



SELF STUDY REPORT
FOR
1st CYCLE OF ACCREDITATION

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

**THE SECRETARY MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE 363 ARCOT ROAD KODAMBAKKAM CHENNAI
600024**

www.msec.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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Executive Summary

Introduction:

Meenakshi Sundararajan Engineering College (MSEC) was established by the IIET Society in 2001. It is a part of the prestigious KRS Group of Institutions. The institution is approved by AICTE, affiliated to Anna University and accredited by National Board of Accreditation for the programs applied. It is located in the heart of the city at 363, Arcot Road, Kodambakkam, Chennai, Tamil Nadu, India. Presently MSEC offers 7 UG programs & 1 PG program in Engineering.

UG Programs

1. B.E. Civil Engineering
2. B.E. Computer Science and Engineering
3. B.E. Electrical and Electronics Engineering
4. B.E. Electronics and Communication Engineering
5. B.E. Mechanical Engineering
6. B.Tech. Information Technology
7. B.Tech. Artificial Intelligence & Data Science (with effect from 2021-22)

PG Program

1. M.E Construction Engineering & Management

The Sri Abhinava Vidya Theertha Block (Main Block) is a four storey building (with a foundation to hold six stories) of floor area 9467 sq.m complete with all infrastructure facilities, spacious library with adequate books, journals and e-books, 32 laboratories, air-conditioned seminar halls, air-conditioned conference hall etc. Adjacent to the Sri Abhinava Vidya Theertha Block, a separate Sri Vidhushekhara Bharathi Block (Civil Engineering block) of floor area 3448 sq.m and Sri Bharathi Theertha Block (Mechanical Engineering block) of floor area 3448 sq.m (including basement) is fully equipped with classrooms, drawing hall, laboratories, seminar halls and conference halls. In addition, the existing IIET block, a four storey building of floor area 2813 sq.m is housed with classrooms and Laboratories for Physics, Chemistry, English and Engineering Graphics hall.

The institution, since inception is known for the quality education it imparts and consistently outshone not only in academics, but also in non-academics and extension activities. The management strives to develop the institution a "**CENTRE OF EXCELLENCE**" imparting quality engineering education and grooming the overall personality with the highest emphasis on ethical values, honing them to face the challenges in the industry and nation at large.

Vision:

To impart state-of- the art technical education, including sterling values and shining character, producing engineers who contribute to nation building thereby achieving our ultimate objective of sustained development of an unparalleled society, nation and world at large.

Mission:

Meenakshi Sundararajan Engineering College, Chennai constantly strives to be a Centre of Excellence with the singular aim of producing students of outstanding academic excellence and sterling character to benefit the society, our nation and the world at large.

To achieve this, the college ensures

- Continuous upgradation of its teaching faculty to ensure a high standard of quality education and to meet the ever-changing needs of the society
- Constant interaction with its stakeholders
- Linkage with other educational institutions and industries at the national and international level for mutual benefit
- Provision of research facilities and infrastructure in line with global trends
- Adequate opportunities and exposure to the students through suitable programs, to mould their character and to develop their personality with an emphasis on professional ethics and moral values

SWOC

Institutional Strength :

Institutional Strength:

- College is sponsored by Indian Institute of Engineering and Technology (IIT) Society.
- 8 acres of land with adequate infrastructure
- Highly encouraging and motivating management.
- Spacious and accommodative auditorium (with 3000 people).
- Excellent rainwater harvesting system.
- Environmentally clean campus with well-maintained green trees.
- Adequate building.
- Leased link Internet access.
- Academic Laboratories are fully equipped with latest equipment and modern software tools.
- The entire campus is under CCTV surveillance.
- Well established and spacious digital library.
- Ranked among the private Engineering Colleges consistently.
- Ragging free campus.
- Regular recipient of University Rank holders in all programs.
- Excellent Placement Records.
- Excellent University examination results.
- Implementation of OBE (Outcome Based Education).
- Average student faculty ratio **13:1**
- Average teaching experience of faculty **8.33 years**.
- Excellent achievement of Alumni (holding higher positions).
- Very good leadership.
- Effective monitoring of the students performance with mentoring, counseling through teachers and effective academic guidance.
- Unique program **E-cube** (Enhancement, Enrichment, Empowerment) conducted every year to improve the communication and presentation skills of all the students.
- Regular Publication of Department News Letters.

- Representation of senior faculty in academic council of Anna University.
- Support of Industries in and around Chennai with MOU's which facilitate placement, internship, Industrial Visit, etc.
- A team of committed and dedicated teaching faculty.
- Good faculty retention.

Institutional Weakness :

Institutional Weakness:

- The departments need to become University recognized Research departments.
- Faculty members with Ph.D. qualification need to be improved.
- Insufficient industrial training for faculty.
- Revenue generation through consultancy to be improved
- Creation of Incubation centre
- More funded research activities need to be carried out.
- More publications, citations and patents are needed in high impact factor journals.

Institutional Opportunity :

Institutional Opportunity:

- Collaboration with International and National Institutes and Organizations of repute and other recognitions
- Student exchange program with reputed National & Foreign Universities
- Focus on Research activities & collaboration with institutes and industries
- Involving more faculty members in research oriented programs
- Enrollment of Students in Internship programs in different renowned corporate houses & industries
- Strong Alumni base that helps for the job generation and referral drive of junior students
- Scope for inter disciplinary projects.
- Located in the heart of the city is a major advantage in improving the industrial collaboration.
- Extension activities as Lions Club and Leo club, NSS, YRC provides scope for holistic development of the students.
- Association with professional societies like NIQR, IEEE, ISTE, etc.
- Scope for Industry sponsored projects.
- Support for entrepreneurship development programs.
- Scope for interdisciplinary projects.

- Developing entrepreneur skills.
- Networking of transport facilities.

Institutional Challenge :

Challenges:

- Shortage of ample opportunity for Research Activities due to funding problem & regulations by Govt., Non Govt. & External agencies.
- Major Gap in course curriculum with respect to Industry standards and our inability to modify it due to non-autonomous status & rigid rules laid by the authorities.
- The fees structure is not encouraging for the required improvements.
- To produce graduates with holistic development to face the highly competitive technical world.
- Keeping pace with continuous technological transformations.

- To motivate faculty for New Product Development/Research/ R&D/ Innovation etc.
- Lengthy procedures & regulations of government sectors
- To attract eminent Professors, Ph.D. Holders and Researchers in Campus to share their knowledge and experience with students, due to financial constraints.
- Presently the decline of interest among students for Engineering Education, especially core engineering.
- Difficulty in issues related to admission procedures.
- Escalating costs & the influence of many controlling bodies slowdown the development activities
- Application oriented learning.
- More funded projects for research.
- Improving the employability of the students and making them suitable for industrial requirements due to time constraints.
- Networking with the stake holders, to be improved overcoming the hurdles.
- Autonomy status for the institution.
- Strengthening research and consultancy is to be upgraded in spite of lack of time & funds.

Criteria wise Summary

Curricular Aspects :

Meenakshi Sundararajan Engineering College acts in accordance with Anna University Elective Course System (Regulation 2013), a Choice based Credit system (Regulation 2017) for all the UG and PG programs. **Outcome-Based Education** is followed meticulously. The system is adapted, for planning and implementation of the curriculum in an effective manner. The teachers participated in various activities like Academic Council/Board of studies, setting question paper, assessment and evaluation process. The faculty enhance the teaching skills through the interaction and participation in such activities. The college conducted **61** add-on courses in the last 5 years for the self-development and professional skill enhancement of the students. **96%** of the courses offer experiential learning through project work, internships etc. and **98.78%** students are benefitted. The curriculum integrates issues pertaining to gender equality, human values, professional ethics, environment and sustainability. The departments collected feedback about the implementation of curriculum from various stakeholders such as students, teachers, alumni and employers to bridge the curricular gap and enrich the teaching-learning process. The feedback obtained is analyzed and necessary action is taken for improvement. The action taken report is uploaded in the College website.

Teaching-learning and Evaluation :

- The average student enrolment of the college for the last five years is **85.84%**.
- The students from all sections seek admission in the college and the seats filled against reserved categories for the past five years crosses **76.26%**.
- Learning assessment is a systematic process that examines student's performance in internal-assessment /innovative skills and segregates into slow learners and advanced learners.
- The Institute provides a diverse range of learning possibilities, like remedial classes and peer coaching for slow learners. Mentors (students) are asked to train the group of **4 to 5** slow learners during peer coaching. Tutorial classes are also conducted.
- Advanced learners are encouraged to pursue certificate courses and a special "**Achieve Excellence Program**" is conducted for advanced learners to enhance technical knowledge.
- The institute is well equipped with **Information Communication Technology (ICT)** tools and are used to facilitate effective teaching and learning.
- The **experiential learning, participatory learning, and problem-solving methodology** are implemented for improving the student's learning.
- The Institution maintains a good **student faculty ratio of 13:1** for the past five years.
- The Institute consistently maintains a good strength of qualified and experienced full-time teachers. In the academic year 2020-2021, the **full time teacher's strength is 111** and an average experience of full time teachers in the same Institute is **8.34 years**.
- Faculty members are encouraged to pursue PhD programmes at recognised Universities. With the consistent and constructive encouragement shown by the management, **14** faculty members completed their PhD program.

- Students benefit from the mentoring system in both academic and non-academic areas. The institution's **mentor-to-mentee ratio is 1:15**.
- As per the University norms, the student's grievances with respect to external examinations are redressed through the centralized exam cell of the institution. Any discrepancies in internal assessment are solved by the faculty concerned and Exam cell coordinator.
- The effectiveness of the teaching learning process is measured through learning outcomes and in turn, it is achieved by mapping the **Course Outcomes (CO) with Programme Outcomes (PO) and Program Specific Outcomes (PSO)**.
- For the past five years, MSEC has continuously maintained an **average pass percentage of 96**.

Research, Innovations and Extension :

MSEC created a very good innovation eco system for the Students and Faculty in the Campus. With the innovative ideas students have attended inter/intra college technical events and conferences.

- Received grants for the funded projects worth **Rs.93 lakhs**.
- **TOYCATHON 2021** Ministry of Education's Innovation Cell :7 teams participated. 3 teams shortlisted for final.
- Done a project with **IISc, Bangalore**, titled, "**Radiation Exposure Level Monitor for Proximity Workers**", in the **Foundation for Advancement of Education and Research (FAER)**.
- Won **VISHWAKARMA 2020** award for the project conducted by **AICTE**.
- Won prizes in **KURUKSHETRA** conducted by **Anna University**.
- Participated in **International Rover Design Challenge (IRDC) 2020** and won 26th position by competing with universities worldwide.
- Conducted nearly **200 technical events** like guest lecture, seminar, workshops and conferences(National/International).
- **Conducted 14 events by Institute Innovation Council (IIC) and Entrepreneur Development**, to shape the young and dynamic minds.
- Encouraged the students and faculty members to publish research papers in journals and conferences (National/International).
- **36 papers** published in UGC/Scopus journals.
- **Published 196 technical** papers/ books chapters.
- Participated and Conducted **83** NSS activities.

