

QEC

NEWSLETTER



Capital University
of Science and Technology
Islamabad

Spring 2025

QEC at A Glance

PSG-23 HEC QAA Framework

Surveys

Professional Development Center Workshops

CUST Insights (Interviews)



cust.edu.pk








qec@cust.edu.pk



Expressway, Kahuta Road, Islamabad



Table of Contents

 QEC at A Glance	1
 PSG-23 HEC QAA Framework	1
Institutional Quality Circle (IQC)	1
CUST Quality Policy	2
Review on Institutional Performance Evaluation (RIPE) – Institutional Performance Report (IPR)	2
Self-Assessment Reports and Assessment Team Meetings	3
Self-Post Graduate Program Review (PGPR) 2024-2025	3
 Surveys	3
 Professional Development Center (PDC) Workshops	5
 CUST Insights (Interviews)	9
Prof. Dr. Nadia Shamshad (HoD/Pharmacy)	9
Dr. Muhammad Usman Farooqi (Assistant Professor/Civil Engineering)	11
Ms. Sadaf Adalat (Senior Lecturer/Accounting and Finance)	13
Miss Aasia (Alumni)	14

Patron

Prof. Dr. Muhammad Mansoor Ahmed

Editors

Mr. Fida Hussain (Director, QEC)

Ms. Areej Ashfaq (Research Associate, QEC)

Graphic Designer

Taaruf Ullah Khaweri

QEC at A Glance

The Quality Enhancement Cell (QEC) at the Capital University of Science and Technology (CUST) was established with a mission to systematically improve, maintain, and monitor the standards of higher education across the institution. The core objective of QEC is to ensure that the university's academic and administrative functions align with national priorities and international benchmarks, thereby contributing to the socio-economic advancement of society at large. QEC plays a pivotal role in supporting the university's strategic goals by facilitating continuous improvement in teaching, learning, and research. It ensures quality compliance through various institutional and academic mechanisms such as program accreditations, Program Review for Effectiveness and Enhancement (PREE) – Self-Assessment Reports (SARs), Postgraduate Program Review (PGPR) for MS/MPhil and Ph.D. programs, and the Review on Institutional Performance Evaluation (RIPE) – Institutional Performance Report (IPR) Document. Additionally, QEC collects and analyzes feedback from students and faculty members in accordance with the newly implemented Pakistan Precepts, Standards and Guidelines (PSG-2023) to identify performance gaps and recommend corrective measures.

By promoting a strong culture of quality, QEC aims to foster an environment where faculty members are encouraged to refine their teaching methodologies and where students are motivated to participate in the learning process actively. The university has developed and implemented a comprehensive automated feedback system, which collects input from both internal (students, faculty) and external stakeholders (industry, alumni) to enhance curriculum design, teaching effectiveness, and overall academic experience. To strengthen faculty competencies, QEC designs and organizes professional development activities through the Professional Development Center (PDC). These initiatives are carefully planned after obtaining structured input from departmental heads and faculty members to ensure relevance and effectiveness in enhancing teaching and research capabilities.

CUST remains committed to adopting global best practices in higher education, as directed by national and international regulatory bodies. In this regard, all engineering programs at CUST have successfully transitioned to an Outcome-Based Education (OBE) framework for teaching, learning, and assessment. This strategic shift not only equips students with essential knowledge and practical skills but also significantly enhances their employability in both domestic and international markets. Plans are already underway to extend the OBE model to non-engineering programs to ensure a uniform standard

of academic excellence across the university. Guided by the visionary leadership of the Honorable Vice Chancellor, QEC remains steadfast in its commitment to elevate CUST into a center of academic excellence. Through the adoption of rigorous quality assurance frameworks and evidence-based policies, QEC will continue to promote excellence in higher education, both nationally and internationally.

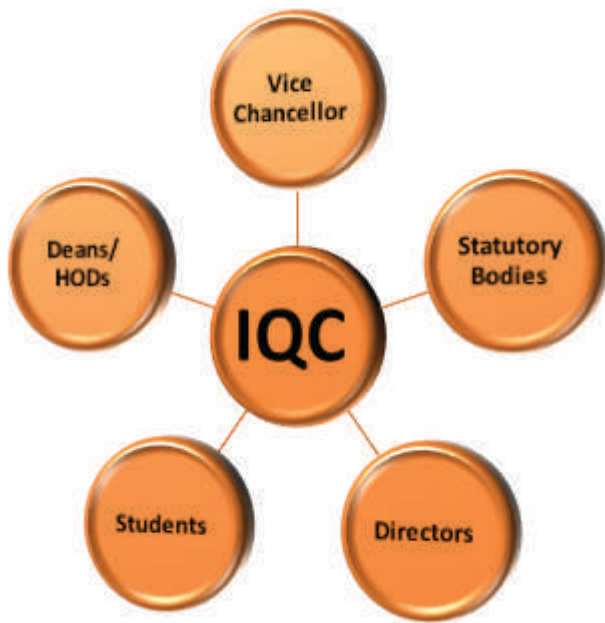
PSG-23 HEC QAA Framework

Capital University of Science and Technology, Islamabad (CUST) has adopted the "Pakistan Precepts, Standards, and Guidelines for Quality Assurance in Higher Education (PSG-2023)" policy developed by the Higher Education Commission of Pakistan in collaboration with QAA UK. Under this framework, CUST aligns its quality assurance processes with internationally recognized standards to promote continuous improvement, transparency, accountability, and independent thinking across the institution. The university actively engages students, faculty, administrators, and accreditation bodies in quality assurance efforts at both the program and institutional levels. As per PSG-2023, the establishment of IQAE and IQC forums, headed by the university Vice Chancellor, is considered to be the focal point for planning and implementation of all quality assurance policies and practices as per HEC guidelines. Being an innovative internal quality intervention, these forums are considered to facilitate the development and effective delivery of internal and external quality practices within HEIs. PSG-2023's Precepts, Standards, and Guidelines are integrated into CUST's internal and external quality assurance mechanisms through three key processes: REQAAB (Reviewing Effectiveness of Quality Assurance & Accreditation), RIPE (Review of Institutional Performance and Enhancement), and PREE (Program Review for Effectiveness and Enhancement). These processes ensure that expected outcomes, suggestive evidence, and guidelines under each standard are effectively executed, fostering a culture of continuous quality enhancement throughout the university. Furthermore, CUST's Quality Policy document, prepared in accordance with the HEC's PSG-2023, acts as a key instrument of this framework, emphasizing excellence in higher education and fostering a culture of quality, transparency, accountability, and continuous improvement.

