

Quality Enhancement Cell (QEC)

FAST-NUCES is determined to manage quality assurance through its designed processes to bring continuous improvement in its teaching - learning and research. Being the final processing point of the graduates for the market, QEC designs and implements adequate quality assurance mechanisms to ensure that graduates are satisfactorily equipped with requisite skills and competencies to meet present day workforce requirements. QEC at NUCES-FAST is taking deliberate steps to bring about continual improvement in the effectiveness of the learning experience of students. In QEC, there is great emphasis on Quality Assessment and encouragement of institutional “Quality Culture”. In this regard, QEC is responsible to ensure that all the quality related policies, standards and guidelines issued by Higher Education Commission (HEC) are being implemented in true spirit.

Vision

Support the university’s vision by adapting best practices suggested by accreditation bodies while conforming with the university policies.

Mission

Adapt existing state-of-the-art higher education quality improvement strategies, while engaging with all stakeholders.

Objectives

1. Enhancing the pedagogical skills of the instructors

to achieve learning outcomes of curriculum and effectively engage with the students.

2. Provide coaching related to the processes and procedures prescribed by the accreditation bodies, to the academic staff.
3. To communicate and coordinate with all the stakeholders (students, instructors, staff, alumni, employers, subject experts, etc.) for feedback with the aim of improvement of education quality.
4. Formulate analytical reports extracted from the received feedback from the stakeholders, i.e., surveys related to infrastructure, teacher evaluation, alumni, employer etc. and provide recommendations to the statutory bodies of the university.
5. Promote automation of quality related processes to develop an effective, viable and sustainable ecosystem of quality assurance at the university.
6. Ensuring the compliance of quality assurance procedures in accordance with the guidelines provided by HEC and accreditation councils.
7. Provide assistance to academic departments to meet the expectations of accreditation bodies in terms of data gathering and reporting.
8. Tailor curricular and co-curricular activities to meet the requirements of ranking organizations.

QEC Team

Name	Designation	Campus
Dr. Muhamad Arshad Islam	Director QEC	NUCES-HQ
Ms. Maria Ibrar	Manager	Peshawar
Mr. Umair Manzoor	Deputy Manager	Islamabad
Mr. Sekandar Riaz	Deputy Manager	Chiniot Faisalabad
Ms. Urooj Leghari	Deputy Manager	Karachi
Ms. Bushra Majeed	Assistant Manager	Lahore
Ms. Warda Razzaq	Officer	Islamabad

Quality Enhancement Cell (QEC) implements internal quality assurance (IQA) mechanism of the university. QECs are established in all campuses and are run as per HEC guidelines. QEC at NUCES is constantly striving to maintain excellent scores in annual quantitative assessment of HEC. This achievement in IQA directly contributes in achieving higher accreditation status from relevant accreditation

councils, working under external quality assurance (EQA) mechanism of HEC. The recognition at both IQA and EQA clearly demonstrates FAST-NUCES efforts to burgeon quality standards of education at all levels.

Consequently, FAST-NUCES QEC introduced innovative strategies to manage more effectively the internal quality assurance processes

of the institution by providing quality academic programs and holistic teaching-learning environment to the students at undergraduate and graduate level. At FAST-NUCES we regularly conduct surveys in order to collect valuable feedback from various stakeholders including students, faculty, alumni, industry and others. These feedbacks are used to take the required measures

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for an overall improvement in the quality culture. Moreover, we give prime importance to the capacity building of our faculty, wherein, training workshops/ sessions have been organized by QEC for the faculty members and Teaching Assistants, so that they are equipped with all the necessary skills for delivering quality lectures. Further, at program level it is assured that all the undergraduate programs being offered at FAST-NUCES are accredited by the relevant regulatory authorities and the graduate programs are self-assessed to monitor the implementation of requisite policies.

Currently NUCES QEC is a member of the International Network for Quality Assurance Agencies in Higher Education (INQAAHE) and American Society for Quality (ASQ). These memberships offer ample opportunities to collaborate with the international members for benchmarking and standardization of best practices. Moreover, NUCES QEC also participates in their international events, as a significant contributor and participant.

