



TEQIP - III

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME - III

**Technical Education Quality Improvement
Programme (Phase-III)**
Malaviya National Institute of Technology Jaipur
Equity Action Plan

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Future Plans

- All activities to be coordinated by concerned departments.
- Executing Agency would be TEQIP MNIT Jaipur.
- Date and duration of programs to be finalized in consultation with program coordinators.
- The programs would be organized at regular intervals, as per the requirement.

(i) Identify weaknesses in all students and take remedial steps

S.No.	Sub-Activity/Action	Indicator to measure outcome
(i)	Curriculum Development Workshop will be conducted to tailor the courses that fit well to industrial requirements.	Syllabus modification of all branches will be enhanced.
	Industrial training and workshops will be organized to improve professional skills and qualities.	Students will be skilled as per Industry requirement.
	Increase in GATE qualified graduates:- Gate coaching classes will be organized in upcoming time at MNIT Jaipur and CTAE Udaipur jointly under Twinning agreement to improve GATE score of students.	Gate Classes will be organized
	The GATE registration fees reimbursement:- TEQIP to reimburse the GATE registration fees and provide transport facility to students for appear in GATE examination. Registered Students for Gate 2019 in both Institutes i.e. MNIT and CTAE will be benefited by refunding of Gate registration fee. The Transport facilities have been provided for Gate 2019 and in future it will be continued.	Gate exam fee will be refunded.
	Increase in student graduation rates/transition rates:- Remedial classes will be conducted for weak students at CTAE Udaipur.	Remedial classes will be conducted.

S.No.	Sub-Activity/Action	Indicator to measure outcome
	<p>Identification of weak students:-Institute has taken up the process of identification of weak students or slow learners based on their performance in Mid Term 1 and 2. In this process, Transition rate of students (percentage) from the First to the Second year (without backlog) in Undergraduate programs will be identified to mark the weak students. It is proposed to run separate remedial classes for all these identified students in future.</p>	<p>Weak students will be identified.</p>
	<p>Traditionally disadvantaged groups students identification:- Institute is governed under the rule of Central government reservation system and is followed. Also, all the admission in UG courses is offered through CSAB through the national level counseling process. The Percentage of students from traditionally disadvantaged groups in total enrolment in the institute will be marked and focused for improvement in related students.</p>	<p>More attention will be given to traditionally disadvantaged groups of students for overall improvement.</p>
	<p>Various activities of Students will be motivated to participate in events such as Workshop, International and National Conference, Symposium, Training, GIAN Course, Industrial visits etc.</p>	<p>Promotion of events will be increased to encourage students for participation.</p>

(ii) Improve language competency, soft skills and confidence levels

S.No.	Sub-Activity/Action	Indicator to measure outcome
(ii)	Workshops:- Workshops related to language competency, soft skills and confidence levels development will be organized.	Students will more improve in language competency, soft skills and lead to development in confidence levels.

(iii) Institution to improve non- cognitive and soft skills including communication and presentation skills through their wide use in curricula / project based work, and where needed, to provide special skills training to students with priority to the weak students

S.No.	Sub-Activity/Action	Indicator to measure outcome
(iii)	<p>Twinning Activities: Twinning activities will be enhanced significantly. Nominations on academic bodies and joint activities will be organized: -</p> <p>1) The long term and short-term twinning plan (action plan) on activities and it's implementation:- Regular meetings will be conducted for TEQIP Coordinators of CTAE and MNIT at Udaipur/ Jaipur to review implementation of long and short term twinning plan.</p> <p>2) Courses/ Classes/Workshops:-Moreno. of courses/ classes/workshops will be conducted by the faculty of Institute under sub component 1.3 for students of 1.1 institute for training and academic development and vice versa (Min 1 per program per year)</p> <p>Workshop/ Courses will be organized at MNIT Jaipur for Chemical Engineering Department and Civil Engineering Department. Likewise Workshop/ Courses will be organized at CTAE Udaipur for Computer Science Engineering Department, Mechanical Engineering Department, Electrical Engineering Department and Civil Engineering Department. Some courses offered by EICT academy in which CTAE Udaipur will act as remote center.</p>	<p>Meeting will result in smooth coordination and execution of long term and short term plans.</p> <p>Workshops will increase the student knowledge.</p>