Institutional Quality Circle (IQC)

In adherence to its commitment to implement the PSG-2023 QA Framework, CUST has established the Institutional Quality Circle (IQC), a high-level institutional quality policy forum. Chaired by

the Vice Chancellor, the forum comprises senior administrative officials, including Deans, Heads of Departments, Registrar, Controller, Director of Finance, and two Student Representatives. This forum is instrumental in maintaining and enhancing External Quality Assessment (EQA) and Internal Quality Assessment (IQA) processes, thereby fostering a robust quality ecosystem within the institution. The committee convenes at least quarterly to monitor quality indicators, ensure policy implementation, and drive continuous improvement. The Quality Enhancement Cell (QEC) at CUST will facilitate institutional planning, coordination, and follow-up of self-assessment activities through the IQC. The second meeting of IQC is planned in June, 2025.



Institutional Quality Circle (IQC) members

CUST Quality Policy

In a strategic move to enhance academic and administrative excellence, Capital University of Science and Technology (CUST) has developed a comprehensive Quality Policy aligned with the PSG-2023 Quality Assurance (QA) Framework. This initiative began with the first Institutional Quality Circle (IQC) meeting, where it was resolved to base CUST's Quality Policy on national standards and best practices in QA. This milestone marks a significant step in strengthening the university's quality assurance mechanisms and demonstrates a clear commitment to continuous improvement.

A dedicated committee, consisting of distinguished faculty members including Prof. Dr. Ishtiaq Hassan, Prof. Dr. Amir Qayyum, Prof. Dr. Umar Farooq Ahmed, and Dr. Maria Mashkoor, was formed to lead this important initiative. Over the course

of four detailed meetings, the committee reviewed existing documents and engaged in thoughtful discussions to ensure that the policy would be holistic and inclusive. Inputs from the CUST Academic Policy, the Student Engagement Policy, and the PSG-2023 principles were carefully integrated, ensuring a robust and well-aligned Quality Policy Framework.

The final draft of the Quality Policy Framework, prepared by the Quality Enhancement Cell (QEC) with valuable contributions from the committee, reflects the university's commitment to high standards in quality assurance. The document is now submitted for formal approval, along with recommendations for implementation across the university. Regular reviews are also proposed to ensure the policy remains relevant and effective, guiding CUST's pursuit of excellence in higher education.

Review on Institutional Performance Evaluation (RIPE) – Institutional Performance Report (IPR)

The Review of Institutional Performance and Enhancement (RIPE) is a strategic initiative launched under PSG-2023 to assess and strengthen the university's effectiveness in achieving its goals. Spearheaded by the Quality Enhancement Cell (QEC), the RIPE process is designed to identify institutional strengths, highlight areas for improvement, and provide a foundation for informed decision-making. A significant milestone in this process was the development of the RIPE Manual and detailed process flowcharts, which outline the standards, procedures, and evaluation criteria. These tools offer a clear and consistent framework for implementation across departments and ensure alignment with the university's strategic vision.

To facilitate a comprehensive assessment, the Vice Chancellor has distributed 16 performance standards to the relevant offices and personnel. These standards cover key domains such as academic quality, governance, research, student support, and administrative efficiency. Regular meetings organized by the QEC have supported the implementation process, providing opportunities for departments to clarify procedures, address concerns, and share best practices. This collaborative approach ensures that all stakeholders are engaged and committed to the university's ongoing development and excellence. Currently, the RIPE process is well underway, with departments actively collecting and analyzing data against the established benchmarks. This critical phase involves evaluating institutional policies and practices, engaging stakeholders, and identifying actionable insights for enhancement. The outcomes of RIPE will guide strategic planning, resource allocation, and quality improvement initiatives, fostering a culture of accountability

and continuous progress. As we move forward, the university remains committed to using the RIPE findings to strengthen its operations and deliver greater value to students, staff, and the wider academic community.

Self-Assessment Reports and Assessment Team Meetings

Self-assessment of all the academic programs is important for ensuring the quality of the academic programs of the university. It provides feedback to the university departments, faculty, and university administration to prepare the required action plan. The purpose of the self-assessment exercise is to assess the quality of academic programs as per set standards, which enables the promotion of students' learning, verification and improvement of academic programs, and ensures institutional objectives and goals. Relevant documentation/ data of programs were gathered against eight set standards and thirty-one attributes through the Self-Assessment process, reviewed critically, and suggested important remedial action/steps for future improvement of the program. In adherence to the PSG-2023 guidelines, significant progress has been made in the preparation and review of Self-Assessment Reports (SARs) for programs entering their third cycle. This initiative is a crucial component of the quality assurance process, aimed at evaluating program effectiveness and identifying areas for improvement. A pivotal step in this process was the development of the PREE Manual, complete with detailed flowcharts. This manual serves as a comprehensive guide for Program Review and Evaluation (PREE) teams, outlining the procedures and criteria for conducting self-assessments. To ensure a thorough understanding and effective application of the manual, two workshops were conducted for the PREE teams. These workshops provided a platform for discussing the manual's contents, clarifying any ambiguities, and equipping team members with the necessary skills to prepare high-quality SARs. In line with the requirements, 24 Self-Assessment Reports have been prepared by the respective departments for programs undergoing their third-cycle evaluation. These reports are the culmination of meticulous self-evaluation processes, reflecting the departments' commitment to quality assurance and continuous improvement. Following the preparation of SARs, Assessment Teams (ATs) were approved by the Vice Chancellor. A total of 24 AT meetings were conducted to review the SARs, providing constructive feedback and recommendations for enhancement. Executive summaries of these meetings were shared with the relevant departments, highlighting key findings and suggested areas for improvement.

Self-Post Graduate Program Review (PGPR) 2024-2025

Quality Enhancement Cell (QEC) at Capital University of Science & Technology (CUST) has successfully conducted Self Review from January 31st, 2023, and February 1st, 2024 and from February 17th, 2025, to February 18th, 2025, in 2025 of all its MS and PhD Programs.