- Service project in collaboration with Campus **Lions clubs and donated steel vessels and slide** worth Rs 1,32,000/- to **Bala Mandir Kamaraj trust**, Chennai.
- Donated Covid relief fund of **Rs.1,55,000** to Consortium of Self-Financing Professional, Arts and Science Colleges.
- Donated fund of **Rs.45,000** /- for **The Voluntary Health Service** and **Chief Minister Covid relief fund of Rs.20, 00,000/-**
- Donated funds for **13 single teacher schools, Cancer Institute Adyar of amount Rs 3,86,88,000/-**
- Lions Club in MSEC **provides lunch for the Senior Citizens in Anandam Home for Senior Citizens, regularly and “one day meal”** for the Differently abled kids in **“My Child Foundation”**, Chennai.
- Institution received an award for conservation of water titled **JAL SHAKTI AWARD** from **AICTE**.
- Won award from **NATIONAL EDUCATIONAL EXCELLENCE AWARDS AND CONFERENCE 2020** in the category of **Industrial Collaborations and Placements**.
- 27 functional MoUs with Educational Institutions and eminent Engineering Industries (National /International) including **VI Microsystems, UNIVERSITI SAINS MALAYSIA, TVS MOTOR COMPANY LIMITED, MISSILE INGENIATOR and NLTVC SDN BHD, MALAYSIA** which rightfully fulfils the innovation appetite of the students and faculty.

Infrastructure and Learning Resources :

Meenakshi Sundararajan Engineering College has adequate infrastructure and physical facilities for teaching-learning more than the requirements specified by Anna University. The campus is spread over 8 acres with greeneries and good academic ambience conducive for learning. There are 30 classrooms, 6 tutorial classrooms, 55 well-equipped laboratories, 28 computing laboratories, 2 conference rooms, 5 seminar halls, 3 drawing halls, 6 research centres, general workshop, and reprographic facility etc for six UG and one PG programmes. 92% of the Classrooms and Seminar Halls are provided with ICT facilities such as smartboard, LCD projectors, Audio and LAN, and LMS (GCR and Zoom) facilities for virtual learning. There are 1050 computers (465 computers with i7 configuration) with adequate student:computer ratio of 1.41:1, 35 printers, 16 UPS, 24 hours UPS backup, LAN and Wi-Fi connection, and high speed internet access of 150 Mbps. The IT machines and software are upgraded to ensure the market relevance and safe operations.

The Central Library is automated using AutoLib Software with integrated modules. 13 computers are provided to access e-resources such as IEEE-ASPP, Springer, ASME, ASCE, ASTE, J-Gate, e-ShodhSindhu, Shodhganga, e-books and NDL. 35093 volumes and 12718 titles are available in Humanities and Sciences, and Engineering and Technology. During pandemic, the reference books were scanned and posted in GCR. Spacious Sports ground, game courts, and well-equipped Gymnasium (average user rate - 52 per day) facilities are available in the campus. The students are trained for sports events by well-qualified and experienced physical director. Auditorium and Seminar Halls are utilized for conducting various Cultural and Yoga events every year.

The regular maintenance (works related to civil, electrical, mechanical and software) is ensured by a team of qualified and skilled manpower based on 5S principles. At times, Civil and electrical maintenance works are outsourced if necessary.

Student Support and Progression :

Meenakshi Sundararajan Engineering College, a student-centric institution supports in Curricular, Co-curricular and Extra-curricular activities at various levels for the Holistic development of the students. The students are mentored by the faculty members from the time of admission till the completion of programme. A group of students (Mentee) are assigned to each faculty (Mentor) for academic guidance and mentoring for the personal problems. Two or three teachers are assigned to counsel the students. Students are allowed to use both Central and departmental libraries, computer and internet facilities for the academic and career development.

The class teacher informs the students regarding the Government scholarships such as Post matric scholarship scheme for SC/ST students and BC/MBC students, First Graduate Scholarship and are encouraged to apply for them. Based on the standard procedures the scholarship applications are forwarded to the office concerned. Moreover, financially weak students are identified and are supported by other schemes such as Laxmi charities, Merit & Means Scheme (sponsors from Alumni and staff etc). Meritorious students are felicitated through endowments and awards during the Annual Day function.

Training and Placement Cell organizes career counselling activities and interactive experience-sharing sessions for the students to improve the soft skills and communication skills along with staff and students' coordinators. MSEC achieves excellent placement record every year. Students who wish to pursue higher studies are motivated through seminars by Alumni and field experts. To inculcate social responsibility among students, various programmes such as Tree Plantation, AIDS Awareness programs, Blood donation camps etc. are organized by NSS & YRC units.

Students are actively involved in administrative activities as members of Anti-Ragging Committee, SC/ST committee, Class Committees and also designated as commanders to maintain cleanliness, promote talent, ensure safety in all aspects.

Students are encouraged to participate in cultural and sports events conducted in inter-institute, zonal level and national level. The best performers and achievers are honored by prizes on sports day celebrations. For the past five years, **46** awards/medals are bagged by the students

Governance, Leadership and Management :

- The governance of the Institution is reflected and is in tune with the Vision and Mission statement of the Institution.
- Well-organized governance is achieved through the administrative set-up which consists of the Management Committee, General Body, Principal, Dean, and Institute levels committees like Internal Quality Assurance Cell (IQAC), Training and Placement Cell (TPC), and Institute Innovation council (IIC).
- Participation of the teachers in the decision making bodies is observed in the 28 institute level committees.
- Decentralization and participative management is achieved in all levels. The case study of the placement cell serves as an illustration.
- Strategic plan is prepared and effectively deployed in the specified core areas.
- Institutional bodies function according to the policies and procedures as clearly charted in the organogram of the institution.
- Case Study of the strategic plan prepared for five years of the TPC indicates placement in 2016 is 93% which is enhanced to 95% in 2021.
- E-governance is implemented in the following areas

- Autolib software is used in the library
- Finance and accounts using online procedures
- Examinations conducted using E-portals
- Online Classes through Zoom Meetings, Google Class room etc.
- Effective welfare measures are ensured for teaching and non-teaching staff.
- Professional Development and administration training programs are organised by the institution for teaching and non-teaching staff.
- Percentage of Faculty development programs during the last five years is 85%.
- Robust Performance Appraisal schemes for teaching and non-teaching staff.
- Conducts internal and external financial audits regularly.
- Funds received from philanthropists were spent on the development of infrastructure like
 - Construction of Mechanical block
 - Required utilities for labs,
 - Purchase of lifts and computers and payment of college fees of underprivileged students.
- IQAC has contributed to institutionalizing QA strategies.
 - NBA accreditation and Peer learning and monitoring.
- Evaluates its teaching methods through an Academic monitoring system and usage of ICT also.
- QA initiatives include regular IQAC meetings and quality initiatives with other institutions like Rajalakshmi Engg College , B.S.Abdur Rahman Crescent Institute of Science & Technology and Meenakshi College for Women.
- Participation in NIRF, CII, IIC ranking and ARIIA and details of NBA for four applied programs are given.

Institutional Values and Best Practices :

Meenakshi Sundararajan Engineering College believes in creating Engineering Graduates imbued with ethical values and right skills. The eco system provides a conducive learning environment and guides young minds in the right path.

MSEC educates the students on gender equity and social responsibility which are ensured in admissions, recruitment, administrative functionality and academic activities. Orientation programs, self-defense workshop, Social media and Anti-ragging awareness are conducted every year.

Importance is given to girl students to participate in various committees. Safety and security of women students is ensured by CCTV cameras and emergency contact help-line. Women students' grievances are resolved through mentoring, counselling, grievance redressal and internal complaints committee.

AICTE Universal Human Values (UHV) trained faculty, conducted Student Induction Programme on UHV for 319 freshers in 2020-21. Professional Ethics and Human Values course is offered in the curriculum.

Every year 7 days NSS camps are organized in nearby villages (Pozhichalur, Ottiyambakkam, Kelloy & Karayanchavadi Villages). 230 volunteers have participated in Eye, Blood donation and tree plantation camps. On an average 315 villagers got benefitted for the past 5 years. Campus cleaning and tree plantation are carried out inside campus.

- 15kW solar energy, Sensor-based energy conservation and LED bulbs (23.06%) are installed to conserve energy.
- Biodegradable solid waste (25Kg/day) and non-degradable solid waste (5Kg/day) are disposed regularly. E-waste is disposed through certified eco-friendly vendors.
- Regular maintenance of rain water harvesting, water bodies and distribution system.
- Green practices are adopted and audited. Received JAL SHAKTHI ABHIYAN 2019 award from AICTE.
- Ramps, lifts, toilets and screen-reading software are provided for physically challenged.
- Sponsored for the construction and maintenance of 13 single teacher schools, vessels to Balamandir Trust and funds for Cancer Institute. Donated for VHS for Corona Relief Fund.
- Code of conduct for students is published in website.
- Every year celebrated National and international commemorative days.

A unique program E-Cube is conducted to improve the students' technical and soft skills. In Achieve Excellence Program (AEP) 337 students got benefited and placed in higher package (>4LPA) jobs for past 5 years and the placement is consistent above 90% in all the previous 5 Years.

Profile

BASIC INFORMATION

Name and Address of the College	
Name	MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
Address	The Secretary Meenakshi Sundararajan Engineering College 363 Arcot road Kodambakkam Chennai
City	CHENNAI
State	Tamil Nadu
Pin	600024
Website	www.msec.edu.in

Contacts for Communication

Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	P K Suresh	044-24801636	9841070913	044-24811103	principal@msec.edu.in
IQAC / CIQA coordinator	Umarani K	044-24732488	9444169280	-	umarani1954@gmail.com

Status of the Institution

Institution Status	Private and Self Financing
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Type of Institution

By Gender	Co-education
By Shift	Regular

Recognized Minority institution

If it is a recognized minority institution	No
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Establishment Details

Date of establishment of the college	14-08-2001
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University to which the college is affiliated/ or which governs the college (if it is a constituent college)

State	University name	Document
Tamil Nadu	Anna University	View Document

Details of UGC recognition				
Under Section	Date	View Document		
2f of UGC				
12B of UGC				
Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	10-07-2021	12	
Details of autonomy				
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?		No		
Recognitions				
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?		No		
Is the College recognized for its performance by any other governmental agency?		No		
Location and Area of Campus				
Campus Type	Address	Location *	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	The Secretary Meenakshi Sundararajan Engineering College 363 Arcot road Kodambakkam Chennai	Urban	13	17974

ACADEMIC INFORMATION

Details of Programs Offered by the College (Give Data for Current Academic year)

Program Level	Name of Program/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Artificial Intelligence And Data Science	48	12th pass	English	60	60
UG	BE,Civil Engineering	48	12th pass	English	60	37
UG	BE,Computer Science And Engineering	48	12th pass	English	60	60
UG	BE,Electronics And Communication Engineering	48	12th pass	English	120	117
UG	BE,Electrical And Electronics Engineering	48	12th pass	English	60	52
UG	BTech,Information Technology	48	12th pass	English	60	60
UG	BE,Mechanical Engineering	48	12th pass	English	60	41
PG	ME,Civil Engineering	24	Bachelor Degree of Civil engineering	English	18	14

Position Details of Faculty & Staff in the College**Teaching Faculty**

	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	10				18				89			
Recruited	5	5	0	10	6	12	0	18	33	56	0	89
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			

Non-Teaching Staff

	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				27
Recruited	8	19	0	27
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Technical Staff

	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				11
Recruited	8	3	0	11
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Qualification Details of the Teaching Staff**Permanent Teachers**

Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	4	5	0	3	2	0	2	0	0	16
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	1	0	0	3	10	0	31	56	0	101

UG	0	0	0	0	0	0	0	0	0	0
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Temporary Teachers

Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers

Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visiting/Guest Faculties

Number of Visiting/Guest Faculty engaged with the college?	Male	Female	Others	Total
	0	0	0	0

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Program	From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total	
UG	Male	230	2	0	0	232
	Female	203	1	0	0	204

	Others	0	0	0	0	0
PG	Male	9	0	0	0	9
	Female	5	0	0	0	5
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years

Category		Year 1	Year 2	Year 3	Year 4
SC	Male	19	29	29	38
	Female	10	16	15	24
	Others	0	0	0	0
ST	Male	0	1	0	0
	Female	0	0	0	1
	Others	0	0	0	0
OBC	Male	146	151	168	146
	Female	105	111	107	133
	Others	0	0	0	0
General	Male	22	30	27	25
	Female	26	30	21	27
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		328	368	367	394

