

INSTITUTIONAL ASSESSMENT AND ACCREDITATION (Effective from July 2017)

Accreditation - (Cycle - 2)

PEER TEAM REPORT ON

INSTITUTIONAL ACCREDITATION OF MEA ENGINEERING COLLEGE C-8079

Perinthalmanna Kerala 679325

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL An Autonomous Institution of the University Grants Commission P.O. Box No. 1075, Nagarbhavi, Bengaluru - 560 072, INDIA

Section I:GENERAL INFORMATION

1.Name & Address of the	MEA ENGINEERING COLLEGE		
institution:	Perinthalmanna		
	Kerala		
	679325		
2.Year of Establishment	2002		
3.Current Academic Activities at			
the Institution(Numbers):			
Faculties/Schools:	1		
Departments/Centres:	7		
Programmes/Course offered:	9		
Permanent Faculty Members:	103		
Permanent Support Staff:	30		
Students:	982		
4.Three major features in the	1. • Dedicated and proactive ma	anagement	
institutional Context	2. • Good Infrastructure		
(Asperceived by the Peer Team):	3. • Encouraging the economically weak students who are good		
	academics by offering institu	•	
5.Dates of visit of the Peer Team	From : 06-03-2024	1	
(A detailed visit schedule may be	To: 07-03-2024		
included as Annexure):			
6.Composition of Peer Team			
which undertook the on site visit:			
	Name	Designation & Organisation Name	
Chairperson	DR. RABINDRA KUMAR SAHU	Professor, Veer Surendra Sai	
_		University of Technology	
		(VSSUT), Burla	
Member Co-ordinator:	DR. VENKATA SITA RAMA	FormerProfessor,Jawaharlal Nehru	
	RAJU ALLURU	Technological University	
Member:	DR. ABHAY SHENDE	Principal, priyadarshini J L College	
		of Engineering	
NAAC Co - ordinator:	Dr. L. Manjunatha Rao		

Section II:CRITERION WISE ANALYSIS

Observations (Strengths and/or Weaknesses) on each qualitative metrices of the key Indicator under the respective criterion(This will be a qualitative analysis of descriptive nature aimed at critical analysis presenting strength and weakness of HEI under each criteria)

Criterion1 - Curricular Aspects (Key Indicator and Qualitative Metrices(QlM) in Criterion1)		
1.1	Curricular Planning and Implementation	
1.1.1	The Institution ensures effective curriculum planning and delivery through a well-planned	
QlM	and documented process including Academic calendar and conduct of continuous internal	
	Assessment	
1.2	Academic Flexibility	
1.3	Curriculum Enrichment	
1.3.1	Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human	
QlM	Values, Environment and Sustainability in transacting the Curriculum	
1.4	Feedback System	

Qualitative analysis of Criterion 1

MEA Engineering College (MEAEC) was established in the year 2002, presently with an affiliation to the APJ Abdul Kalam Kerala Technological University (KTU), Kerala and approval from AICTE. The Institute is offering 7 UG and 2 PG programs in Engineering.

The College ensures effective implementation of the curriculum, prescribed by the affiliating University through preparation of academic calendar for each semester with inclusion of various activities like regular classwork, assessments, guest lectures, industrial visits, sports, cultural and other curricular and co-curricular activities. Subject allocation to faculty members is based on their expertise in the relevant subject and its effective delivery is ensured with maintenance of course file by each faculty member and conduct of academic audit, conduct of syllabus coverage meetings periodically, monitoring the internal assessment question papers, organizing industrial visits and expert lectures, conduct of parent-teacher meetings, collection of student's feedback. The Institute offers short-term courses and skill development programs to equip the students with domain knowledge and skills beyond the curriculum.

The curriculum prescribed by the affiliating University includes many of the crosscutting issues through inclusion of programs/courses like a seven-day induction program at the beginning of first year to integrate moral, social, and ethical values, 'Professional Ethics' and 'Sustainable engineering' courses at second year level of B.Tech. The Institute conducted programs like awareness programs on a plastic-free world, renewable energy sources, conservation of water and electricity to sensitize staff, students and also public in the nearby villages through NSS wing of the Institute. A dedicated women's empowerment cell ensures the well-being of all female students. However, apart from the curriculum the Institute need to conduct various programs to have more focus on crosscutting issues and environmental sustainability.