The Panel reviewed the available data/ documents prepared by QEC as per HEC guidelines, interacted with MS and Ph.D. faculty and scholars, and visited the research and academic facilities at the campus. The panel also interacted with the Deans and HoDs and appreciated the efforts towards the assurance of quality education through regular Program Reviews/Audits. The review reports were duly furnished, comprising findings and recommendations for future improvement of academic programs. The panels found that almost all documents provided by QEC were in line with HEC predefined standards, and the university is committed to maintaining the quality standards in true spirit.



Self PGPR Review Panel 2025

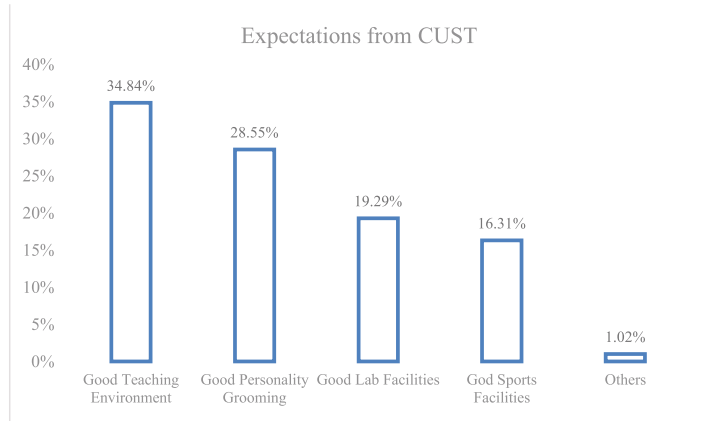
Surveys

QEC received regular feedback through different surveys (Freshman, Course & Teacher evaluation, Faculty Satisfaction level, Exit, Alumni, and Employer), engaging concerned Stakeholders periodically on a regular basis regarding the quality of academic programs, faculty satisfaction level, and course & teacher evaluation. For the years 2024-2025, key findings and recommendations made on the basis of these survey results were communicated to the university's competent authority before being shared with concerned university offices and departments. All concerned department submit their implementation plan, including proposed remedial action against each recommendation in the form of an action taken report with a stipulated timeline for inclusion in the yearly progress report.

Freshman Survey for Fall 2024

Quality Enhancement Cell (QEC) at Capital University of Science and Technology (CUST) conducted a survey of new intake of students to get their feedback regarding their background, expectations from the university, and their experience during the entire admission process.

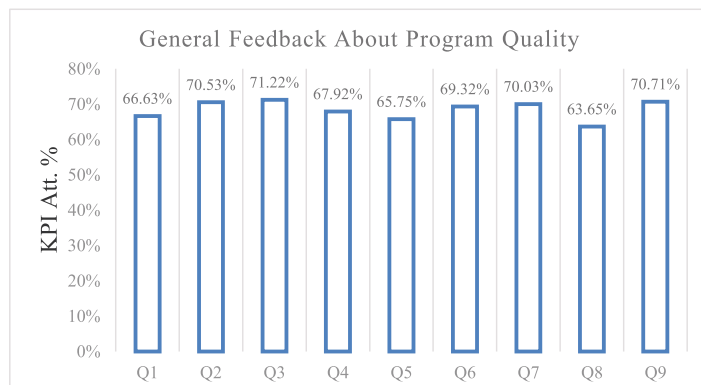
A total of 1040 students took admission in various undergraduate programs offered at Capital University of Science and Technology (CUST), out of which 710 students gave their feedback in the



Freshman Survey. Statistical analysis of survey data reflects that a good teaching environment and good personality grooming are two important expectations of students from the university.

Exit Survey for Fall 2024

The Exit Survey of Fall-2024 was conducted in order to obtain feedback from graduated students regarding the effectiveness of the PLOs program quality, including course contents, learning environment, teaching methodology, laboratory facilities, and teacher competencies. Graduate students from the Faculty of Computing, the Faculty of Management and Social Sciences,



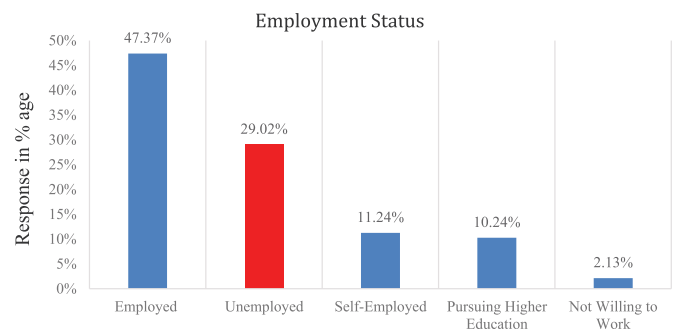
the Faculty of Health and Life Sciences, and the Faculty of Pharmacy participated and gave their feedback. Survey data depicts responses of graduating students against set attributes,

representing four areas pertaining to the structure and quality, comprising evaluation of PLOs, program quality, strength of the program, and suggestions for improvement of each specific program.

Empirical findings provide insight that the overall majority of the students showed satisfaction with the teaching faculty, lab facilities, and personal grooming.

Alumni Survey for 2024

Quality Enhancement Cell (QEC) at Capital University of Science and Technology (CUST) conducted the alumni survey in order to obtain the feedback of pass-out graduates regarding different predefined attributes of Program Educational Objectives (PEOs) of the academic program.



A total of 703 CUST Alumni graduated during Fall 2023 and Spring 2024 from 27 academic programs participated in the survey and provided their feedback on different areas related to employment status, working within degree domain, leading any group/team, requirement of professional development activities, being part of any professional society, involvement in any community/social activities and quality of education.

Employer Survey for 2024

An employer survey at Capital University of Science and Technology (CUST) was conducted to obtain the feedback of employers about how well our alumni are meeting the needs and expectations of their employers. The feedback received from employers will help the institution to determine the program's effectiveness and to suggest measures to improve its structure in order to equip its graduates as per today's market requirements. In order to obtain maximum information about alumni performance at their workplace, the survey instrument acquires the information related to four areas, which are graduates' knowledge and professional skills, self-learning, values, and interpersonal skills. The survey was distributed to a large number of employers based on data collected from the

CUST alumni database.