Provide the Following Details

Number of Programs	Self-financed Programs offered	New Programs introduced during the last five years
	7	1

Provide the Following Details		
Unit Cost of Education	Including Salary Component	Excluding Salary Component
20.21	75282	41414

Institutional preparedness for NEP	
1. Multidisciplinary/interdisciplinary:	The Vision of National Education Policy, to provide high quality education to develop human resources in our nation as global citizens, is well taken by the institution. Awareness among the faculty members was created on the key principles of NEP such as diversity for all curriculum and pedagogy with technological innovations in teaching and learning, encouraging logical decision making and innovation, critical thinking and creativity. MSEC supports interdisciplinary research.
2. Academic bank of credits (ABC):	The affiliating University - Anna University is registered with National Academic depository
3. Skill development:	MSEC offers skill development courses. Placement Training is given to make the students industry ready. Enrichment, Enhancement and Empowerment (E-Cube) is conducted to improve their communication and soft skills. Students are encouraged to participate in various competitions like Smart India Hackathon, Toycathon etc. showcasing their skills. Many guest lectures, seminars symposiums are conducted to enhance their professional skill development. Students undergo internships, practical training to improve their technical skills.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	MSEC impacts moral values and culture in all aspects ensuring the students to be good citizens. Professional ethics in Engineering is offered as elective course. Various seminars/webinars on yoga was conducted. Competitions were conducted to mark various special days of National significance. Student Induction Program on Universal Human values was conducted to students. There are various display boards in the campus to showcase the Indian culture and knowledge system. Students are motivated to take up research in the Indian Knowledge system. In some occasions, courses are also taught in Tamil

	for better understanding. This helps the Tamil medium students to cope with the courses.
5. Focus on Outcome based education (OBE):	MSEC offers 7 UG programs and 1 PG program. All these programs are offered as outcome-based education (OBE) which meets the industrial requirements. Course outcomes, Program Outcomes, Program Specific Outcomes and Program Educational Objectives are taken into consideration for the curriculum delivery. Bloom's Taxonomy is incorporated in evaluating the students' performance for calculating the attainment level.
6. Distance education/online education:	MSEC is involved in using the digital platforms for conducting classes, conferences and meetings. Study materials and assignments are shared using digital platforms. Online education has broken the geographical barriers creating interaction of experts and students from distant places. The online mode of conducting classes was very effective during the lock-down period during the pandemic. Further, online internships, online placement training, online placements were also effectively carried out during this pandemic. Hybrid mode of education was also implemented.

QIF

1. Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The Institution ensures effective curriculum delivery through a well planned and documented process

Answer:

- The curriculum and syllabus for affiliated Engineering colleges are planned and designed by Anna University. As the college is affiliated to Anna University, MSEC follows the curriculum and syllabus prescribed by Anna University.
- The academic schedule published by Anna University is taken into consideration for preparing the college academic calendar.
- The academic calendar is discussed and prepared in the HOD meeting conducted by Principal and Secretary of MSEC before the commencement of the academic year incorporating the academic schedule, Internal Assessments tests, events like college day, sports day, symposium, seminars etc.
 - The workload and the timetable for the schedule of classes are prepared in the department and circulated among the faculty members.
 - The faculty members prepare the course plan for the courses allocated to them considering all the topics to be covered in detail in each Unit of the course.
- The curriculum is rendered using different teaching methodologies.
 - It ensures **Outcome-Based Education**.

- The course plan is verified by the Head of the Department.
 - There is a provision for flexibility by providing extra hours in the course plan, to adapt the changes if necessary.
 - The syllabus completion review form is filled periodically to review the status of syllabus completion.
 - The syllabus completion is monitored by the Head of the department and it is reviewed by Dean Academics.
 - Additional hours are scheduled for syllabus completion, if required.

The curriculum is also effectively implemented through Projects, Mini projects, Industrial Visits, Internships, industrial interactions etc. Students implement mini projects in the laboratory courses.

- Students undergo **Internships** and most of the final year students do projects at industries as a part of their curriculum.
- **Industrial visits** are arranged to the students for enhancing the technical knowledge and exposure to the industrial atmosphere.
- **Student Development Programmes** like Career guidance, Guest lectures and seminars are conducted to hone the employability skills of the students.
- **Japanese Language training** is offered to students for a better career scope.

The internal assessment tests are conducted as per the academic schedule in order to assess the understanding and learning level of the students.

- The question paper is prepared based on **Bloom's Taxonomy**
- The test papers are corrected immediately and the marks of the students are reviewed.
- The fast and slow learners are identified and remedial classes (Peer Coaching) are conducted to uplift the knowledge of the students.
 - For fast learners, Achieve Excellence Program is conducted to train in a specific field.

A unique programme **Enrichment, Enhancement and Empowerment (E3)** is conducted for all the students to ensure a holistic development of the students.

- It is mandatory for the second, third and final year students to present technical paper on latest advanced technologies.
- Students are asked to present Mini project in the Third Year.
- To nurture the skills and the talent of the students, provisions are made for project presentation, group discussion and mock interview along with their technical capabilities for the final year students.

File Description	Document
Upload Additional information	View Document
Link for Additional information	View Document

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Answer:

- The academic calendar is prepared before the commencement of the academic year incorporating co-curricular and extracurricular activities.
 - The academic calendar is printed as booklets and issued to faculty members and students.
 - The timetable is prepared by the Head of the Department and it is approved by Dean Academics and Principal.
 - It is disseminated to the faculty members and students. The academic calendar is followed meticulously.
 - The Head of the Department monitors the conduct of classes as per the scheduled timetable. The syllabus completion is checked and reviewed by the head of the department and the same is cross checked by Dean Academics.
 - If any of the courses is not completed within the stipulated time, then additional classes are scheduled and conducted for those courses.
- The internal assessment tests for theory and practical courses are conducted as per the procedural plan.
 - The question paper is prepared based on **Bloom's Taxonomy**
 - The answer scripts are corrected and distributed to the students immediately.
 - Benchmark is set for the students' performance and the fast and slow learners are identified from the performance in the internal assessment tests.
 - To improve the slow learners in the respective courses, remedial classes are conducted.
- There is a provision for flexibility in the academic calendar to incorporate changes for conducting the Continuous Internal Evaluation (**CIE**).
 - In case of **unforeseen conditions**, the academic calendar is modified and revised as per the instructions of Head of the Institution.
 - The **adherence report** of the academic calendar is prepared by the department

File Description	Document
Upload Additional information	View Document
Link for Additional information	View Document

1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years

1. Academic council/BoS of Affiliating university
2. Setting of question papers for UG/PG programs
3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
4. Assessment /evaluation process of the affiliating University

Answer: B. Any 3 of the above

File Description	Document
Institutional data in prescribed format	View Document

Details of participation of teachers in various bodies/activities provided as a response to the metric	View Document
Any additional information	View Document
Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Answer: 100

1.2.1.1 Number of Programmes in which CBCS / Elective course system implemented.

Answer: 7

File Description	Document
Minutes of relevant Academic Council/ BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional information	View Document

1.2.2 Number of Add on /Certificate programs offered during the last five years

Answer: 61

1.2.2.1 How many Add on /Certificate programs are offered within the last 5 years.

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
13	11	13	13	11

File Description	Document
List of Add on /Certificate programs	View Document
Brochure or any other document relating to Add on /Certificate programs	View Document

Any additional information	View Document
Link for Additional information	View Document

1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

Answer: 99.41

1.2.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
1477	1573	1665	1740	1776

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	View Document
Any additional information	View Document

1.3 Curriculum Enrichment

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

Answer:

Professional Ethics and Human Values

- Engineering education with the highest emphasis on ethical values is imparted to students.
- Student Induction Programme on Universal Human Values is conducted for the students.
 - All faculty members have undergone the training programme on Universal Human Values in order to mould the students as good citizens with moral responsibility.
- Professional Ethics in Engineering is offered as an elective course.
 - This inculcates moral values and develops ethical competency among the students.
- The Institution celebrates Independence Day, Republic day etc. which are the days of National significance.
- As a part of Institute-Social responsibility, social service activities have been carried out by the students and faculty members.
 - The Lions/Leo Clubs of the campus have adopted villages and have strived for rural development.
 - As a part of NSS/YRC activities, Blood Donation Camps, Medical Camps, Swatch Bharath activities were carried out.
 - A humanitarian aid was given to the Adyar Cancer Institute and cooking utensils were donated to Bala Mandir.

- During the Pandemic, the faculty members and students have rendered services to the society.
- These activities nurture moral, ethical and social values and inculcate social responsibility among the students.

Gender

- The proportion of boys and girls in this institution is **55% and 45%** respectively.
- The College Grievance Redressal Cell provides **counselling** to students, **promotes gender equity** among students and also dealt with related issues of safety and security.
- The gender equity is maintained in placement.
- Anti-ragging committee and internal complaint committee also deal with the issues related to safety and security of the students.
- Promotional programmes for girl students are conducted.
- The college campus is secured with CCTV and fire extinguishers providing a safe environment.

Environment and Sustainability

- A clean and green campus is maintained.
 - **Plastic free campus**
 - **Environment commanders** are selected in each year to ensure sustainability of the environment
- Rain water harvesting system is installed to improve the ground water level.
- Vermicomposting is carried out to treat organic wastes into manure.
- Solar energy is also utilized in the campus.

Department	Professional Ethics	Environment and Sustainability	
		Regular Course	Elective Course
B.E - Civil		<ul style="list-style-type: none"> • Environmental Science and Engineering • Environmental Engineering I • Environmental Engineering II • Water Resources and Irrigation Engineering • Water Supply Engineering • Waste Water Engineering 	<ul style="list-style-type: none"> • Air Pollution Management • Municipal Solid Waste Management • Environment and Agriculture • Air Pollution and Control Engineering • Geo-Environmental Engineering • Disaster Management

B.E - CSE		<ul style="list-style-type: none"> • Environmental Science and Engineering 	<ul style="list-style-type: none"> • Green Computing • Waste Water Treatment • Disaster Management • Air Pollution and Control Engineering
B.E - ECE		<ul style="list-style-type: none"> • Environmental Science and Engineering 	<ul style="list-style-type: none"> • Disaster Management
B.E - EEE	<ul style="list-style-type: none"> • Professional Ethics in Engineering <p>(Elective)</p>	<ul style="list-style-type: none"> • Environmental Science and Engineering • Renewable Energy Systems 	<ul style="list-style-type: none"> • Power Electronics for Renewable Energy Systems • Disaster Management
B.Tech - IT		<ul style="list-style-type: none"> • Environmental Science and Engineering 	<ul style="list-style-type: none"> • Green Computing • Disaster Management • Air Pollution and Control Engineering
B.E - Mech	<ul style="list-style-type: none"> • Professional Ethics in Engineering <p>(Regular course in Regulation 2013 and elective course in Regulation 2017)</p>	<ul style="list-style-type: none"> • Environmental Science and Engineering 	<ul style="list-style-type: none"> • Environment and Agriculture • Renewable sources of energy • Disaster Management

Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View Document
Any additional information	View Document

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Answer: 1.16

1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
4	4	3	3	3

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Any additional information	View Document

1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Answer: 98.78

1.3.3.1 Number of students undertaking project work/field work / internships

Answer: 1463

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	View Document

Any additional information

[View Document](#)

1.4 Feedback System

1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders

1) Students

2) Teachers

3) Employers

4) Alumni

Answer: A. All of the above

File Description	Document
Any additional information (Upload)	View Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	View Document
URL for stakeholder feedback report	View Document

1.4.2 Feedback process of the Institution may be classified as follows:

Options:

1. Feedback collected, analysed and action taken and feedback available on website
2. Feedback collected, analysed and action has been taken
3. Feedback collected and analysed
4. Feedback collected
5. Feedback not collected

Answer: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Upload any additional information	View Document
URL for feedback report	View Document

2. Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Answer: 85.84

2.1.1.1 Number of students admitted year-wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
328	370	369	395	418

2.1.1.2 Number of sanctioned seats year wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
438	438	438	438	438

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Answer: 91.13

2.1.2.1 Number of actual students admitted from the reserved categories year-wise during the last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
168	182	182	276	185

File Description	Document
Average percentage of seats filled against seats reserved	View Document

Any additional information

[View Document](#)

2.2 Catering to Student Diversity

2.2.1 *The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners*

Answer:

In order to identify and improve the level of academic performance continuously, internal assessment test/ Model Examination are conducted in each semester along with assignments in all subjects. Based on the academic performance in those tests and assignments, the level of performance of the students is assessed by the teachers. The results of these assessments are used as tools to categorize the students into two major groups namely advanced learners and slow learners

Action taken for slow learners:

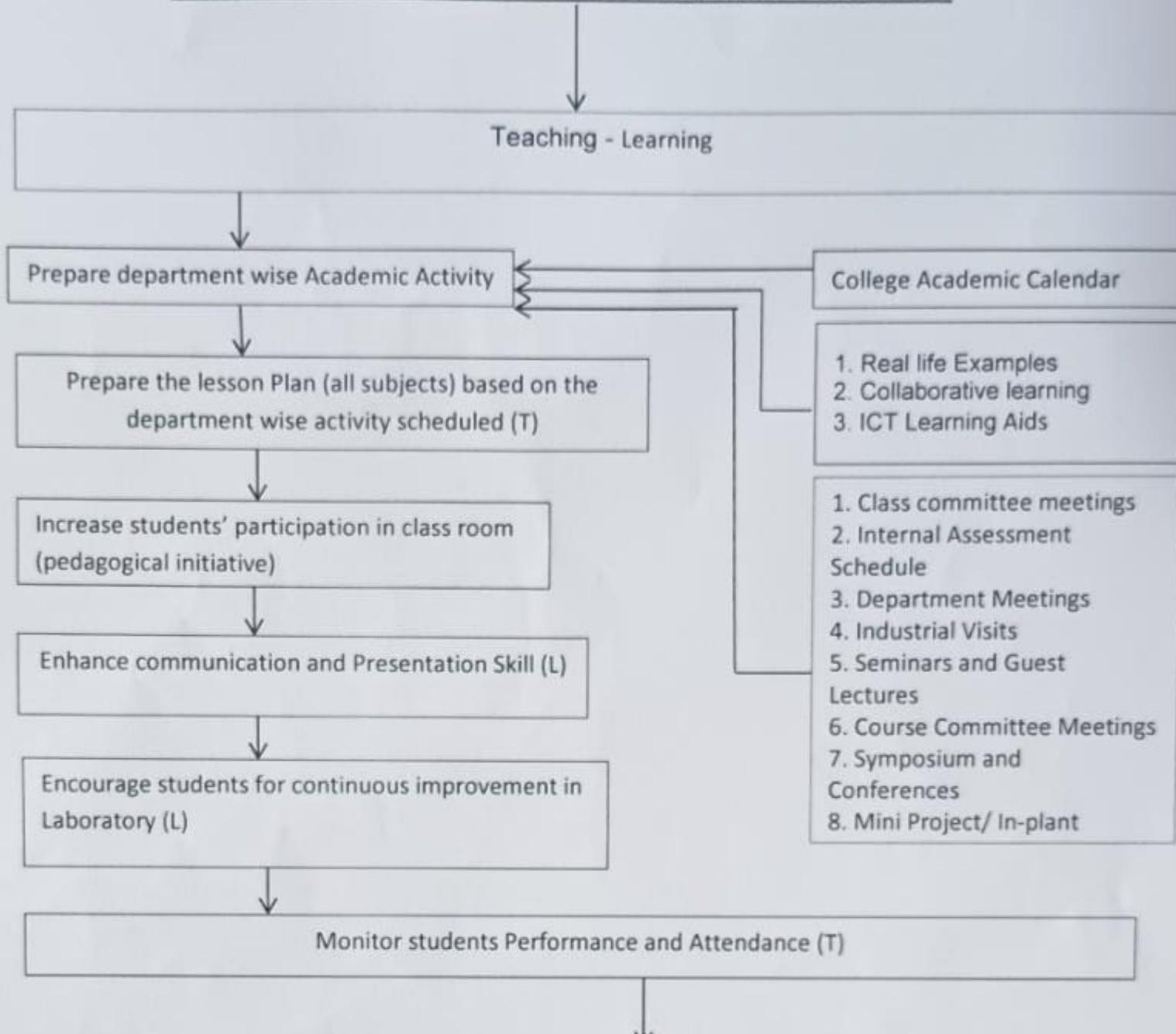
- The slow learners are identified on the basis of internal assessment test.
- Remedial coaching classes are organized in the department and they are encouraged to interact during class hours.
- In order to enhance their performance, **peer coaching** is conducted. Special care is given to these students through **Tutorial classes**.
- **Mentoring and counselling** is done to encourage these students to concentrate more in studies, attend classes regularly and come on time and to perform well in the University examination.
- The faculty members clearly explain the fundamental concepts in order to facilitate the slow learners.
- Necessary books are provided to them through the departmental library and from the central library.
- The slow learners are encouraged to participate in co-curricular and extra-curricular activities and to showcase their talents in events like symposia and conferences.
- A special program **E-cube (Enrichment, Enhancement and Empowerment)** is conducted every year by all the departments and even the slow learners are motivated to present technical papers which pave the way for them to exhibit their talents.
- E-cube is a platform which enhances the confidence level of the students and their presentation skills.

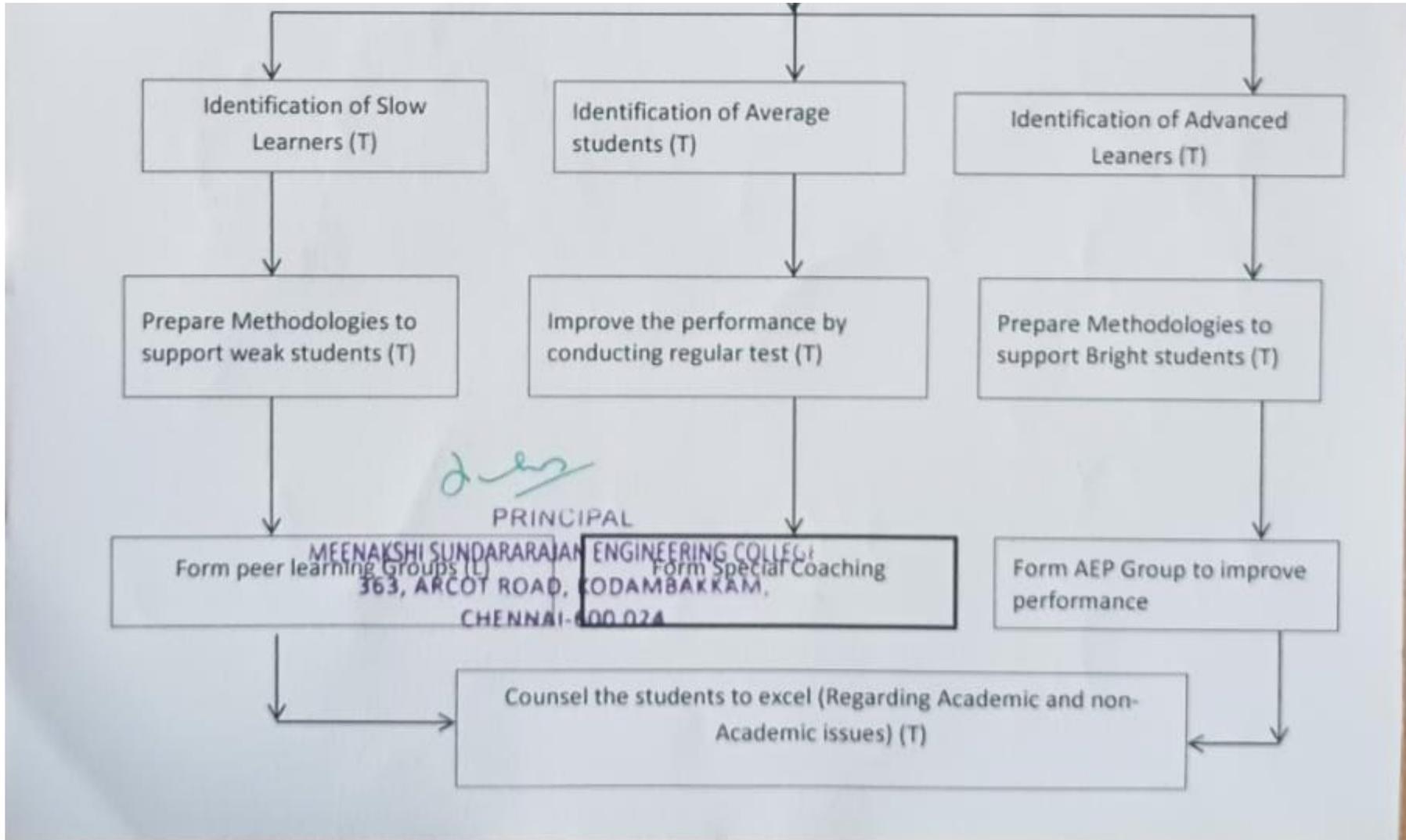
Steps taken for advanced learners:

- The students who have achieved more than 70% marks in the internal assessment tests and students with innovative skills are identified as advanced learners.
- The students are encouraged to guide and support slow learners in groups.
- Advanced learners are motivated and given opportunities to share their ideas in the regular classes.
- Mentoring and counseling is done to encourage the students to score better grades in examinations, obtain University ranks and appear for competitive examinations.
- To improve the level of confidence, advanced learners are motivated to present technical papers in symposia and conferences. A unique '**Achieve Excellence Program**' is conducted exclusively for advanced learners to excel and gain more knowledge.
- To be on par with latest technological transformation, these students are encouraged with workshops on specialized topics.
- These students are given training in communication skills by expert lectures.

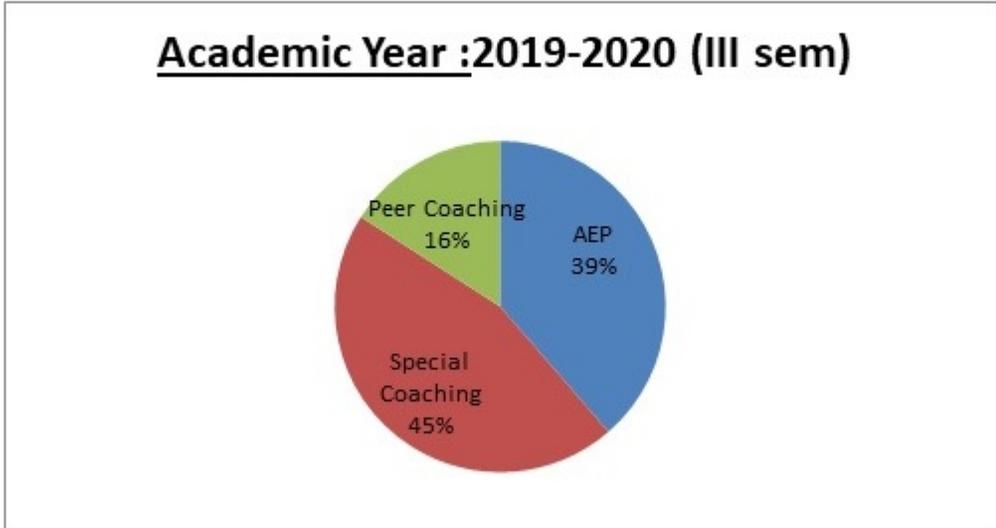
Flow Chart for Quality Improvement in teaching Learning Process:

IMPROVE QUALITY OF TEACHING LEARNING PROCESS





Programmes Based on Learning Levels
Electrical and Electronics Engineering Department Academic Year 2019 – 2020
III Semester



File Description	Document
Upload any additional information	View Document
Upload any additional information	View Document

Past link for additional Information	View Document
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2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)

Answer: 16.1

File Description	Document
Any additional information	View Document
Any additional information	View Document

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Answer:

METHODOLOGY OF STUDENT CENTRIC TEACHING- LEARNING:

The Institution is always student-centric and all activities are focused on the academic and holistic development of the students. The modes of delivery of courses used to improve quality of Teaching - Learning Processes are: **Lectures, Assignments, quizzes, Tutorials, Laboratory Practice, Project Work, Mini Project, Problem solving (individual and collective) ,Special training and Workshops / Guest Lectures / Seminars.** The faculty members make the learning interactive by motivating them to participate in **group discussion, role-play, quiz and questions and answers** session. Each of the departments organizes **Guest lectures by experts** from industries and higher educational Institutions.