Criterion2	Criterion2 - Teaching-learning and Evaluation (Key Indicator and Qualitative Metrices(QlM) in Criterion2)		
2.1	Student Enrollment and Profile		
2.2	Student Teacher Ratio		
2.3	Teaching- Learning Process		
2.3.1	Student centric methods, such as experiential learning, participative learning and problem		
QlM	solving methodologies are used for enhancing learning experiences and teachers use ICT-		
	enabled tools including online resources for effective teaching and learning process		
2.4	Teacher Profile and Quality		
2.5	Evaluation Process and Reforms		
2.5.1	Mechanism of internal/ external assessment is transparent and the grievance redressal		
QlM	system is time- bound and efficient		
2.6	Student Performance and Learning Outcomes		
2.6.1	Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the		
QlM	institution are stated and displayed on website		
2.6.2	Attainment of POs and COs are evaluated.		
QlM			
	Explain with evidence in a maximum of 500 words		
2.7	Student Satisfaction Survey		

APJ Abdul Kalam Kerala Technological University (KTU)/ Kerala state govt. regulates the admission of engineering colleges for UG programs through a centralized admission process. The institution follows the reservation policy of the State Government. Apart from Government scholarships, MEAEC offers scholarships for academically bright students with weak financial backgrounds. All the Departments conducts various technical / non-technical programs as a part of the curriculum / beyond the curriculum like industry oriented projects, seminars, internships, industry visits, participation in national and international competitions, some add on courses. The Institute is encouraging students to participate in quizzes, presentations and publications in national/international seminars/conferences, Annual cultural/sports days, various activities organized by NSS unit of the College to have participative learning experience. In addition, students are also encouraged to attend MOOC Programs of NPTEL, ICT-IITK, SAP, COURSERA etc., Seminars etc organized by the Institute. However, it is required to inculcate problem-solving techniques among the students.

Theory courses are assessed for 150 marks, in which 50 marks through internal assessment by way of two internal examinations, two assignments and attendance, the remaining 100 marks through the University end semester examination. Laboratory courses are assessed for 150 marks, out of which 50% through continuous internal evaluation from the performance in the laboratory classes, one internal test before appearing for the University Lab. Examination and attendance, the remaining 50% marks through end semester examination as per the University guidelines. Experiential and Participative learning exists and needs to be strengthened further in the teaching-learning process. Transparency of internal assessment is ensured through clear communication of assessment methods and schedules, timely release of internal marks, departmental display of marks on notice boards, result analyses, remedial classes, and avenues for grievance resolution through faculty and grievance redressal cells. The integration of the Campus ERP system streamlines the entire process, making it easier for students to voice their concerns and for the institution to respond promptly. However needs to be strengthened further.

Curriculum Book of every program is made available on the website. The Website contains Programme

Educational Objectives (PEOs), Programme Specific Objectives (PSOs), POs and COs. Each faculty maintains an academic record file in which, COs and its mapping with POs and PSOs are mentioned.

From the A.Y. 2015-16, the affiliating University is following Outcome Based Education (OBE) system. On commencement of every semester, the faculty concerned with each course clearly communicates its CO-PO and CO-PSO correlation to the students along with the justification for the mapping. The attainment and evaluation process is visible. However, need to strengthen OBE process further.

Criterion3 - Research, Innovations and Extension (Key Indicator and Qualitative Metrices(QlM) in			
Criterion3	Criterion3)		
3.1	Resource Mobilization for Research		
3.2	Innovation Ecosystem		
3.2.1	Institution has created an ecosystem for innovations, Indian Knowledge System		
QIM	(IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and		
	other initiatives for the creation and transfer of knowledge/technology and the outcomes of		
	the same are evident		
3.3	Research Publications and Awards		
3.4	Extension Activities		
3.4.1	Outcomes of Extension activities in the neighborhood community in terms of impact and		
QIM	sensitizing the students to social issues for their holistic development during the last five		
	years.		
3.4.2	Awards and recognitions received for extension activities from government / government		
QlM	recognised bodies		
3.5	Collaboration		