190 employers responded to the 2024 Employer survey. The data on employers includes a mix of public and private sector companies, institutions, and organizations. Employers have provided positive feedback indicating that CUST graduates



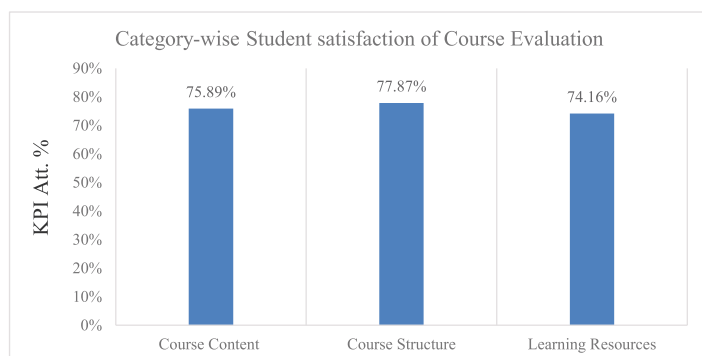
possess the necessary skills to compete effectively, offer solutions to market challenges, and have developed transferable skills, align as per job market needs.

Course and Teacher Evaluation Report

The QEC at CUST conducts evaluation of faculty and courses at the end of each semester to assess the existing teaching & learning practice and to suggest further improvement. The Course and Teacher Evaluation survey for Fall 2024 was conducted with the purpose of improving the teaching-learning process. The survey data was collected through the university portal for all offered courses on a structured instrument to assess the quality of teaching and student learning.

The program-wise survey results of six faculties depict that all 41 programs being offered under six faculties during the Fall 2024 semester received 76.94% overall satisfaction level.

The faculty evaluation survey consisted of 12 items, consisting of



twelve Quantitative and one Qualitative question. 12 quantitative items responses were collected on the five-point Likert scale. The quantitative items were divided into three sections, : the first section is about the preparation of the faculty for the

courses and classes, the second section consists of qualitative attributes related to the conduct of the teacher, and the third section is about students' utilization of IT facilities while delivering the course content. The survey also consists of one qualitative, open-ended question, which is regarding students' suggestions, recommendations, and general comments about the performance of faculty members. The survey data was qualitatively and quantitatively analyzed. The results were categorized on a set of Key Performance Indicators (KPIs) thresholds indicating individual faculty performance. The faculty members who received a satisfaction level of less than 60% were placed in the "red" Category. The survey results indicate that overall, all six faculties have received a satisfaction level of 77.50%.

Faculty Satisfaction Survey

Faculty Satisfaction Survey serves as an important tool to assess employees' level of satisfaction against set attributes, by determining their quality of task performance and delivery. Quality Enhancement Cell (QEC) at Capital University of Science and Technology (CUST) conducts faculty satisfaction survey each year with an objective to obtain faculty feedback on identified attributes, assessing faculty level of job satisfaction, identifying areas, where improvement is required and recommend certain actions which could be considered in future by the university management. The survey data results against the university governance attributes reflect that almost all faculty appeared to have a high level of motivation while working at CUST and were more satisfied with the quality of the conducive educational environment being provided.

Professional Development Center (PDC) Workshops

In order to continue development and capacity building of the faculty and staff for efficient and effective delivery of academic as well as administrative services to our students, the Professional Development Center has been established at Capital University of Science and Technology with these objectives:

- Facilitate the faculty and staff members in improving and updating their knowledge and skills, teaching methodologies and relevant innovative techniques
- Promote research activities of the faculty members by providing a conducive environment and maximum possible assistance
- Provide ample facilities and encouragement to faculty members for industrial collaborations

- Ensure skill development of individual faculty and staff members by analyzing their strengths and weaknesses

The Professional Development Centre conducts and arranges various workshops and consultative sessions for the faculty and

staff members to achieve the above-mentioned goals. This year 2024–2025 as well, PDC has arranged the following sessions and workshops:

Workshop Title	Date	Resource Person
Workshop on Continuous Quality Improvement (CQI) Cycle	May 23, 2024	Prof. Dr. Majid Ali
Understanding the World in Qualitative Way	August 15th, 2024	Dr. Muhammad Arif Saleem from International Islamic University Islamabad
Contemporary Effective Teaching Methodologies (Work Ethics & Environment)	September 25th, 2024	Dr. Maria Mashkooor
Preparation of Self-Assessment Report As per PSG- 2023 QA Framework PREE	23rd and 24th October, 2024.	Mr. Fida Hussain
Workshop on Effective Teaching Methodologies	December 19th, 2024	Prof Dr. Muhammad Sarwar (Dean Faculty of Education) Superior University Lahore
One-Day Workshop on Academic Writing	April 23, 2025	Dr. Uzma Arshad
Workshop on Effective Evaluation of SAR	May 26, 2025	Dr. Muhammad Usman Farooqi

Workshop on Continuous Quality Improvement (CQI) Cycle

The Quality Enhancement Cell (QEC) at Capital University of Science and Technology (CUST) organized a workshop titled “Workshop on Continuous Quality Improvement (CQI) Report” on May 23, 2024, for the English Department. The session, led by Prof. Dr. Majid Ali, focused on Outcome-Based Education (OBE), the CQI cycle, and aligning Program Educational Objectives (PEOs) with Program Learning Outcomes (PLOs) using KPIs. Participants gained insights into SAR assessment, collaborative program team roles, and practical implementation strategies through an interactive exercise. Prof. Dr. Majid Ali emphasized transitioning to OBE and requested participants to submit their



revised documents for evaluation. The workshop, attended by faculty members, reinforced CUST's commitment to academic excellence, with special thanks to Prof. Dr. Umer Farooq for his support and Prof. Dr. Majid Ali for his expert guidance.

Workshop on “Understanding the World in a Qualitative Way”

The Professional Development Center at Capital University of Science and Technology (CUST) organized a one-day workshop titled “Understanding the World in a Qualitative Way” on August 15, 2024, for faculty members across various departments. The session, led by Dr. Muhammad Arif Saleem from the International



Islamic University Islamabad, aimed to enhance participants' understanding of qualitative research. The workshop began with the recitation of the Holy Quran, followed by a welcome address from the Director of QEC, who emphasized the importance of research in broadening human understanding. Dr. Saleem explained the core concepts of qualitative research, contrasting it with quantitative methods, and addressed five common misconceptions surrounding it, including doubts about its scientific validity and complexity. He engaged participants in an interactive discussion to challenge these myths and encouraged

a deeper exploration of the methodology. The event concluded with certificate distribution, a souvenir presentation to the resource person, and expressions of gratitude from the Director QEC to all attendees and contributors for making the workshop a valuable and insightful experience.