Academic Year 2019 – 2020

Department of EEE

Student Centric Methods

E Cube Paper
Presentation
Sessions

4

Lab Activities 15

Mini Projects 15

Industrial Visits

6

Internships / Inplant
Training

28



1. Experiential Learning:

Experiential Learning is used to provide empirical evidence of theory learnt. Each department imparts the following experiential learning practices to enhance creativity and cognitive levels of the students:

- **Laboratory work** demonstrates how theoretical concepts are applied practically.

- The students are encouraged to do **mini projects**. This method is used to improve understanding of application and also to reinforce knowledge provided during the lecture.
- **Industrial visits** are planned and arranged for the students to get the industrial exposure and to acquire the knowledge on recent innovation and technology.
- **Internships** are considered as an important career stepping stone. Students attend internship during their semester vacation for a minimum period of 7 days and maximum of 15 days to experience on-the-job skills.
- **Technical Workshop and hands on training** are conducted during each semester on latest technologies.
- **Seminars (Technical/Non-Technical)** are presented by the resource persons on specific topics in the respective courses to enrich their knowledge.

2.Participative learning:

- The students are motivated to participate in **group discussion, role-play, and quiz** and **brain storming** activities during regular classes.
- During **Communication Skills Lab**, students practice recorded contents and use workbook exercises to improve the skills on communication.
- **Career development courses** like **soft skills, presentation and group discussion** are conducted to enhance the Communication and Presentation skills.
- Apart from the curriculum, every student **presents a technical paper** in the **E-cube** event. As a part of E-cube event, Students are encouraged to participate in **group discussions** and **mock interviews** aswell.
- Students are motivated to participate and present their **projects/miniprojects** in the conferences and journals.
- **Peer learning** is encouraged to improve the academic performance of the slow learners.
- **Seminars** related to the subjects are given by the students during class .

3.Problem solving methodologies:

- Departments encourage students to acquire and develop **problem-solving skills** by organizing **expert lectures** on various topics.
- Students participate in various inter-collegiate and **intra-collegiate technical fests and other competitions**.
- To nurture the problem solving skills, the students are asked to **do presentation on case studies** individually or in groups, **conduct quizzes** and problem based assignments.
- Students are motivated to take part in competitions like **SIH (Smart India Hackathon), Toycathon** and **code-vita by TCS** etc.
- A unique initiative **Societal beneficial Innovation (SBI)** organized by the Institution provided opportunity for the students to develop innovative projects addressing the societal problems.The objective of this initiative is to distribute the products developed under this scheme, to the beneficiaries.



Students Participation in Problem solving



File Description	Document
Upload any additional information	View Document
Link for additional information	View Document

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Answer:

The Institute uses Information and Communication Technology (ICT) in education to support, enhance, and optimize the delivery of education besides the traditional classroom teaching.

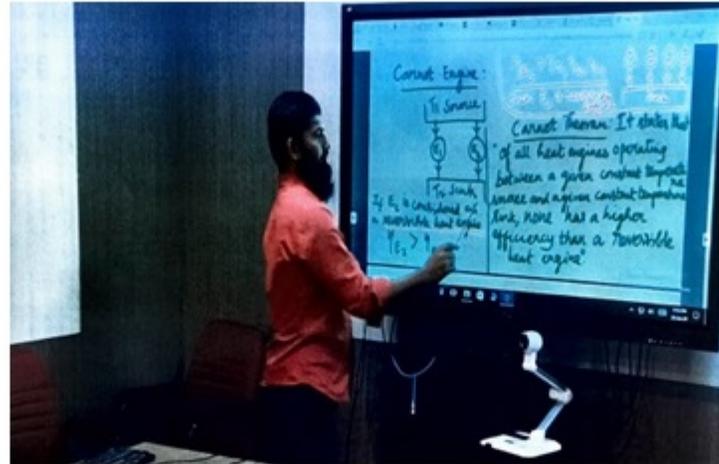
- In addition to traditional teaching method (chalk and talk), faculty use **ICT tools such as PPT, animated videos** to encourage and motivate the independent and active learning of the students.
- Modern teaching aids like **LCD projectors and smart boards** are used for effective teaching learning process.
- Faculty provide course material to the students, administrate internal assessment tests and assignments, track student progress, through open source LMS like **GOOGLE CLASS ROOM, ZOOM, EDMODO CLASS ROOM and SOCRATIVE**.
- Faculty members use digital library and other open source platforms such as NPTEL video lectures to make the course easy to understand.
- Faculty members are encouraged to attend short term courses, staff development programs and workshops on advanced topics to keep pace with the technological developments that are taking place.
- Over the past years, Faculty members have been **participating/ presenting papers in National / International conferences** and publish articles.
- E-resources like E-books, Online Test (Aptitude & Technical), you tube video Lectures & animated video lectures, Quiz and E-Learning are used for effective teaching.

Usage of ICT by Faculty:

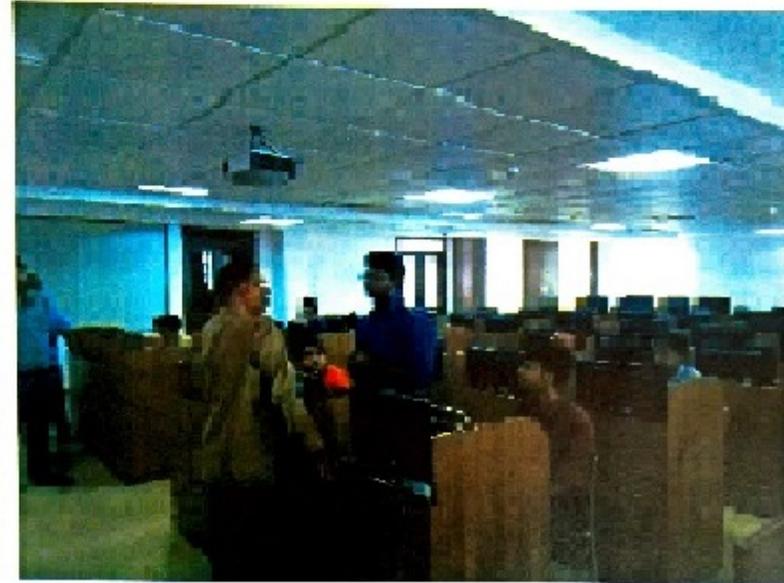
- **PowerPoint presentations-** Faculty use **power-point presentations** in teaching using **LCD projectors**.
- **Industry Connect-** Seminar halls and Conference rooms are digitally equipped, where guest lectures and expert talks are organized for students.
- **Online quiz-** Online quiz for students are prepared and conducted with the help of **GOOGLE FORMS**.

- **Video lecture-** Video lectures are recorded and made available to students for long term learning and future referencing.

Faculty Using Smart TV for giving Lecture



Learning Environment equipped with ICT



Links of You tube Video Lecture by our department faculty:

Video lectures by our faculty are made available in the website to the students. The students can be able to access the material at any time and they can improve their knowledge in the respective courses.

<https://www.youtube.com/watch?v=Fe1nVjeiTCQ&list=PLEvSBgF2iITIpS010PZVsS9nVaMDVuMeE>

https://www.youtube.com/watch?v=rT_4LLVnF5g&list=PLEvSBgF2iITL2Blo84LYQawA2bVDEfX7u

<https://www.youtube.com/watch?v=HmrUCxT0MII>

https://youtu.be/cP_Ew7UjboA

<https://youtu.be/OsUv4crb1k4>

<https://youtube.com/channel/UCm2uSqZKExOS0vE3r1F97MQ>

<https://youtu.be/ZzXzfnh1Zjc>

File Description	Document
Upload any additional information	View Document
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View Document

2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

Answer: 16.1

2.3.3.1 Number of mentors

Answer: 92

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	View Document
mentor/mentee ratio	View Document
Circulars pertaining to assigning mentors to mentees	View Document

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Answer: 92.18

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Answer: 11.04

2.4.2.1 Number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. year wise during the last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
14	13	10	9	8

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	View Document
Any additional information	View Document

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Answer: 9.98

2.4.3.1 Total experience of full-time teachers

Answer: 917.83

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

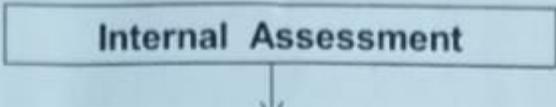
Answer:

Internal assessment assessments are used to evaluate students' performance as well as their comprehension of a course. Faculty members can use the continuous evaluation method to keep track of their students' progress in a course. It may also assist students in preparing for their end-of-semester exams and provide insight into their general grasp of a course. Internal assessment tests are administered, and students are given marks based on their performance. The results of internal evaluation tests and attendance are posted on the Anna University webportal.