S.No.	Sub-Activity/Action	Indicator to measure outcome
	<p>3) Student exchange program:- No. of students of 1.1 institution will attend the courses at 1.3 institution under student exchange program and vice versa (Min 1 per program per year). One-Summer Internship for each B.Tech. program of CTAE Udaipur is planned and will be executed.</p>	<p>Summer internship will provide practical knowledge to students that will be beneficial in their career.</p>
	<p>4) Training and academic development:-More no. of Trainings will be conducted for faculty/ support staff of 1.1 institute by Institute under sub component 1.3 for training and academic development and vice versa (Min 1 per program per year). One training program for staff is planned at CTAE and will be executed. Subsequently another training program for Staff will be organized at MNIT.</p>	<p>Faculty and Staff will be aware of innovation of their working domain.</p>
	<p>5) Seminars/ Techfest, and conferences for students:-More no. of Seminars/ Techfest, and conferences will be conducted by Institute under sub component 1.3 for 1.1 institute for students to share research and discuss technological advancements in dynamic industrial and business environment (Min 1 per year). One Seminar/ Tech fest is planned at CTAE Udaipur and will organize in March 2019 and another Seminar/ Tech fest is planned at MNIT Jaipur and will organize in April 2019.</p>	<p>Tech fest will provide platform to student to show their skills of handling up-levelled responsibilities. Thus their skills will be furnished.</p>

S.No.	Sub-Activity/Action	Indicator to measure outcome
	<p>6) Seminars/ conferences and academic meeting for faculty:- More no. of Seminars/ conferences and academic meeting will be conducted by Institute under sub component 1.3 for 1.1 institute for faculty to share research, discuss technological advancements in dynamic industrial and business environment (Min 1 per year). According to collaborative research domains one collaborative activity will be conducted which is related to joint consultancy and testing at MNIT/ CTAE.</p>	<p>Meeting on Sharing of research, discussion on technological advancements in dynamic industrial and business environment, will acknowledge the faculty about related domain thus it will become easy to plan strategies with acknowledgement of all related factors.</p>
	<p>7) Partnership activities:-No. of departmental partnership with corresponding department of 1.1 institute for joint research activities for applied research and technological development will be executed. Partnership activities for joint research project will be implemented soon.</p>	<p>Partnership activities will improve the skills and quality knowledge of weak student in both the institutes as the interaction of more students will lead to more sharing of knowledge.</p>
	<p>8) Industry partnership for joint R&D with 1.1 institute and internships (Min 1 per year):- Identification of R&D activity was initialized and this project will be implemented.</p>	<p>The resource and development project will magnify the development of students.</p>
	<p>9) Industry partnership for placement activity (Min 1 per program per year):-One Partnership activity will be proposed.</p>	<p>Placements of students of both the institutes (mentors and mentee) will be increased.</p>

S.No.	Sub-Activity/Action	Indicator to measure outcome
	<p>10) Seminars and learning forums: -More number of Seminars and learning forums will be conducted by Institute under sub component 1.3 for 1.1 institute on Governance practices, institutional management, academic and non-academic reforms (Min 1 per year). Curriculum Review workshop for engineering department of CTAE Udaipur will be organized in March 2019. One workshop will organize for best office practices and pedagogy training at MNIT.</p>	<p>Office practices will be better. Pedagogy training will be helpful for development of weak students.</p>
	<p>11) Short term advisory and consultancy services: -Quality assistance will be provided in short term advisory and consultancy services by Institute under sub component 1.3 for 1.1. Joint meeting of HOD's of CTAE and MNIT will be organized.</p>	<p>Quality assistance will lead student's direction of development.</p>
	<p>12) NBA Workshop: -More workshops will be conducted on Outcome Based Education (NBA) by Institute under sub component 1.3 for 1.1 institute. OBE workshop is planned and will be organized in Civil Engineering department, Mining department and Mechanical Engineering department at CTAE Udaipur. OBE workshop Will be planned for more remaining departments.</p>	<p>Accreditation of UG/PG will be faster.</p>
	<p>13) SAR for accreditation:-Quality assistance will be given by the Institute under sub component 1.3 for 1.1 institute in filling-up of SAR for getting accreditation. SAR committee includes MNIT faculty for all the departments of CTAE and will help in SAR filling to mentee institute.</p>	<p>Quality assistance will be given to CTAE for SAR Filling.</p>
	<p>14) Startup activities:-More workshops, entrepreneurship fests, competitions etc. will be organized. Information exchanged about the best practices will be adopted at the two institutions, and due to which their impact will be maximized. Relatively one collaborative event will be organized.</p>	<p>Exchange of information about the best practices will impact maximum on development of students.</p>

(iv) Give under-qualified teachers priority in opportunities to upgrade their domain knowledge