Contemporary Effective Teaching Methodologies (Work Ethics & Environment)

The Quality Enhancement Cell (Professional Development Center) of Capital University of Science and Technology (CUST) organized a one-day workshop on "Effective Teaching Methodologies" on September 25, 2024, for newly inducted faculty members from various departments including Civil Engineering, English, Accounting and Finance, Bioinformatics & Biosciences, Electrical & Computer Engineering, Psychology, and

adopted the PSG-2023 Quality Assurance Framework and established a centralized Institutional Quality Circle (IQC), chaired by the Vice Chancellor, to oversee its implementation. As



Pharmacy. The workshop, led by Dr. Maria Mashkoor, aimed to orient participants on innovative teaching strategies, work ethics, and best international practices in teaching and learning. It was conducted in two phases: the first focused on work environment and ethics, where the importance of trust, communication, workspace comfort, and work-life balance was discussed; the second introduced contemporary teaching methodologies such as flipped classrooms, project-based learning, and the integration of educational technology. Emphasis was placed on student collaboration, culturally responsive teaching, and the creation of inclusive classroom environments. The session was highly interactive, with active participation and engagement from attendees. The event concluded with the distribution of certificates and appreciation from QEC for the participants' involvement and commitment to fostering quality education.

Preparation of Self-Assessment Report As per PSG-2023 QA Framework PREE

Capital University of Science and Technology (CUST) has

part of this initiative, programs that have completed the second cycle of self-assessment are required to begin the third cycle in alignment with the Program Review and Evaluation Exercise (PREE). To support this transition, the Quality Enhancement Cell (QEC) organized a two-phase orientation session on October 23–24, 2024, titled "Preparation of Self-Assessment Report (SAR) as per PSG-2023 QA Framework." During the session, Director QEC, Mr. Fida Hussain, welcomed the nominated Program Teams (PTs) and provided an overview of the new QA framework, highlighting the revised SAR format, structure, standards, and Expected Outcome Indicators (EOIs). He addressed participants' concerns and assured full support from QEC and the university, including the provision of an Operational Manual and related resources. The session aimed to build a clear understanding among the PTs regarding the updated requirements for SAR preparation under the PSG-2023 Framework.

Workshop on Effective Teaching Methodologies

The Professional Development Center at CUST organized a one-day workshop on "Effective Teaching Methodologies" on December 19, 2024, for newly inducted faculty members from multiple departments. Led by Prof. Dr. Muhammad Sarwar, Dean of the Faculty of Education at Superior University Lahore, the workshop focused on innovative teaching strategies, quality teaching and learning concepts, and best international practices to enhance the teaching-learning process. Starting with the recitation of the Holy Quran, the session emphasized the vital role of effective classroom management in developing skilled, socially responsible graduates. Dr. Sarwar engaged participants through interactive discussions, presentations on teaching and learning as processes and products, and introduced models like the Dunning-Kruger Effect to highlight self-awareness in

learning. Group activities encouraged faculty to share insights on teaching skills, measurement of effectiveness, and the role of AI in education, fostering a collaborative learning environment.



The workshop concluded with certificate distribution and a souvenir presentation to the resource person, with the Director QEC expressing appreciation for the active participation and contributions of all attendees.

One-Day Workshop on Academic Writing

The Quality Enhancement Cell (QEC) of Capital University of Science and Technology (CUST) organized a one-day workshop on “Academic Writing” on April 23, 2025, aimed at improving

the writing skills of faculty members and researchers. Led by Dr. Uzma Arshad from the English Department, the workshop covered essential aspects such as structure, style, clarity, and



formatting of academic writing, alongside practical activities including error correction, abstract writing, and citation practices. The interactive session received positive feedback for its practical approach and the resource person's expertise, with participants recommending more hands-on workshops and extended durations to cover additional topics like writing for publication. Certificates were awarded by the Registrar, and the QEC committed to incorporating participant suggestions in future training sessions, successfully meeting its objective to enhance academic writing capabilities within the university.

Workshop on Effective Evaluation of SAR

The Professional Development Center of CUST organized a one-day workshop on “Effective Evaluation of Self-Assessment Reports (SAR)” on May 26, 2025, for faculty members from various departments to enhance their understanding of quality assurance and the PSG-23 policy, including the Program Review for Effectiveness and Enhancement (PREE) process. Led by Dr. Muhammad Usman Farooqi, the workshop covered key principles of SAR evaluation, the roles of Internal Quality Committees, Program Teams, and Assessment Teams, and emphasized essential skills such as teamwork and communication. Participants engaged in group activities to evaluate PREE Rubric standards, fostering rich discussions and practical insights. Dr. Farooqi highlighted the importance of evidence-based evaluations, alignment of objectives and assessments, and continuous quality improvement in SARs. The interactive session concluded with certificate distribution and appreciation from the Director QEC for the active participation of attendees.



CUST Insights (Interviews)

Prof. Dr. Nadia Shamshad

(HoD/Pharmacy)

Briefly introduce yourself and your role at CUST.

I am Dr. Nadia Shamshad Malik, Professor and Head of the Department of Pharmaceutics at the Faculty of Pharmacy, Capital University of Science and Technology (CUST), Islamabad. With over 18 years of academic and research experience, my work revolves around polymer-based drug delivery systems, nanotechnology, and cosmeceuticals. At Capital University of Science and Technology (CUST), Islamabad, I serve as a member of several important committees that contribute to the university's academic governance and operations. These include the Board of Studies (BOS), Board of Faculty (BOF), Academic Council, and Harassment Committee. These committees play vital roles in curriculum development, academic policymaking, faculty affairs, and maintaining a safe campus environment. My participation in these committees involves regular attendance at meetings, reviewing relevant materials, and providing input on relevant academic and administrative matters. Through this committee work, I support the university's mission of



maintaining high educational standards and fostering a positive learning environment for students and faculty alike.

What steps has your department taken to improve the quality of its academic programs?