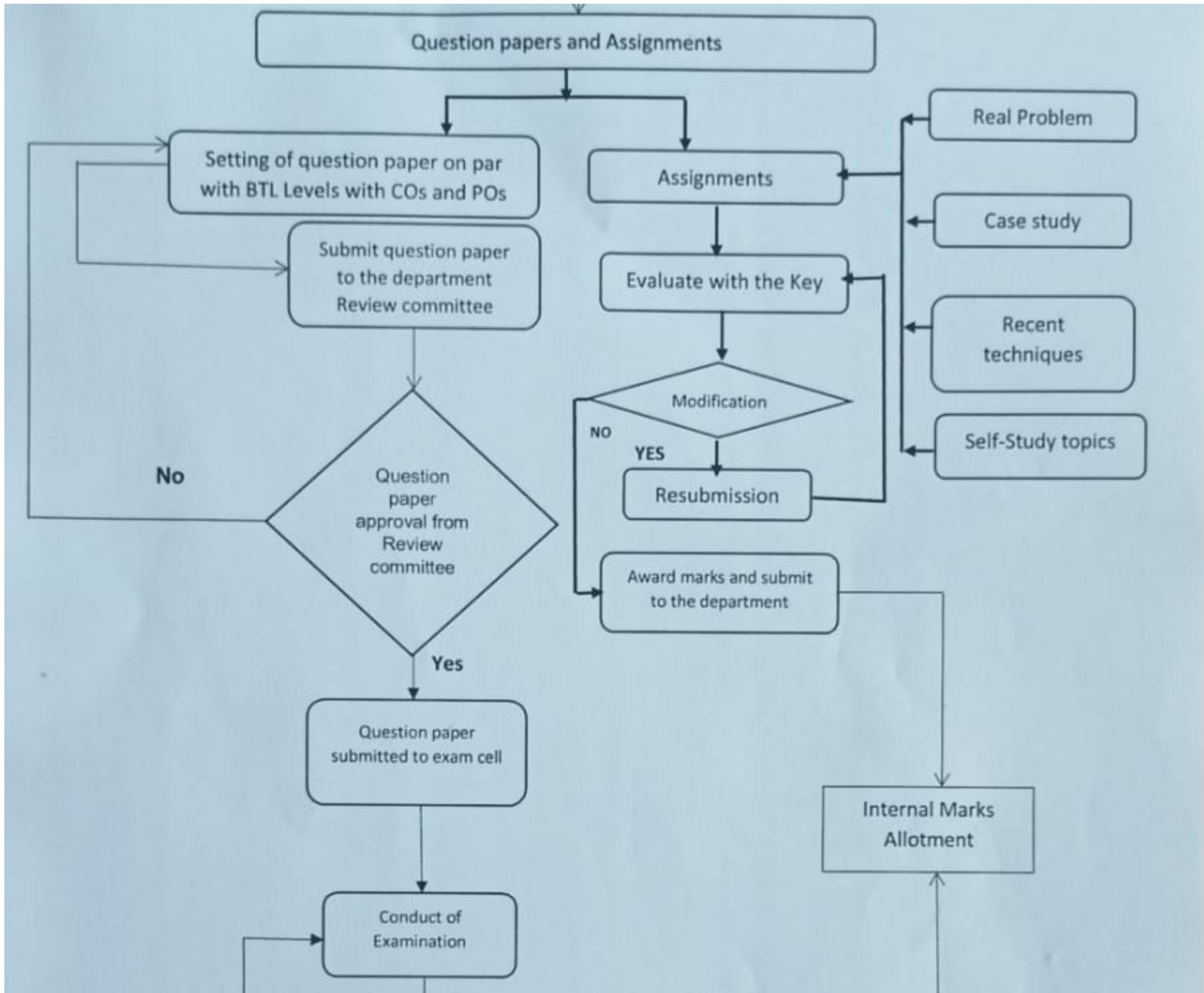
Procedure for conducting internal assessment tests:

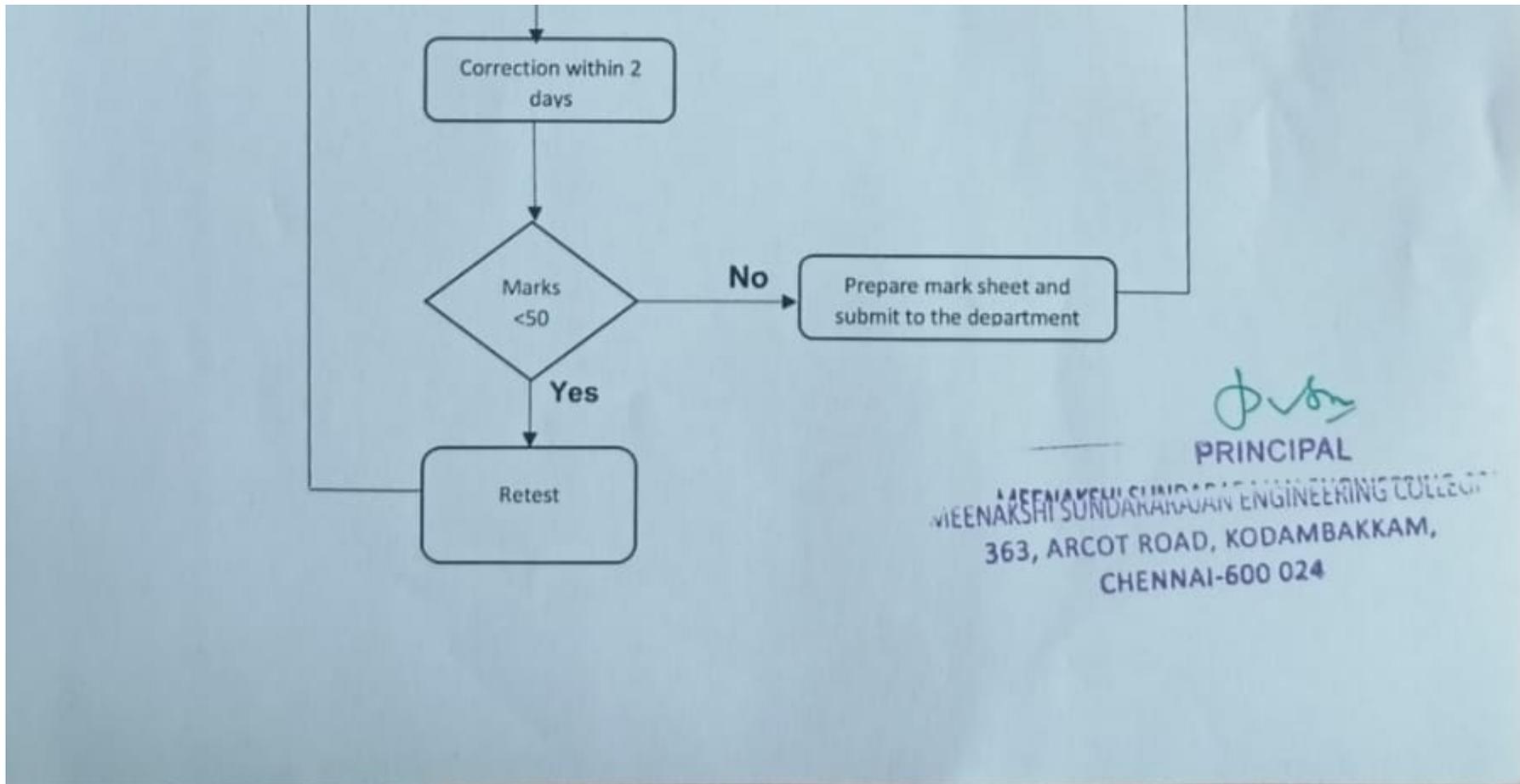
- **Internal assessment tests** for all subjects are conducted unit wise **periodically**.
- The **schedule for the exam** is prepared by the **exam cell** and communicated to the students.
- The subject teachers prepare the **question paper** on par with **Blooms Taxonomy level**.
- The **question papers are validated** by the exam cell coordinator of each department and then forwarded to the exam cell.
- The **answer books are printed similar to the Anna University answer sheets** for the better practice for the students.
- The **model exam** in theory is conducted in each semester as per Anna University pattern.
- The students are allowed to verify the evaluated answer sheets and discuss the same with the faculty concerned.

Mechanism of internal assessment:



Internal Assessment





Practical course evaluation:

- Continuous evaluation procedure is followed for practical courses.
- List of experiments are explained by the faculty.
- Each batch students perform experiments and it is evaluated.
- Practical classes are conducted based on the syllabus prescribed by the Anna University.
- To facilitate the students for better performance and to evaluate internal marks at the end of the semester, **model examination similar to the Anna University** pattern is followed for all practical courses.

Sample sheet of List of experiments:

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE, KODAMBAKKAM, CHENNAI - 600024

LIST OF EXPERIMENTS

DEPT. : EEE

SUBJECT NAME : EE6511 Control & Instrumentation Lab

Expt. No	Experiment Title
1	Analog Simulation of Type 0 & Type 1 Systems
2	AC Position Control System
3	DC Position Control System
4	Transfer Function of DC Generator
5	Transfer Function of DC Motor
6	Stability Analysis of Linear Systems
7	Digital Simulation of Linear First Order System
8	Digital Simulation of Linear Second Order System
9	Design of lead, lag & lead lag Compensators
10	Synchro Transmitter - Receiver characteristics

A - Attended

C - Completed

Sample Lab Evaluation Sheet:

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE, KODAMBAKURAM, CHENNAI - 600024
 (STUDENTS' PRACTICAL WORK)
 DEPT. : EEE SUBJECT NAME : EE6511 Control & Instrumentation Lab

Group No	Name of Student	EXPERIMENT NO													
		(A-Attended)		(C-Completed)											
		1	2	3	4	5	6	7	8	9	10				
		A	C	A	C	A	C	A	C	A	C	A	C	A	C
✓	Adithya M ✓	4/8	28/8	4/7	17/7	4/9	19/9	5/9	11/10	5/9	11/10	5/9	11/10	5/9	11/10
✓	Akshaya P ✓	4/8	28/8	4/7	17/7	4/9	19/9	5/9	11/10	5/9	11/10	5/9	11/10	5/9	11/10
✓	Almai A ✓	4/8	28/8	4/7	17/7	4/9	19/9	5/9	11/10	5/9	11/10	5/9	11/10	5/9	11/10
✓	Amalitha Valluvar P ✓	29/8	5/10	4/8	11/8	18/8	25/8	4/9	5/9	5/10	11/10	29/8	5/10	4/8	11/8
✓	Anashkumar AB ✓	29/8	5/10	4/8	11/8	18/8	25/8	4/9	5/9	5/10	11/10	29/8	5/10	4/8	11/8
✓	Arun Kalithi P ✓	29/8	5/10	4/8	11/8	18/8	25/8	4/9	5/9	5/10	11/10	29/8	5/10	4/8	11/8
✓	Ashwin Kumar B ✓	4/7	28/7	4/9	19/9	5/9	11/10	5/9	11/10	5/9	11/10	5/9	11/10	5/9	11/10
✓	Azar Mohammed J ✓	4/7	28/7	4/9	19/9	5/9	11/10	5/9	11/10	5/9	11/10	5/9	11/10	5/9	11/10
✓	Badeenath N ✓	4/7	28/7	4/8	9/8	11/9	24/9	29/8	8/9	2/8	9/9	29/8	8/9	2/8	9/9
✓	Balaji G.S ✓	4/8	18/8	4/7	6/7	4/7	6/7	29/8	19/9	29/8	19/9	29/8	19/9	29/8	19/9
✓	Balaji S ✓	4/8	28/8	4/7	17/7	4/7	17/7	29/8	19/9	29/8	19/9	29/8	19/9	29/8	19/9
✓	Dinesh Raja ✓	4/8	24/8	4/7	17/7	4/7	17/7	29/8	19/9	29/8	19/9	29/8	19/9	29/8	19/9
✓	Divya P ✓	19/9	4/10	18/7	11/8	4/8	11/8	19/9	19/9	19/9	4/10	29/8	4/10	18/7	11/8
✓	Gemathi N ✓	19/9	2/8	10/7	10/8	4/8	10/8	19/9	19/9	19/9	2/8	29/8	2/8	10/7	10/8
✓	Guru Prasad T ✓	19/9	4/10	18/7	10/8	4/8	10/8	19/9	19/9	19/9	4/10	29/8	4/10	18/7	10/8