Key Achievements

Lahore Campus

Change of Scope visit for BS - Civil Engineering was conducted on 23rd June 2023 by PEC visitation team. Self-Assessment visit of the MS Business Analytics program was held on 10th August 2023. Self-Assessment visit of the MS and PhD Mathematics program was held on 18th September 2023. Self-Assessment visit of the MS and PhD CS program was held on 7th November 2023. Self-Assessment visit of the BS DS program was held on 27th December 2023. Self-Assessment visit of the MS DS program was held on 26th March 2024.

Apart from that QEC has arranged several training workshops:

1. Tour to Walled City of Lahore was planned for faculty by QEC on 19th June 2023. It was planned to enhance team building among employees.
2. QEC organized a guest speaker session with Mr. Adeel Hashmi on 11th August 2023 on the topic, empowering the Educators for faculty members.
3. QEC organized a capacity-building session on the subject of “Managing Classroom in the Age of ChatGPT” for faculty on 11th August 2023.
4. QEC organized a training session on “Email Etiquettes and Communication” on 14th September 2023 for non-teaching staff members.
5. QEC organized an orientation session for newly hired faculty members on 27th September, 2023.
6. Bonfire Night for “Igniting Team Building and Learning for Quality Enhancement” was organized by Quality Enhancement Cell in Lahore Campus on 28th December 2023.
7. QEC Lahore Campus organized a 3-day orientation session for newly hired faculty members from 16th to 18th January 2024.
8. QEC (Lahore and Peshawar) campus participated in the workshops of the 4th International Conference (Pakistan Network of Quality Assurance in Higher Education) PNQAHE on 3rd March 2024 at Jinnah Convention Center, Islamabad.

Peshawar Campus

In the dynamic landscape of higher education, ensuring quality and relevance is paramount for institutions striving to meet the evolving needs of students, industry, and society. The Quality Enhancement Cell (QEC) of the National University of Computer

and Emerging Sciences (NUCES) stands as a vanguard in this pursuit, playing a pivotal role in internal quality assurance (IQA) and facilitating external quality assurance (EQA) processes.

For the said QEC-PWR’s multifaceted activities in fostering excellence and continuous improvement across academic programs and institutional practices. From facilitating accreditation visits by esteemed bodies like the National Computing Education Accreditation Council (NCEAC) and the Pakistan Engineering Council (PEC) to conducting program evaluations and organizing capacity-building workshops. Here are the details,

1. As a representative of campus Internal Quality Assurance (IQA), QEC-PWR facilitated visits of External Quality Assurance (EQA) by the National Computing Education Accreditation Council (NCEAC) and the Pakistan Engineering Council (PEC). NCEAC visited for accreditation of BS Software Engineering while PEC visited for re-accreditation of BS Electrical Engineering.
2. QEC-PWR also convened program evaluation visits for BS Computer Science and BS Artificial Intelligence. For said activity, external subject experts were invited for the evaluation and assessment of these programs. Dr. Nasru Minallah, Associate Professor from Department of Computer Systems Engineering of UET Peshawar was invited for BS (AI) while Dr. Ihtesham ul Islam, Associate Professor from Military College of Signals, NUST Rawalpindi was invited for evaluation of BS (CS).
3. QEC-PWR arranged orientation training workshops every semester for newly hired faculty

and staff members. These training workshops not only enlightened them on FAST-NUCES policies but the sessions on teaching pedagogy, mental wellbeing, academia-industry linkages were also delivered for enhancing their professional skills and fostering a culture of continuous learning and development.

4. Additionally, training sessions for Teacher Assistants were also arranged for the students who are performing the job of TA ship. These workshops are arranged for equipping TAs with the necessary skills and knowledge to effectively support faculty members in their teaching and administrative duties.
5. Similarly, training workshops for Program Teams were also arranged for self-assessment process of BS Computer Science and BS Artificial Intelligence. These teams compiled reports on their programs for their evaluation as a part of internal quality assurance.
6. Apart from that, 2-day training session on Medical First Aid and Fire Safety was also arranged by QEC-PWR by inviting professional trainers from Emergency Rescue Service (Rescue - 1122), Khyber Pakhtunkhwa.
7. Moreover, QEC-PWR attended sessions on “Empowering the Educators” by LHR campus, “The Nexus Quality of Teaching and Learning: Two sides of same coin” by Agha Khan University, Karachi.
8. Likewise, training sessions arranged by PNQAHE were also attended by QEC-PWR; the training sessions were on “Stakeholder Involvement in Quality Assurance Processes” by Dr. Jakub Grodecki from Poland, “Considering Generative AI in Higher Education Policy, Learning and Teaching, and Student Experience” by Ms. Emilia

Todorove from Gibraltar and PSG-2023: A Strategic Roadmap to Transformation of Higher Education” by Mr. Nasir Shah, DG, QAA, HEC, and Mr. Muhammad Raza, Deputy Director, QAA, HEC.