To improve the quality of our academic programs, our department has adopted a multifaceted approach. As the healthcare profession evolves, we regularly revise and integrate the curriculum to incorporate the

latest advancements in pharmacy, ensuring alignment with national and international standards. Outcome-Based Education (OBE) is fully implemented, with clearly defined Course Learning Outcomes (CLOs), their alignment with Program Learning Outcomes (PLOs), and robust assessment strategies. Practical training has been strengthened through enhanced laboratory infrastructure equipped with modern instrumentation. We actively encourage faculty to participate in conferences, workshops, and training sessions for professional growth. Students are engaged in industrial internships and research projects in collaboration with pharmaceutical companies and hospitals, bridging the gap between academic learning and real-world practice. One initiative I'm especially proud of is the Pharmacy Career Expo, where students showcase their research projects in pharmaceutical technology, participate in mock interviews, and submit their CVs. What makes it truly special is how it brings the entire pharmacy ecosystem together—academics, regulators, and industry professionals—giving our students a real taste of the challenges and opportunities awaiting them after graduation.

How do you plan to further improve and enhance the quality of these programs w.r.t prospects and aspirations?

Looking ahead, we are committed to continuously enhancing the quality and relevance of our academic programs. Our approach is grounded in practical implementation, stakeholder feedback, and strategic collaborations. We are strengthening our partnerships, such as the MoU with Fauji Foundation Hospital (FFH) Rawalpindi, to provide students with structured clinical training, exposure to real-time hospital pharmacy practices, and collaborative research opportunities in patient care and pharmacotherapy. In the industrial domain, our ongoing collaborations with Shaigan Pharmaceuticals, Focus & Rulz Pharmaceuticals (Pvt.) Ltd and Bio-Labs (Pvt) Ltd, Islamabad, Pakistan, are enabling regular industrial tours, guest lectures, and hands-on exposure to GMP-compliant manufacturing and quality control processes. These visits are complemented by career counseling and pathways for securing internships and job placements. These sessions are supplemented with guidance on international seminar registrations, conferences, and workshops, enabling our students and faculty to stay updated with advancements and build international academic networks. Our internship collaboration with Shaukat Khanum Memorial Cancer Hospital offers valuable exposure to oncology pharmacy, clinical operations, and multidisciplinary patient care, providing students with an enriched learning experience in a high-impact environment. We also conduct career pathway training sessions and admission guidance seminars to help students navigate opportunities for higher education abroad. This includes step-by-step mentoring on entrance exams, scholarship applications, and program selection aligned with individual aspirations. Finally, we are actively fostering an entrepreneurial mindset by promoting opportunities in community pharmacy, encouraging applied research, and engaging with alumni and industry mentors to

translate academic ideas into viable, real-world solutions.

What role does QEC play in improving the quality of education at CUST?

The Quality Enhancement Cell (QEC) at CUST plays a pivotal role in assuring and uplifting academic standards. It provides structured frameworks for self-assessment, performance evaluation, and program accreditation. QEC regularly organizes faculty development workshops, audits program implementation, and monitors the progress of departments towards achieving quality benchmarks. It fosters a culture of continuous quality improvement by encouraging data-driven decisions and evidence-based teaching practices. The QEC's coordination with academic departments ensures compliance with national regulatory standards such as those outlined by HEC and the Pharmacy Council of Pakistan (PCP).

The Quality Enhancement Cell (QEC) at CUST plays a central role in strengthening the academic quality and institutional effectiveness of our programs. It works closely with departments to ensure the implementation of quality assurance policies and fosters a culture of continuous improvement through systematic planning, monitoring, and evaluation. QEC facilitates the self-assessment process for academic programs by guiding departments in developing outcome-based education frameworks, mapping course learning outcomes, and compiling Self-Assessment Reports (SARs). These activities help identify gaps and provide actionable feedback for enhancement. Moreover, QEC actively organizes faculty development workshops and training sessions focused on teaching methodologies, assessment design, and curriculum alignment with program learning outcomes. These initiatives help faculty adopt evidence-based teaching practices and meet national and international academic standards. Through regular academic audits, peer reviews, and student feedback mechanisms, QEC ensures that departments remain aligned with the quality

standards set by regulatory bodies. Importantly, QEC collaborates with academic leadership to promote data-driven decision-making, thereby contributing to the strategic planning and academic vision of the university. Its role is not just evaluative but developmental, enabling departments to evolve in response to stakeholder needs and emerging educational trends.

What is your role as Head of the Department in improving the quality of faculty and academic programs?

As the Head of the Pharmaceuticals Department, I am committed to upholding and advancing academic standards in alignment with CUST's vision for excellence in education. My role involves both strategic planning and active engagement in initiatives aimed at enhancing faculty performance and academic program quality. We regularly review and update the curriculum to ensure it remains contemporary, industry-relevant, and aligned with national and international benchmarks. This includes integrating emerging technologies and incorporating feedback from students, alumni, and industry stakeholders. Recognizing the pivotal role of faculty, we place strong emphasis on continuous professional development. We organize and encourage participation in training sessions and workshops, often in collaboration with the Quality Enhancement Cell (QEC) focused on effective teaching methodologies, innovative assessment strategies, and the use of virtual learning tools. New faculty members are guided through structured orientation and peer support systems to ensure a smooth academic transition. Together with the QEC, we implement robust quality assurance mechanisms, including self-assessment reports, peer evaluations, and structured student feedback systems. These practices ensure compliance with regulatory standards set by the Higher Education Commission (HEC) and the Pharmacy Council of Pakistan (PCP). Through internships, research projects, and community outreach, we aim to equip students with practical skills and a strong sense of social responsibility.



CUST Insights (Interviews)

Dr. Muhammad Usman Farooqi

(Assistant Professor/Civil Engineering)

Briefly introduce yourself and your role at CUST.

I am Dr. Muhammad Usman Farooqi, currently serving as Assistant Professor in the Department of Civil Engineering at Capital University of Science and Technology (CUST), Islamabad, since 2017. With over a decade of diverse experience in teaching, research, and industry, I have been actively involved in the academic and administrative development of the department. My research focuses on sustainable construction materials, especially natural fiber-reinforced concrete and recycled waste utilization. I have published more than 10 research articles in renowned international journals, with a cumulative impact factor exceeding 50. In addition to my academic and research contributions, I also lead campus-wide media and outreach initiatives as the FM In-charge of Voice of Capital FM 97.6 and Convener of the Capital Media Group. I supervise media and marketing activities at the university, supporting branding, student engagement, and institutional visibility. I am also a member of the internal quality assurance cell, where I contribute to improving institutional quality and academic standards..

What steps has your department taken to improve the quality of its academic programs?