Qualitative analysis of Criterion 3

MEAEC offers a valuable platform for students to foster their innovative ideas. This centre actively supports students in their start-up projects and provides some entrepreneurship programs, including workshops and seminars on entrepreneurship development. MEAEC takes pride in its active Innovation and Entrepreneurial Development Cell (IEDC), which offers essential facilities for project, research, and start-up activities to both current and alumni students. The Institute is actively engaged in the research and development activities on the campus by providing facilities in terms of internet connectivity, laboratory and providing research incentives for faculties for their research-related activities, such as publishing research papers and attending workshops/conferences. Faculty members are encouraged to publish papers in refereed national and international journals and conferences. However, the number of papers published in peer-reviewed journals indexed in SCOPUS, and WoS should be increased. About 15 % of faculty members possess a Ph.D. The institute encourages research through technical and IPR-related workshops, seminars, and training programs. Efforts towards publishing patents and technology transfers are in their infancy. To create a research culture among students and faculty, the institution has MOUs with the industry which provide research extension activities. The institution has an established student-run IEDC Cell, through which students interact with successful entrepreneurs and thereby create career opportunities. MEAEC has organized a variety of programs related to innovation. Program TECH TALK, which focuses on discussing technological advancements and their impact. This program provides a platform for students and professionals to engage in insightful discussions and stay updated with the latest trends in technology. However, the implementation part is inadequate. The institution has a functional MOU with the state resource centre Kerala and International University. Few MOUs are signed, However, the number of activities is to be enhanced. MEAEC faces hurdles to secure funding for research projects. Few faculty members are recognized as research supervisors

by various universities. To develop sensitivities towards community issues, gender disparities, social inequity etc. and to inculcate values and commitment to society, the NSS unit of the institute conducts and promotes extension activities such as blood donation camps, Swatch Bharath, and various awareness programs in the nearby villages for the promotion of universal values, national values, human values, communal harmony, and social cohesion.

Criterio	n4 - Infrastructure and Learning Resources (Key Indicator and Qualitative Metrices(QIM) in
Criterio	n4)
4.1	Physical Facilities
4.1.1	The Institution has adequate infrastructure and other facilities for,
QlM	
	• teaching – learning, viz., classrooms, laboratories, computing equipment etc
	• ICT – enabled facilities such as smart class, LMS etc.
	Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor),
	Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)
4.2	Library as a Learning Resource
4.2.1	Library is automated with digital facilities using Integrated Library Management System
QlM	(ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally
	used by the faculty and students
4.3	IT Infrastructure
4.3.1	Institution frequently updates its IT facilities and provides sufficient bandwidth for internet
QlM	connection
	Describe IT facilities including Wi-Fi with date and nature of updation, available internet
	bandwidth within a maximum of 500 words
4.4	Maintenance of Campus Infrastructure

Qualitative analysis of Criterion 4

MEA Engineering College is located in a spacious campus provides ample space for various facilities such as academic buildings and recreational areas with adequate infrastructure facilities. The facilities include classrooms, laboratories, computing equipment. There are separate academic blocks almost department-wise and a centralized block accommodating administration. Apart from the adequate number of classrooms for each Department, there are seminar halls, tutorial rooms and laboratories as per KTU and AICTE norms. There is separate auditorium for conducting diverse cultural and other college level functions/activities. The Institute has good Indoor and Outdoor Sports facilities with Football and Cricket Grounds, basketball courts and Badminton courts. The Institute has a Leased line Internet Connectivity with bandwidth 965 Mbps. The Institute has various licensed open-source software. CCTV cameras are installed at various places on the college premises to monitor campus activity and maintain security. The Institute upgrades its IT infrastructure, However need to strengthen further. Central Library is stocked with the textbooks and reference material. The central library is automated with "Book Magic", an Integrated Library Management System (ILMS) software. However, need to be increased footfall of students by conducting various activities. A separate hostel is available for boys and girls. A gymnasium and waiting hall for boys and girls are also available on the campus. A dispensary with a doctor's facility is available inside the campus.

Criterion5 - Student Support and Progression (Key Indicator and Qualitative Metrices(QlM) in Criterion5)		
5.1	Student Support	
5.2	Student Progression	
5.3	Student Participation and Activities	
5.4	Alumni Engagement	
5.4.1	There is a registered Alumni Association that contributes significantly to the development of	
QlM	the institution through financial and/or other support services	