9. The training sessions under the SSPI project were also attended by QEC-PWR. These include “Intellectual Property Rights and Technology Transfer”, “International Office Best Practices” and 2-day training sessions on “Production Planning and Control” and on “Model Predictive Control”.
10. QEC-PWR attended various sessions arranged by QAA, HEC for capacity building of QEC staff on various quality assurance activities. Those included training sessions on HEC National University Ranking-2023, QEC Yearly Progress Report, HEC Graduate Education Policy-2023, revamped quality assurance policy-Pakistan Precepts, Standards and Guidelines (PSG-2023), and a training session on Program Review Effectiveness and Enhancement (PREE).
11. QEC-PWR collected feedback from various stakeholders for the improvement of the programs and to keep them updated and market-oriented. This feedback mechanism involved engaging with students, faculty members, industry professionals, alumni, and other relevant stakeholders to gather insights into the effectiveness of the educational programs offered

Chiniot-Faisalabad Campus

1. QEC CFD Campus arranged orientation sessions in each semester for the newly joined faculty members to equip the faculty members with Flex, and Slate and for the awareness of NUCES Policies.
2. QEC CFD Campus arranged and

delivered a session with freshmen on September 13, 2023. The topic was “Importance on “Building a Better Learning Environment with Feedback”.

3. QEC CFD organized impactful training sessions on September 23, 2023, with Dr. Tobias Sprodowski from the University of Bremen covering practical problem-solving and internationalization. Additionally, sessions by Dr. Asif Naeem and Dr. Muhammad Aleem addressed ORIC and graduate policies, respectively. Dr. M. Arshad Islam introduced “ChatGPT Assessment.” These sessions promoted collaboration, professional development, and academic excellence at FAST-NUCES.
4. A training workshop on LaTeX was organized on October 31, 2023. The main objective of the workshop was to introduce faculty and students to LaTeX, emphasizing its importance for research and MS theses. Participants received hands-on experience and practical guidance on LaTeX document compilation and related features. One Day Hands-on Training Workshop on OBE held on August 04, 2022.
5. An Awareness Session on Quality Assurance and Utilization of Library Resources for graduate programs is scheduled to be held at QEC FAST-NUCES EDC CFD Campus on Wednesday, December 06, 2023. The session aims to educate participants on quality assurance practices and optimal utilization of library resources to enhance academic research and learning outcomes.
6. The Quality Enhancement Cell (QEC) at FAST-NUCES CFD Campus organized a workshop on “Data Science: A Journey to Foster

Change,” emphasizing faculty development and practical insights into the field. Sessions covered various aspects of data science, including pedagogical approaches and the integration of storytelling with data for policymaking, fostering enriching discussions and showcasing the transformative potential of the discipline.

7. The QEC successfully concluded a comprehensive 3-Day Teacher Training Workshop from January 16 to 18, 2024, covering essential aspects of effective teaching, institutional policies, and personal growth. Sessions addressed topics such as the qualities of a good teacher, ORIC policies, assessment methodologies, mental health, and innovation.

Moreover, QEC CFD has arranged a Self-Assessment visit for the Bachelor of Science (Business Analytics) program on February 16, 2024. The Campus also organized 3-day Institutional Performance Evaluation (IPE) visit from March 14-16, 2024.

In addition to the above, the QEC CFD attended the following sessions/trainings and webinars.

1. Attended awareness session by Higher Education Commission (HEC) on “Graduate Education Policy” held on August 30, 2023.
2. How to prepare a successful paper for publishing in a peer-reviewed journal by Dr. Thomas Von Larcher Senior Editor SN Applied Sciences held on October 25, 2023.
3. Attended HEC Progress Review Meeting held on March 06, 2024.