S.No.	Sub-Activity/Action	Indicator to measure outcome
(iv)	<p>Faculties will be taken annual refresher, which will be delivered through SWAYAM portal:- Faculty members will be regularly encouraged to take up the following annual refreshers courses delivered through SWAYAM:</p> <ol style="list-style-type: none">1) Use of ICT in teaching.2) Design and development of virtual labs for hands on training.3) Development in Student Assessment and Evaluation.4) Accreditation of Undergraduate and Post Graduate Engineering Programs.5) Problem based learning.6) Online refresher courses.	<p>Faculties will be improved in their skills in Teaching, Student assessment, Accreditation of UG & PG.</p> <ol style="list-style-type: none">1) ICT teaching will improve quality of understanding the subject topics for students.2) Virtual Labs will intensify the skills.3) Sharpness in the identification of weak students and more quality assessment of students.4) Accreditation of UG and PG will be in speed.5) Clarification of solutions of problems will strengthen knowledge in related Subject/ domain.6) Online refresher courses will update the faculties about innovation in related domain.

(v) Training of teachers in subject matter and pedagogy, particularly to improve the performance of weak students

S.No.	Sub-Activity/Action	Indicator to measure outcome
(v)	<p>Faculty will be training in either their subject domain, pedagogy, or management capacity building and leadership programs:-</p> <p>Following activities will be taken up at institute to increase the percentage of faculty trained in their subject domain, pedagogy, or management capacity building and leadership program:</p> <ol style="list-style-type: none"> 1) Participation of faculty in summer schools and hands on training in domain specific courses. 2) Participation of faculty in the technical events of IEEE, AICTE, and other technical societies. 3) Participation of faculty in national and international conferences/workshops. 4) Encouraging faculty to take up courses through SWAYAM, GIAN, and MOOCS. 	<p>Faculties will be more skilled in subject domain, pedagogy, management capacity building and leadership.</p> <ol style="list-style-type: none"> 1) Faculties will gain more knowledge during Summer school and they will be benefited through hands on training in domain specific courses. 2) Knowledge sharing and Subject/ domain knowledge will be increased. 3) National and International conferences/workshops will deepen their point of view and innovative information about the topic discussed in conferences and workshops. 4) Faculties will be more expert in subject/ domain through participation in courses through SWAYAM, GIAN, and MOOCS.

(vi) Make campuses physically and socially gender- friendly; especially provide adequate and suitable facilities to women students and faculty

S.No.	Sub-Activity/Action	Indicator to measure outcome
(vi)	<p>Infrastructure Development and Facilities increment for students:- We are increasing the hostels for PhD, M. Tech., M.SC, Students female candidate. A new Girls hostel will be ready with capacity of 884. There is proposal to allot hostels to PG and PhD students, once we have increased the capacity as total. All hostels (boys and girls) will be equipped with ramp and parking for differently abled students and proper access to all facilities.</p>	<p>Infrastructure will be expanded and more facility will be provided to students.</p>
	<p>Establishment of Smart classrooms/ promoting MOOCs etc.:- The requisite technical support will be provided for specification development as per planning. Smart classrooms will be developed in each Department of CTAE Udaipur according to smart classrooms procurement process at CTAE Udaipur in consultation with MNIT Jaipur.</p>	<p>Class room will be modified into Smart classrooms in which massive open online courses will be available for students. Thus students will learn more about their subject topics easily.</p>

(vii) Hold innovation and Knowledge Sharing Workshops yearly to improve knowledge sharing

S.No.	Sub-Activity/Action	Indicator to measure outcome
(vii)	Innovative projects:- Innovative projects will be conducted and to provide information of upcoming projects, we will increase activities such as sending mails, use of banners and charts, pinning of project details on boards etc., which will lead to more and more participation of students in innovative projects.	Increase in promotion of Innovative projects will lead to more participation of students.
	Workshops:- Workshops will be conducted to increase sharing of knowledge in subject/domain of students which will be beneficial for students.	Knowledge sharing workshops will be organized. Thus shared knowledge will be increased among students.

(viii) Sharing information and knowledge about engineering courses and institutions

S.No.	Sub-Activity/Action	Indicator to measure outcome
(viii)	<p>TEQIP Cell is planning to organize following activities for sharing the information and knowledge about engineering courses:</p> <ol style="list-style-type: none">1) Design of online courses in science, engineering and technology for other institute's students and faculty.2) We will organize the science fair (model based project) for students who are studying in other institutions.3) We will develop the short term courses in science and engineering.4) Design of the Skill Development courses for students.	<ol style="list-style-type: none">1) Online courses facility will be provided to other institute's students, which will lead to deep understanding of subject topics.2) Project based knowledge will be improved in students.3) Short term courses will improve their knowledge and make them aware about topic of their subject/ domain.4) Students will be skilled in communications and proficiency values .