The Department of Civil Engineering at CUST has taken several proactive steps to improve the quality of its academic programs. These include aligning the curriculum with the Outcome-Based Education (OBE) framework as prescribed by the Pakistan Engineering Council (PEC) and Higher Education Commission (HEC), incorporating industry-relevant courses, and regularly updating course content through curriculum review committees. The Department has adopted a structured and comprehensive Continuous Quality Improvement (CQI) system based on OBE principles. This system includes ongoing assessment of Course Learning Outcomes (CLOs), Program Learning Outcomes (PLOs), and Program Educational Objectives (PEOs) through both direct and indirect methods. Curriculum development is data-driven and reviewed at both course and program levels through feedback from students, faculty, alumni, and industry. Course Review Reports and exit surveys inform necessary revisions, which are implemented via departmental committees and academic boards. State-of-the-art laboratories, practical training, and industry-relevant tools ensure our students receive hands-on experience. The department also encourages research-based learning and frequently updates course content to stay aligned with emerging technologies and professional practices. Together, these efforts ensure that our academic programs remain rigorous, relevant, and responsive to the evolving needs of the engineering profession.

How do you participate in further improving and enhancing the quality of engineering programs with future prospects and aspirations?

My involvement in quality enhancement is both strategic and instructional. I actively collaborate with the QEC to align our engineering programs with the evolving expectations of accrediting bodies, industry experts, and international best practices. This includes contributing to periodic curriculum reviews, self-assessment processes, and implementation of CQI mechanisms based on feedback from alumni, employers, and students. I play a key role in course development and delivery by



integrating sustainability-driven innovations and modern pedagogical approaches that reflect global engineering education trends. Through my role in the Curriculum Review Committee and Board of Studies, I help ensure that our curriculum remains relevant, outcome-focused, and responsive to the rapidly changing needs of the profession. Additionally, I supervise undergraduate and postgraduate research in sustainable construction materials and mentor students in interdisciplinary projects, ensuring they develop both technical competencies and soft skills. I also stay engaged with industrial partners and professional bodies to incorporate real-world perspectives into teaching and program design, ultimately preparing our graduates for future challenges in a globally competitive environment.

What role does QEC play in improving the quality of engineering academic programs at CUST?

The QEC at CUST plays a central role in ensuring that engineering academic programs meet and exceed national and international quality standards. It provides strategic oversight and operational support for the implementation of OBE and CQI frameworks across departments. QEC facilitates regular program assessments through structured SARs,

curriculum reviews, alumni and employer surveys, and exit surveys. These mechanisms generate actionable insights that guide departments in revising learning outcomes, updating curricula, and enhancing teaching and assessment methods. The cell also ensures compliance with the evolving requirements of accrediting bodies such as PEC and HEC, and coordinates with departments to prepare for accreditation and academic audits. In my experience as an actively engaged faculty member, I have found QEC to be a highly collaborative and responsive unit that works effectively to ensure our engineering programs remain aligned with industry expectations, accreditation requirements, and international quality standards. QEC's collaborative approach ensures that feedback from all stakeholders, including students, faculty, alumni, and employers, is systematically integrated into the academic development process, ultimately driving academic excellence and graduate readiness for a competitive global landscape.

Which innovative steps have been taken by the FOHLS in promoting the quality of their graduates?

The Faculty of Health and Life Sciences (FOHLS) has introduced a set of innovative initiatives to improve the quality of its graduates. These

measures aim to bridge the gap between theory and practice, equipping students with the skills necessary for successful careers. Key initiatives include curriculum modernization. FOHLS regularly update its programs to incorporate the latest advancements and industry trends in life sciences. FOHLS also promotes interdisciplinary learning, enabling students to explore courses across various fields and to cultivate a comprehensive understanding for application of these courses in this domain. Through partnerships with healthcare organizations, research institutions, and industries, FOHLS provides internships, industry placements, and real-world project opportunities, offering invaluable hands-on experience. Research integration is central to the curriculum, encouraging students to participate in faculty-led research projects and develop crucial skills in critical thinking, problem-solving, and innovation. The faculty has also established international collaborations, offering research opportunities to expose students to global healthcare challenges and perspectives. Additionally, skills development programs focused on communication, leadership, and teamwork are embedded in the curriculum to ensure graduates are well-rounded and career-ready. These initiatives collectively ensure that FOHLS graduates are highly competitive, possess a strong skillset, and are well-prepared to meet the evolving demands of the industry.



CUST Insights (Interviews)**Ms. Sadaf Adalat***(Senior Lecturer/Accounting and Finance)****Briefly introduce yourself and your association with CUST.***

I am currently doing a PhD (Finance) from the Capital University of Science and Technology, Islamabad. I have almost 7 years of teaching experience. I have done MS in Finance from Capital University of Science and Technology, Islamabad. I have done a BS(Hons) in Banking & Finance from the Foundation University Rawalpindi Campus. With the blessings of Allah Almighty, and prayers from my parents and teachers, enabled me to achieve Merit and High Distinction Holder certifications from the university in my BS(Hons) and MS. My academic journey here has helped me grow both personally and professionally. I also worked as an intern at the State Bank of Pakistan, and also worked as a visiting lecturer at the International Islamic University, Islamabad. My association with CUST as a student started in 2014, and I had a great learning experience as a student. I started my teaching career as a visiting lecturer from the Capital University of Science and Technology, Islamabad, in 2018, and have been contributing to academic excellence and student development.

Can you tell us about your learning experience at CUST?

Studying at CUST has been a journey of both academic and personal growth. The learning environment is intellectually stimulating, with access to experienced faculty and modern resources. I've appreciated the focus on innovation, professionalism, and ethical values, all of which are helping me prepare for the real-world challenges ahead. The faculty is highly supportive and encourages critical thinking, creativity, and research. I consider CUST to be my second home. The supportive environment, dedicated faculty, and diverse learning opportunities have made my academic journey not only educational but also personally fulfilling. Beyond academics, the seminars, workshops, and co-curricular activities have helped me develop leadership, communication, and problem-solving skills.

What are the major strengths of the program that you studied at CUST?

The Department of Management Sciences' major strength is experienced and research-active faculty who bring both academic rigor and real-world insights into the classroom. The department places a strong emphasis on research-oriented curriculum, courses are regularly updated to match industry trends, access to digital libraries, research databases, and modern learning tools supports deep academic exploration. Professional development opportunities to

attend workshops, conferences, and networking events help bridge the gap between theory and practice.