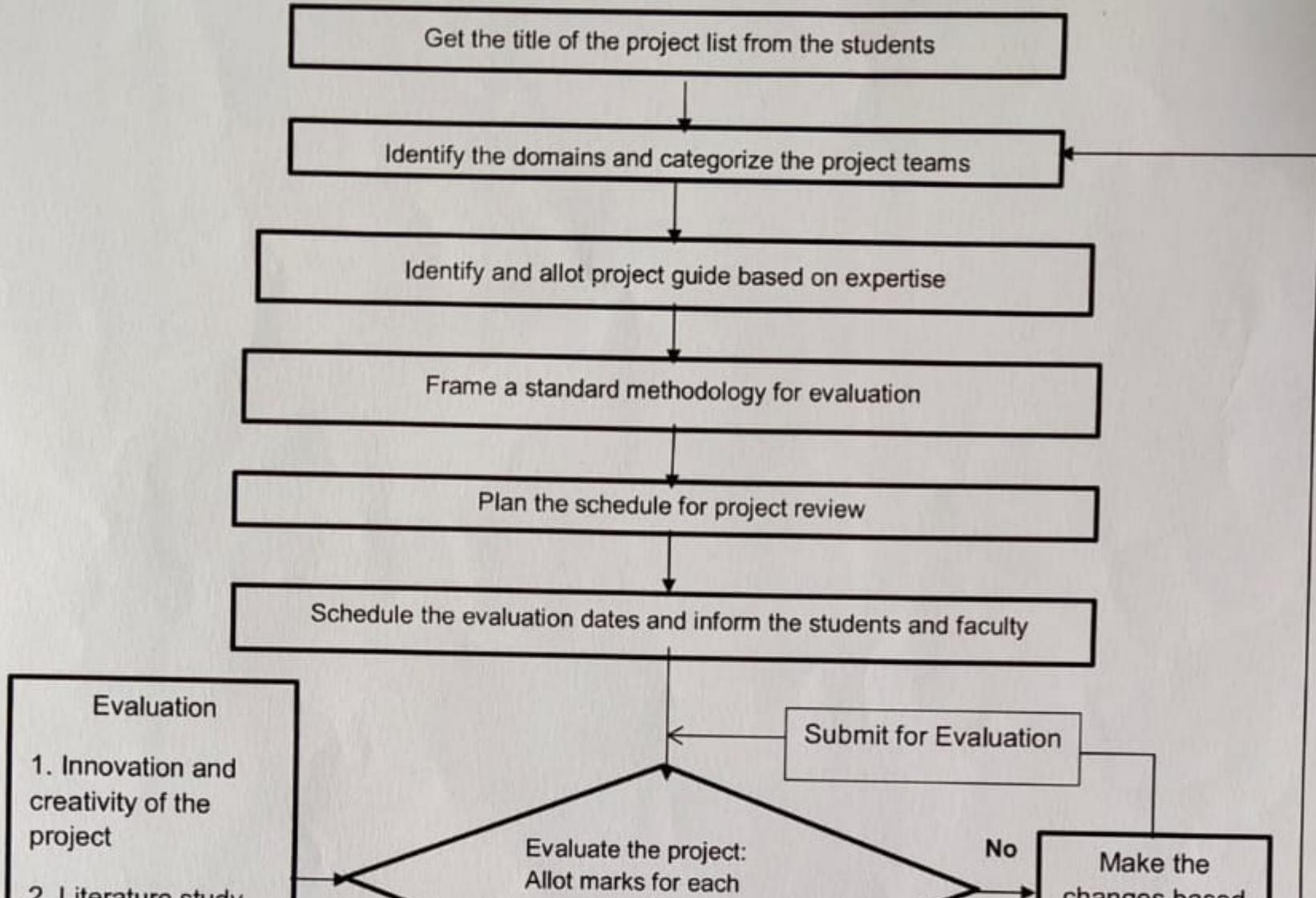
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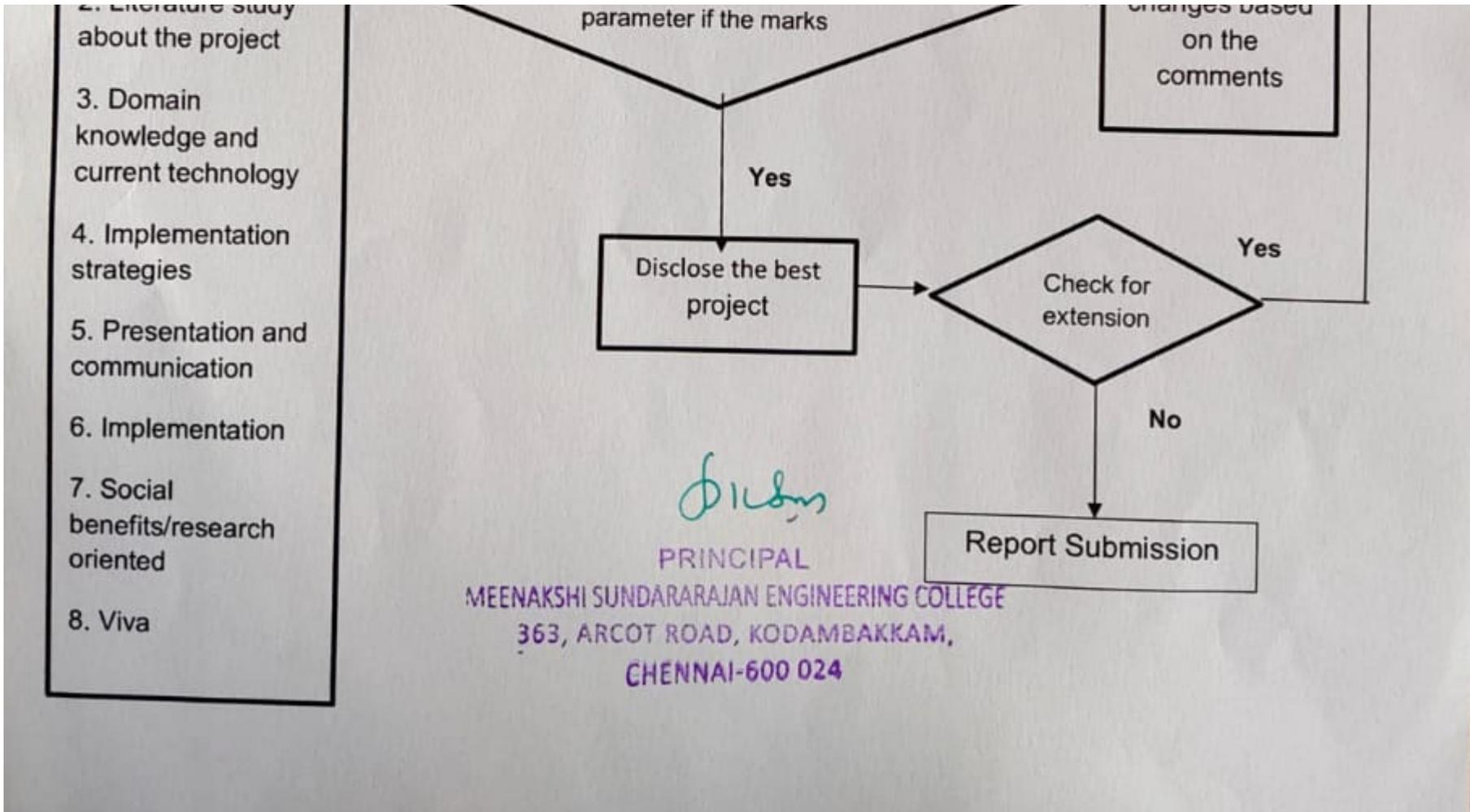
Project work evaluation:

- Students present their **project work title** which is **approved** based on their relevance to the latest trends.
- Project guides are allotted based on their expertise.
- The progress in the **project work** is continuously monitored by **periodical reviews** and evaluation.
- Model review is conducted typical to the University pattern.
- The Examination cell coordinators from each department contribute for the smooth conduct of the examination.
- The examination committee meets periodically to discuss all the examination related matters.

Mechanism of Project Identification, allotment , Monitoring and Evaluation:

PROJECT IDENTIFICATION, ALLOTMENT MONITORING AND EVALUATION PROCESS





File Description	Document
Any additional information	View Document
Link for additional information	View Document

2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, time- bound and efficient

Answer:

- On the Induction Day, the first year students are made aware of the **Anna University examination evaluation processes**.
- The University allots **80% marks for the end semester** exams and **20% for internal marks** and it is subjected to changes as per regulations.
- The **internal assessment test marks and attendance are uploaded in Anna University web portal**.
- Internal assessment test is conducted and marks are awarded to the students based on their performance.
- At the end of each semester, University examinations are conducted as per the Anna University schedule.
- For the efficient conduct of internal assessment test, the institute has **examination cell** which comprises faculty from each department and an overall examination cell co-ordinator.
- Any grievances reported by the students related to the internal examination are immediately attended and corrected.
- The grievances related to **internal assessment** test are dealt in three stages namely: **Before, during and post examination** in a transparent, time-bound method.

PRE EXAMINATION:

- The exam cell prepares **the timetable** which is **circulated to the students**.
- Student's suggestion regarding the time, change of subject order in the timetable (due to difficulty level of the subject) are reported to the HOD and corresponding changes are incorporated to the benefit of the students.
- All **question papers are scrutinized by the exam cell coordinators** in each department and then it is forwarded to the exam cell.

DURING EXAMINATION:

- If any student **finds discrepancy in question paper like insufficient data, students may report it to the exam cell**. The examination coordinator takes immediate action and resolves the grievance with the help of concerned faculty.

POST EXAMINATION:

- The corrected answer sheets are distributed to the students for verification in the classroom and concerned faculty discusses the performance of the students as a part of **feedback mechanism**.
- If the students find their marks are low, they are asked to write **retest** to boost the internal marks.
- To facilitate the students for better performance and evaluate internal marks at the end of the semester, model examination typical to the Anna university method is followed for all theory, practical courses and project work.

EXTERNAL EXAMINATION:

- The external examination is planned and conducted as per Anna University stipulations. **The remarks about the question paper like, out of syllabus questions, insufficient data, and lengthy question paper are reported by the students to the controller of examinations in Anna University through a proper channel**.
- After declaration of the results, students are given opportunity to apply for **reevaluation**.
- These answer sheets are evaluated thoroughly by the concerned subject teacher before forwarding to the Anna University.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

2.6 Student Performance and Learning Outcomes

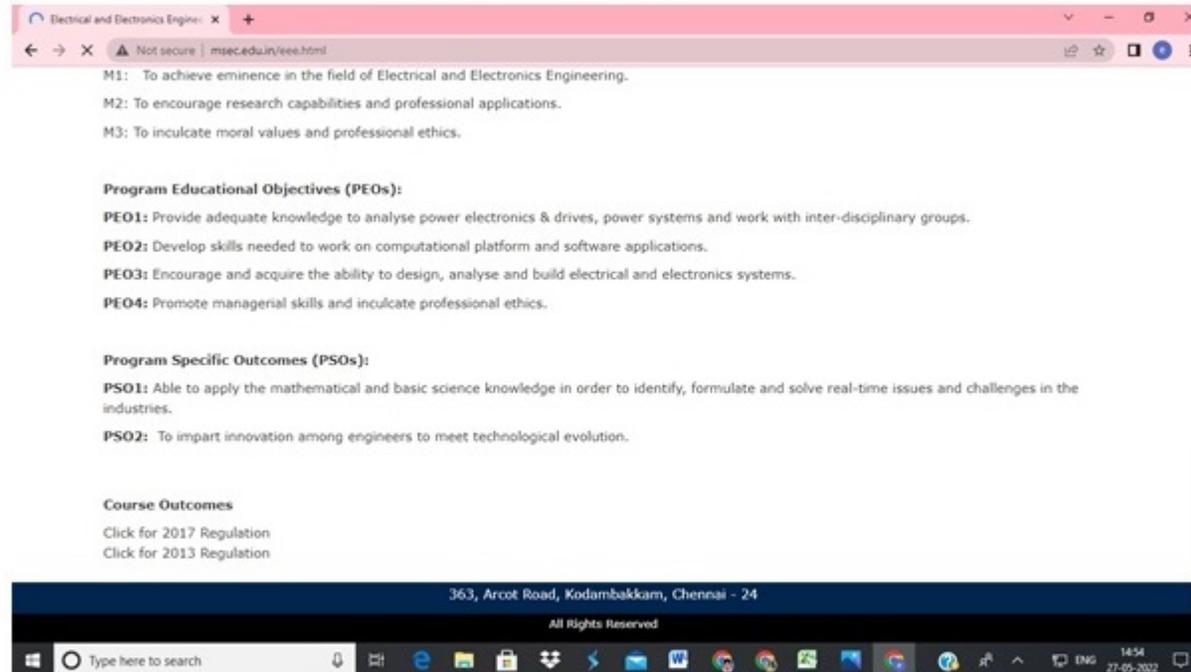
2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Answer:

- The Institute provides a high-quality, all-encompassing education. The aim and mission of the Institute is to provide a conducive learning environment that helps the students to attain professional and personal growth in technical area.
- The effectiveness of the teaching learning process can be measured through learning outcomes and in turn, it can be achieved by mapping the **Course Outcomes (CO) with Programme Outcomes (PO) and Program Specific Outcomes (PSO).**
- Program Educational Objectives (PEO), and Program Specific Outcomes (PSO) are clearly **stated and displayed** in each department's classrooms, corridors, faculty rooms, laboratories, as well as on the departmental webpage of the Institutional website ()
- All the students are **apprised** of the objectives and expected outcomes of their Programme during the compulsory **Orientation program**. Students are also **educated** and provided with the detailed syllabus and course outcomes in each course and the assessment strategy for each course. The course outcomes are displayed in departmental web page of institutional website.

