 2-day workshop for the newly established QECs (Public & Private) on November 19-20, 2015 at Hotel Grand Regency Islamabad. The objective of the workshop was to impart knowledge to Directors/ Asst Directors/Data Analyst of QECs on preparation of Self-Assessment Report (SAR) and how to enter data in the prescribed forms of QAA. The title of workshop was “Preparation of Self-Assessment & Yearly Progress Report”. Prof. Arif Vaseer, Director QEC and Dr. M. Ishfaq Khan, Assistant Professor represented CUST in this two days workshop.



Quality Assurance Committee CUST



Group photo of Quality Assurance Committee with Vice Chancellor CUST.

Capital University of Science and Technology
Off Kaak Pul, Sihala Road, Zone-V, Islamabad
UAN: 111-87-87-87
<http://www.cust.edu.pk>