Institutions make efforts to provide necessary assistance to students, to enable them to acquire meaningful experiences for learning on the campus and to facilitate their holistic development and progression. Students benefit from both government and management scholarships. Orientation programs and bridge courses are organized to familiarize new students with courses, faculty and curricular/co-curricular activities. Apart from classroom interactions, remedial classes for slow learners, workshops, seminars and internships are integral components of the academic support system. Technical events through various professional bodies are conducted to enhance the student's knowledge of recent technology trends. The institute has effectively implemented a mentoring system. Faculty members are assigned with 30 students to monitor students' academic performance, attendance and disciplinary issues. The institute has Grievance Redressal, Antiragging, committees and a women empowerment cell to cater for the various needs of the students. The Institute makes efforts for student progression and employability. Students are involved in organizing various co-curricular and extra-curricular activities. With coaching provided, students take active participation in sports and games at various levels. The institute has a student representation in various academic and extracurricular committees. Departmental associations are available where students play an important role in decision-making and organizing department-level activities. The NSS club of the institute motivate students and staff to participate in various extension activities. The institute has an Alumni Association that is not registered. Every year the college organizes an alumni meet. Alumni help students for placement & career planning.

Criterion	6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrices(QIM) in		
Criterion			
6.1	Institutional Vision and Leadership		
6.1.1	The institutional governance and leadership are in accordance with the vision and mission of		
QlM	the Institution and it is visible in various institutional practices such as NEP implementation,		
	sustained institutional growth, decentralization, participation in the institutional governance		
	and in their short term and long term Institutional Perspective Plan.		
6.2	Strategy Development and Deployment		
6.2.1	The institutional perspective plan is effectively deployed and functioning of the institutional		
QIM	bodies is effective and efficient as visible from policies, administrative setup, appointment,		
	service rules, and procedures, etc		
6.3	Faculty Empowerment Strategies		
6.3.1	The institution has performance appraisal system, effective welfare measures for teaching		
QlM	and non-teaching staff and avenues for career development/progression		
6.4	Financial Management and Resource Mobilization		
6.4.1	Institution has strategies for mobilization and optimal utilization of resources and funds		
QlM	from various sources (government/ nongovernment organizations) and it conducts financial		
	audits regularly (internal and external)		
6.5	Internal Quality Assurance System		
6.5.1	Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing		
QlM	the quality assurance strategies and processes. It reviews teaching learning process,		
	structures & methodologies of operations and learning outcomes at periodic intervals and		
	records the incremental improvement in various activities		

MEAEC strives to bring continuous improvement with the involvement of the governing body and stakeholders to achieve the vision, mission and goals of the institute. Dedicated and committed management and a Principal have developed an organizational culture in the institute. The Governing Council and Academic Council give guidelines for framing policies of the Institute in tune with the vision and mission. The vision and Mission of the institute need to be reviewed and revisited. The institute believes in practising decentralization and involves stakeholder representatives in decision-making. The institute has developed a strategic plan to achieve its goals. Principal & Heads of the department plan and implement quality improvement strategies taking into consideration the feedback of all stakeholders. However, the plan need to be implemented effectively. The institute ensures stakeholder participation in assigning responsibilities to faculty members and administrative staff. Departments prepare an action plan for the academic, curricular and co-curricular activities and the implementation and planning of the action plan is monitored. IQAC has been established as per norms and its functioning is visible. However, need to strengthen further. The institute has different cells consisting of stakeholder representatives. The institute has implemented e-governance through an ERP in academics and administration. However, it needs to be extensively used in all functions. The institute provides welfare measures to Faculty and staff. There is a provision for financial assistance to staff from the Management for professional development as well as personal emergencies. Staff members are granted 15 Casual Leaves per year. For faculty members pursuing Ph.D. programs, there is provision for 12 days of duty leave per year Both students and staff are provided with insurance coverage. Performance appraisal system is available only for teaching staff. However needs to strengthen further. All the institutional level and department-related expenditures are planned and documented. Internal and external audits of all the finances and accounts are done yearly to ensure that allocated funds are well utilized.

Criterion7	- Institutional Values and Best Practices (Key Indicator and Qualitative Metrices(QlM) in	
Criterion7)	
7.1	Institutional Values and Social Responsibilities	
7.1.1	Institution has initiated the Gender Audit and measures for the promotion of gender equity	
QlM	during the last five years.	
	Describe the gender equity & sensitization in curricular and co-curricular activities, facilities	
	for women on campus etc., within 500 words	
7.1.4	Describe the Institutional efforts/initiatives in providing an inclusive environment i.e.,	
QlM	tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and	
	Sensitization of students and employees to the constitutional obligations: values, rights,	
	duties and responsibilities of citizens (Within 500 words)	
7.2	Best Practices	
7.2.1	Describe two best practices successfully implemented by the Institution as per NAAC format	
QlM	provided in the Manual	
7.3	Institutional Distinctiveness	
7.3.1	Portray the performance of the Institution in one area distinctive to its priority and thrust	
QlM	within 1000 words	