Mr. Sekandar Riaz, Deputy Manager QEC delivered workshops on IT Essentials at FAST-NUCES Lahore and CFD Campuses and as part of community development, the 3-day training workshop was also delivered on “IT Essentials” at Abu-Anees Ideal

High School Faisalabad, almost 110 teachers attended the workshop.

Karachi Campus

1. The Institutional Performance Evaluation (IPE) of the Karachi Campus was arranged on February 20 –22, 2024.
2. The Self-Assessment Review (SAR) of the BS-CY and MS-CNS programs was organized in coordination with the Department of Cyber Security on 31 st January 2024.
3. The Self-Assessment Review (SAR) of the BS-BA program was organized in coordination with the Department of Management Sciences on 22 nd March 2024.
4. On 18th July 2023 the FAST-NUCES, Karachi Campus, QEC department organized a training session on “Teaching Challenges and amp; Opportunities”.
5. On 10th August 2023 the FAST-NUCES, Karachi Campus, QEC department organized an online guest speaker session in collaboration with QEC Lahore Campus on “Empowering the Educators” for faculty members.
6. On 18th September 2023 the FAST-NUCES, Karachi Campus, QEC department organized a training session on “Training on Email Etiquettes” for the staff members.
7. On October 25th, 2023, the FAST-NUCES, Karachi Campus, QEC department organized the Fire Safety and Security Awareness Session.
8. From 15th to 17th, January 2024, the Quality Enhancement Cell (QEC) at the FAST-NUCES Karachi campus organized a comprehensive three-day Faculty Training Program for newly joined faculty members from various departments.

Islamabad Campus

1. FAST-NUCES Islamabad team including Dr. Usman Habib (Computer Science), Mr. Hammad Majeed (Management Sciences) and Mr. Umair Manzoor (QEC) under the leadership of Dr. Muhammad Arshad Islam, Director QEC attended a two weeks series of training workshops at University of Évora, Portugal from 2-14 July 2023. The training covered various sessions including international accreditation, Pedagogy, and Student Services. This training session arranged under the umbrella of the Erasmus funded project “Strategic Support for Accreditation of Programs and Internationalization at South Asian HEIs” (SSAPI) provided an opportunity to develop collaboration with some foreign universities.
2. Quality Enhancement Cell at FAST-NUCES organized a faculty capacity-building session on “Managing Classroom in the Age of ChatGPT” on August 3, 2023
3. Quality Enhancement Cell arranged an insightful virtual guest speaker session led by Adeel Hashmi on “Empowering the Educators” on 11 August 2023.
4. Quality Enhancement Cell organized New Faculty Orientation Session on 17-18 August 2023.
5. Quality Enhancement Cell at FAST-NUCES organized a Session titled “International Opportunities for NUCES Students” on 31 August 2023.
6. Quality Enhancement Cell arranged a three-day training workshop for Faculty and Students Training, where Dr. Tobias Sprodowski, University of Bremen, Germany was invited as resource person from 18-19 September, 2023 at Islamabad campus.

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7. Quality Enhancement Cell at FAST-NUCES organized a Session “Intellectual Proper Rights” on 6 October, 2023.
8. Quality Enhancement Cell at FAST-NUCES organized a Training Session on International Office Best Practices on 8 November, 2023.
9. QEC organized 1-day training workshop in collaboration with HR Office titled “IT Essentials” (Batch # 3) on November 16, 2023
10. International Training and Project Meeting of the Project “Strategic Support for Accreditation of Programs and Internationalization at South Asian Higher Education Institutes (SSAPI)” was held at the University of Peradeniya Sri Lanka from 2-6 December, 2023
11. Quality Enhancement Cell at FAST-NUCES organized a 3 Day Faculty Development Training Program on 16-18 January 2024.
12. Ms. Warda Razzaq (QEC) attended Two Days workshop titled “From Envisioning to Conquering: Workshop on Women’s Academic Leadership” February 20-21, 2024 at Fatima Jinnah Women University under LCF project.
13. Quality Enhancement Cell at FAST-NUCES organized Post Graduate Program Review (PGPR) Visit on 28-29, February 2024.
14. International Training and Project Meeting of the Project “Strategic Support for Accreditation of Programs and Internationalization at South Asian Higher Education Institutes (SSAPI)” was held at the Royal University of Bhutan from 6-9 March, 2024.