Does the program enroll, equip you with the requisite knowledge and skill set as required by the job market?

Yes, the program I enrolled in at CUST has effectively equipped me with the requisite knowledge and skill set demanded by the current job market. The curriculum was designed to balance theoretical foundations with practical applications, allowing me to develop strong analytical, managerial, and problem-solving skills. Through coursework, case



studies, presentations, and research, I gained hands-on experience in areas such as strategic management, financial accounting, financial analysis, budgeting, and data analysis. The program also encouraged the use of modern tools and technologies that are widely used in the industry, ensuring I am well-prepared to adapt to various roles in a competitive and evolving job market.

How do you plan to apply the knowledge and skills learned at CUST practically?

I plan to apply the knowledge and skills learned at CUST practically by integrating them into real-world business environments and challenges. My focus will be on translating theoretical concepts into actionable strategies in the workplace. In a professional setting, I will utilize my analytical and problem-solving skills to improve processes, enhance productivity, and support evidence-based decisions. Additionally, I intend to stay engaged in lifelong learning, attend professional workshops, and contribute to knowledge-sharing platforms to keep evolving with industry demands. Overall, my goal is to make a meaningful impact by responsibly applying what I've learned to create value for organizations

and society.

What sort of advice would you like to give to someone who intends to join CUST for his/her higher studies?

Firstly, students should be thankful to Allah Almighty, who gives them

the chance to get a professional education. My advice to someone who intends to join CUST for their higher studies is that be proactive in learning, utilize faculty support, and focus on research and critical thinking. Overall, CUST is a place where motivated students can thrive. Make the most of the resources, stay curious, and you'll walk away with a valuable education and a memorable experience.

ALUMNI'S INTERVIEWS

Miss Aasia

Briefly introduce yourself and your association with CUST.

My name is Aasia. I commenced my MS in Biosciences at Capital University of Science & Technology (CUST) in Spring 2022 and successfully completed it in 2024, earning a Gold Medal in

enhancing my understanding and skills. The culture of academic excellence and innovation encouraged me to challenge myself and grow continuously. I not only gained academic knowledge but also learned how to think critically and work on real-life research problems.



recognition of Academic Excellence. Currently, I am working as the Manager of ORIC at CUST. My association with the university has evolved from being a dedicated student, and now I am proud to contribute to the university in a professional role. CUST has played a big part in shaping my academic and career growth.

Can you tell us about your learning experience at CUST?

My academic journey at CUST was intellectually enriching and personally rewarding. The university fostered a highly supportive environment where faculty mentorship, well-equipped laboratories, and research exposure played a key role in

What are the major strengths of the program that you studied at CUST?

The MS Biosciences program at CUST is well-structured, research-oriented, and aligned with current scientific advancements. Its strengths include experienced faculty, hands-on laboratory work, and an emphasis on critical thinking and scientific writing. The interdisciplinary approach and access to research resources make it a strong and competitive academic program.

Does the program being enrolled, equipped you with the requisite knowledge and skill set as required by the job market?

Yes, the program thoroughly prepared me for professional challenges. It equipped me with in-depth subject knowledge, technical expertise, and essential soft skills such as communication, teamwork, and analytical reasoning. These competencies are highly valued in both academia and industry, and have greatly contributed to my current professional role.

How do you plan to apply the knowledge and skills learned at CUST practically?

In my current role at ORIC, I am actively applying the knowledge and skills gained during my MS studies. I work on developing research proposals, managing collaborative projects, and supporting intellectual property initiatives. My academic background provides a strong foundation for contributing effectively to research development and innovation promotion.

I also support others in learning about research and innovation.

What sort of advice would you like to give to someone who intends to join CUST for his/her higher studies?

CUST offers an excellent platform for students aiming to pursue higher education. My advice to future students is to stay focused, engage actively with faculty and peers, and take full advantage of the learning and research opportunities that CUST offers. With commitment and curiosity, your journey at CUST can open doors to both academic success and professional excellence. CUST is a great place to learn and grow, both personally and professionally.

CUST Achievements –Ranking

Rankings serve as an effective management tool to effect Strategic, Organizational, Managerial, and/or Academic change. It has become a vital resource to attract students and their families, as well as for Academics, University administrators, and Governments globally for identifying institutions for collaborations and partnerships. Moreover, the University's Ranking was the second most-researched factor by prospective international students when choosing where to study.

QEC CUST also participates in various International Rankings to present CUST's achievements and has achieved remarkable positions and scores amongst top HEIs of Pakistan. CUST entered the World University Rankings (WUR), by Times Higher Education (THE), previous year for the first time and gained recognition

worldwide as it was the 1 of the only 6 private universities across Pakistan to have gained position in the score band of 401–500 for its Physical Sciences programs and 601–800 for its Engineering Programs. Over all it ranked 4th amongst all the universities of Pakistan. This is a big achievement for CUST and will help maintain and build its Institutional Position and Reputation more effectively. Moreover, CUST entered the Young University Rankings for the first time and was ranked 5th in all of Pakistan. This ranking particularly assesses the performance and quality of HEIs of 50 or less than 50 years of age in particular. It's a remarkable achievement to have received a score band of 201–250.

Apart from the Times Higher Education (THE) QEC CUST has also submitted data in the QS World University Rankings and is committed to participate in more international rankings to improve and enhance its standard of quality further. Capital University of Science & Technology (CUST) has achieved significant recognition in global and national rankings, solidifying its position as a leading educational institution. In 2025, according to the Times Higher Education World University Rankings 2025, CUST is placed in the 601–800 band globally and declared the top private university in Pakistan. Additionally, it ranks 501–600 in Business & Economics, 601–800 in Engineering, and an impressive 301–400 in Physical Sciences. Nationally, CUST secured 5th position among Pakistani universities in the UI Green Metric Ranking 2024 and was placed 8th in the 251–300 band by the QS Asia Ranking 2023–24. Furthermore, it earned 5th position in the 201–250 band in the Times Higher Education Young University Rankings 2023–24, further highlighting its academic excellence and commitment to sustainable development.

THE Rankings

QS Rankings

UI GreenMetrics



Capital University of Science and Technology
Off Kaak Pul, Sihala Road, Zone-V, Islamabad
UAN: 111-555-666
<http://www.cust.edu.pk>