The stated objective of MEAEC is not only to encourage the students to obtain a degree but also to inculcate responsibility in students to become global citizens with self-confidence, positive attitude and motivation to face any challenge in their lives. The institute engages itself in various promotional activities to help the students emerge as successful professionals and emerge as world-class technocrats. The Institute provides adequate support to foster innovation, creativity and quality. Women Empowerment Cell organizes several activities to create awareness about gender equality and ensure fair treatment for all. The Institute conducts gender sensitization programs related to Sexual Harassment, Ragging, Women and their rights. MEAEC provided the daycare centre for children of staff. Constant surveillance and vigilance are effectively implemented by security personnel and through the installation of CCTV cameras at vantage points on the campus. The Institute has installed a rainwater harvesting system. Efforts are made to reduce papers in official work through e-governance. Institution celebrates national and religious festivals. Birth & Death anniversaries of great Indian personalities are also observed by the institute. The institute has its core values and code of conduct displayed within the campus. The institute organized programmes which contributed to the local community like Mehar, Punarjany, and Computer literacy programmes with the help of management and local administration bodies like panchayath and municipality. Amongst the several best practices, the following two emerge 1) Peer to Peer teaching method, PhD duty leave to the faculties and also provides incentives to faculties for publications. 2) Samoohavivaham (Mehar). Mehar is a community wedding program conducted at the institute, by the college union, with the help of the faculty members and management. Every program aims at identifying brides and grooms from the socially and economically backward classes. The institute is making an all-out effort to align its goals and practices towards ensuring a bright future for the students. As an aspect of social responsibility every year MEAEC conducts a management scholarship examination to assist deserving students who are pursuing engineering careers as bright futures.

Section III:OVERALL ANALYSIS based on Institutional strengths. Weaknesses, Opportunities & Challenges (SWOC) (up to 500 words)

Overall Analysis

Strength:

- 1. Visionary and proactive management
- 2. Well-maintained building infrastructure and laboratory facilities
- 3. Constant encouragement is given to the faculty members in pursuing research leading to a PhD
- 4. The hostel facilities are good for boys and girls students.
- 5. Three programs Accredited by the NBA

Weaknesses:

- 1. Being an affiliated institution has limited academic autonomy in designing curriculum and syllabus.
- 2. There is scope for increasing the number of research publications and patents.
- 3. Industry Supported Laboratories need to be further increased.
- 4. Exposure of faculty to international academics is to be established.
- 5. Need to enhance placement activities.

Opportunities:

- 1. Attaining Autonomous status
- 2. Applying for research grants from government and non-government funding agencies.
- 3. Student and Faculty Exchange Program with Indian and International universities

4. An improved research environment can be foreseen as a good number of faculty members are pursuing Ph.D.

5. There is scope for interdisciplinary research challenges and new trends in multidisciplinary professional education.

Challenges:

- 1. No flexibility in academic structure & curriculum since MEAEC is an affiliated institute
- 2. Coping with rapidly changing technologies
- 3. Securing funds from leading funding agencies
- 4. Setting up industry sponsored/supported laboratories to cope with industry ready engineers.

ection IV	V:Recommendations for Quality Enhancement of the Institution
lease lin	nit to ten major ones and use telegraphic language) (It is not necessary to indicate all the ten
llets)	
• Mu	alti-disciplinary and trans-disciplinary research areas are to be promoted
• Mo	ptivate faculty to conduct research and apply for funding
• Up	grade the laboratories to cope the with emerging technologies
• Str	rengthen the interaction between students and industry
• Al	umni Association need to be registered
• Fo	cus on real-time program problems of society and industry
• En	hance research in reputed journals
• Str	rengthen T&P activities for placement in core areas
• Re	cruit Ph.D. faculty and faculty at the senior level
• Im	plement the strategic plan and subsequently review progress periodically

I have gone through the observations of the Peer Team as mentioned in this report

Signature of the Head of the Institution

Seal of the Institution

Sl.No	Name		Signature with date
1	DR. RABINDRA KUMAR SAHU	Chairperson	
2	DR. VENKATA SITA RAMA RAJU ALLURU	Member Co-ordinator	
3	DR. ABHAY SHENDE	Member	
4	Dr. L. Manjunatha Rao	NAAC Co - ordinator	

Place

Date