(ix) Provide appropriate infrastructure for physically challenged students

S.No.	Sub-Activity/Action	Indicator to measure outcome
(ix)	Facilities in newly constructed building:- We will provide ramps, parking area and lifts in newly constructed buildings. We will provide rest rooms for each section in newly construction buildings.	Ramps, parking area, lifts, boy's hostel, girl's hostel and rest room for each section will be ready to use in newly construction building.

(x)Special efforts for training/ internship/ placement of weak students

S.No.	Sub-Activity/Action	Indicator to measure outcome
(x)	<p>Summer Internship:-</p> <ol style="list-style-type: none"> 1) Promoting Summer Internship by which expenses on the accommodation, travel and food expenses to be reimbursed for students. 2) Placement cell will increase more communication with industries for summer internship through interaction with industrialists. 3) Supervisor in industries of weak students will be requested to have focused supervision of weak students during internship. 	<ol style="list-style-type: none"> 1) Financially students will be supported. 2) Communication with industries will be more strengthen which will lead to more placements. 3) Weak student will improve skill in focused supervision and will be in count of strong students.
	<p>Placement Workshops:-</p> <ol style="list-style-type: none"> 1) Workshops will be conducted to improve and understand the Professionalism for more placements. 2) Institute will increase the communication and collaboration with industries and institute will invite the industries to provide more placement considering hiring of weak students. 3) Trainings and invited talks will be organized for increment in industrial professionalism skill in students. 	<ol style="list-style-type: none"> 1)Professionalism skill of weak students will be improved. 2) Increase in communication with industries will lead to increase in placements of students. 3) Hand on training and interaction with industrialist, will be beneficial to students during placement in interviews.

(xi) A two tier grievance redress mechanism (GRM)

S.No.	Sub-Activity/Action	Indicator to measure outcome
(xi)	We will increase the awareness of GRM.	More awareness will be there in students.

(xii) Ensure that institutional mechanisms to protect and address the needs and concerns of women students

S.No.	Sub-Activity/Action	Indicator to measure outcome
(xii)	Women's/Girls have provided all the necessary facilities:- There are hostels for girls in camps and new hostel building is in construction. Security guards will be there for new hostel building. Ramps and lift will be provided in newly constructed building. Hostel warden will be more concern about girl students. All kind of safety will be provided in newly constructed building too.	Newly constructed girl's hostel will be ready soon. Ramps, lifts, concerned warden, safety guards will be available in upcoming time.

(xiii) Develop a standard model for tracking of student progress

S.No.	Sub-Activity/Action	Indicator to measure outcome
(xiii)	<p>Enterprise Resource Planning Software:-We have established online ERP system to monitor the study progress at every semester. Hence the tracking of student progress is always in process and will be continued. Meetings will be organized if there will be more improvement or changes in ERP system to make it more efficient.</p>	<p>1) Student Information will be more integrated. 2) Student overall performance will be more analyzed. Required information of students will be provided for upcoming implementation of development plan.</p>
	<p>Weak Students development Strategies:- ERP software is integrated application which help institute to store and manage student information data. Student's details and their overall current status will be provided for next semester from ERP to faculties accordingly they make strategies to focus on weak students which will help in improving grades of students.</p>	<p>The real-time information flow in ERP will be more analyzed for development in varies strategies and related data will be reported to concerned officer to execute planning and strategies.</p>

(xiv) Peer Learning Groups of students

S.No.	Sub-Activity/Action	Indicator to measure outcome
(xiv)	<p>Orientation Program/Induction Program An induction program of two weeks for newly admitted UG students will be organized. During this program, several activities such as expert talks on human values, physical activities, creative arts, proficiency values, introduction to UG branches, on-campus Rules & Regulations, introduction to Academics, Placements & Training, Cultural Club and auditions & selections will be conducted for the newly admitted UG students. This induction program will help students to get familiar with the campus environment, motivate them to start their journey at MNIT from higher notch and get accustomed with several regulations of the campus. During this program, a team of senior students will help and guide in visiting the institute facility to the newly admitted students.</p>	<ol style="list-style-type: none"> 1) Sharing of knowledge between students will be more in action. 2) Students will explore their talents, enhancing leadership quality and team work. 3) Extra-curricular activities will more develop student's abilities to handle any kind of situations in upcoming time and these abilities will improve sound personality and overall performance of students. 4) Students will be able to handle up leveled responsibilities therefore students will become more responsible. 5) Students will be more skilled in innovativeness and readiness for challenges. 6) Students will more learn essential managerial and entrepreneurial skills while having fun.

(xv) Appointing Student Mentors and Faculty Advisers for Students

S.No.	Sub-Activity/Action	Indicator to measure outcome
(xv)	Same as (xiv)	Same as (xiv)