Website Screenshot of Course Outcomes

POs,PSOs and PEOs



Program Outcomes

Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

Problem analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	View Document
Upload any additional information	View Document
Past link for Additional information	View Document

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

Answer:

Evaluation Procedure for course outcome and program outcome attainment:

- The course outcomes are evaluated using Direct and Indirect assessment tools.
- The Direct assessment tools include internal assessment tests, Assignment/Slip tests, End semester examination.
- The Course survey, received from all the students for all the courses, are taken as indirect assessment tool.
- The course outcome attainment is used in the evaluation of direct attainment of Program outcome.
- The Student exit survey, Alumni Survey are used as indirect assessment tools to compute attainment of Program outcomes and program specific outcomes. The assessment tools and the procedure to evaluate Course outcomes, Program outcomes and program specific outcomes are done as follows

Procedure To Evaluate Course Outcomes And Program Outcomes

Internal Assessment Test - 1	Internal Assessment Test - 2	Internal Assessment Test - 3
Portions Covered For The Exam		
(100% of unit 1)+ (100% of unit2)	(100% of unit 3)+ (100 % of unit 4)	(100% of unit 5)
Mark Allocation		
CO1-50% CO2-50%	CO3-50% CO4-50%	CO5-100%

CO1(50Marks)		CO2(50Marks)		CO3(50Marks)		CO4(50Marks)		CO5(50Marks)	
IAT1	Assignment/ Slip Test	IAT1	Assignment/ Slip Test	IAT2	Assignment/ Slip Test	IAT2	Assignment/ Slip Test	IAT3	Assignment/ Slip Test
30 Marks	20 Marks	30 Marks	20 Marks	30 Marks	20 Marks	30 Marks	20 Marks	30 Marks	20 Marks

COMPUTATION OF CO ATTAINMENT

Direct CO Attainment = 20% of IAT attainment + 10% of MCQ attainment +
70% of University attainment

Overall CO Attainment = 80% of Direct attainment + 20% of Indirect attainment.

COMPUTATION OF PO/PSO ATTAINMENT

Direct PO Attainment = (PO Average * CO Attainment) / Maximum level of attainment (3)

Indirect PO Attainment = 70% of Student Exit Survey + 30% of Alumni survey

Overall PO Attainment = 80% of Direct attainment + 20% of Indirect attainment.

RECORD THE ATTAINMENT OF COURSE OUTCOMES OF ALL COURSES WITH RESPECT TO SET ATTAINMENT LEVELS

The set target value is fixed as a standard of 70 marks for all the theory and laboratory courses.

Attainment Level 1 (Slight) : 50% students scoring set attainment level in internal assessment test, multiple choice question test and university examination.

Attainment Level 2 (Moderate): 60% students scoring set attainment level in internal assessment test, multiple choice question test and university examination.

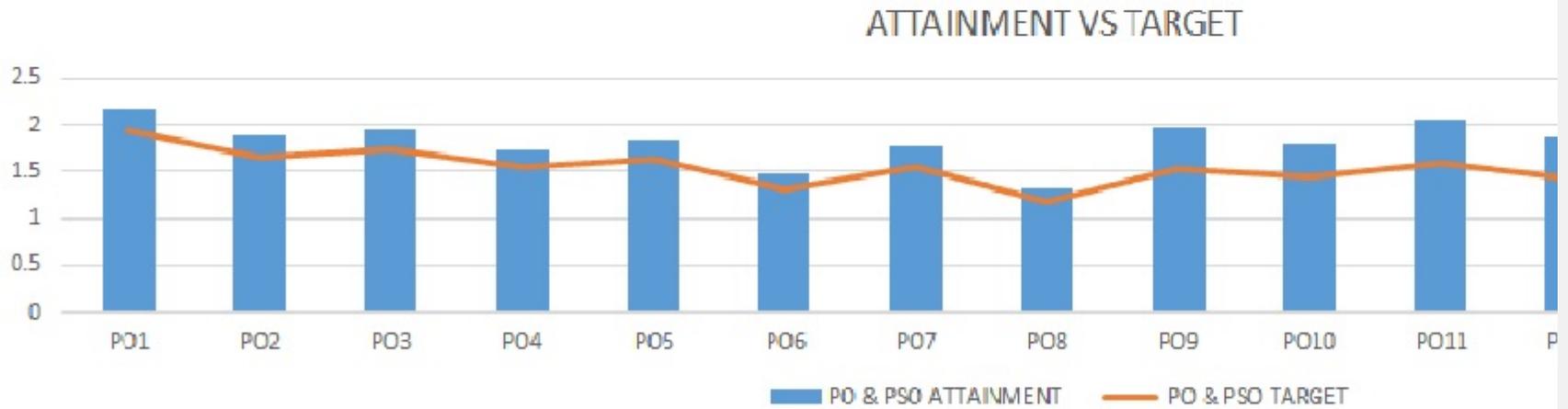
Attainment Level 3 (Substantial): 70% students scoring set attainment level in internal assessment test, multiple choice question test and university examination.

*Attainment is measured in terms of actual percentage of students getting target marks.

List of Assessment Tools / Processes

Theory Courses	Practical Courses
Direct Assessment Tools/Processes	Direct Assessment tools/Processes
Internal Assessment test / unit test	Experiments Evaluation Model Examination
Assignment / Slip test	Design & Fabrication Project/Project Work
Multiple Choice Question Test	Project Reviews
End semester examination	End semester Viva Voce Examination
Indirect Assessment Tools/Processes	Indirect Assessment Tools/Processes
Course Outcome Survey	Course Outcome Survey
Indirect Assessment Tools/Processes for PO, PSO Attainment	
Student Exit Survey	
Alumni Survey	
Stake holders Survey	

PO, PSO ATTAINMENT AND TARGET (2014-2018 BATCH)											
PO NO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
PO AVG	2.59	2.22	2.32	2.07	2.19	1.75	2.08	1.58	2.04	1.92	2.11
PO, PSO Attainment	2.17	1.88	1.94	1.73	1.84	1.47	1.78	1.32	1.97	1.8	2.0
TARGET	1.94	1.66	1.74	1.55	1.65	1.31	1.56	1.18	1.53	1.44	1.51



File Description	Document
Upload any additional information	View Document

Paste link for Additional information	View Document
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2.6.3 Average pass percentage of Students during last five years

Answer: 96

2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
412	443	437	425	458

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
413	443	463	468	482

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Upload any additional information	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Answer: 3.74

File Description	Document
Upload database of all currently enrolled students (Data Template)	View Document
Upload any additional information	View Document

3. Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Answer: 92.8

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
6.5	0	85.291	0.81	0.2

File Description	Document
List of endowments / projects with details of grants	View Document
e-copies of the grant award letters for sponsored research projects / endowments	View Document

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Answer: 1.09

3.1.2.1 Number of teachers recognized as research guides

Answer: 1

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Answer: 30

3.1.3.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
2	0	3	3	1

3.1.3.2 Number of departments offering academic programmes

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
6	6	6	6	6

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Paste link to funding agency website	View Document

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Answer:

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Meenakshi Sundararajan Engineering College created an ecosystem to nurture transfer of knowledge and innovative skills of staff and students in the learning process.

Recognitions for Innovative projects in National/International Contests:

- **TOYCATHON 2021, an initiative by Hon'ble Prime Minister, MSEC Students conceptualized novel toys based on Indian civilization. 7 teams participated in the event of which 3 teams entered the final round among 227 teams all over India.**
- **MSEC Students along with Dr. Srinivas Talabutta an Associate Professor of Electrical Communication Engineering, IISc, Bangalore, proposed a project titled, "Radiation Exposure Level Monitor for Proximity Workers", in the Foundation for Advancement of Education and Research (FAER).**
- **MSEC students won prizes in KURUKSHETRA conducted by Anna University, Chennai for project presentation.**

- **MSEC students Vasupradha S and Sneha M won VISHWAKARMA 2020 award for their project to cater technical assistance related to market-oriented farming and app based small/medium-scale agro-enterprise development.**
- **Teams SPARROW and INVADER designed drones with the technical support of HYORISTIC INNOVATIONS PVT LTD which was ranked 290th in International Rover Design Challenge (IRDC) 2020 and won 26th position by competing with universities worldwide.**

Distinguished projects developed by the students as a result of the innovation ecosystem provided:

- **Indoor-outdoor navigation using Google enhanced augmented reality (G.E.A.R) apps.**
- **Real world coordinate estimation using homographic matrix and plane model construction.**
- **Design of RISC-V bit manipulation instruction IP using Bluespec System Verilog for Shakti co-processors.**

Societal Beneficial Project:

- **Innovative and low cost (Rs. 11,500/-) prototype titled “Low Cost Portable Ventilator for Covid-19 patients” was developed by Mr. Kishore Kumaran, an alumnus of MSEC, along with students of MSEC, which was shortlisted by National Innovation Foundation for its C3 competition.**

INNOVATION ECOSYSTEM of MSEC:

Institution Innovation Cell (IIC):

MSEC conducts various activities under IIC to nurture product design and entrepreneurship.

Major & Mini Project

Innovation, societal conscious projects are developed by students as part of their 8th semester project. All 3rd and 4th year students present their project ideas during E-Cube activities every year.

Professional society activities

Through various Professional chapters of MSEC like IEEE, ISTE, IETE, NIQR, CSI ,ICI and SAE, Symposiums, technical seminars, workshops and guest lectures are conducted which opens up door for new opportunities, recognition and reward.

Industry Collaborations

MSEC received an award from BEGINUP RESEARCH INTELLIGENCE PRIVATE LIMITED in NATIONAL EDUCATIONAL EXCELLENCE AWARDS AND CONFERENCE 2020 for the LEADING ENGINEERING COLLEGE in 2020, Tamil Nadu in the category of Industrial Collaborations and Placements.

MSEC has 26 functional MoUs with Educational Institutions and eminent Engineering Industries including VI Microsystems, UNIVERSITI SAINS MALAYSIA, TVS MOTOR COMPANY LIMITED, MISSILE INGENIATOR and NLTVC SDN BHD, MALAYSIA which rightfully fulfills the innovation appetite of the students and faculty.

Entrepreneur Development Programs:

EDC of MSEC conducted 10 activities in the past 5 years with over 200 beneficiaries on an average every year.

Innovation ecosystem has made students realize their potentials and achieve greater heights.

File Description	Document
Upload any additional information	View Document

3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

Answer: 201

3.2.2.1 Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
46	39	37	49	30

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

Answer: 0

3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years

Answer: 0

3.3.1.2 Number of teachers recognized as guides during the last five years

Answer: 1

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
URL to the research page on HEI website	View Document

3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Answer: 0.93

3.3.2.1 Number of research papers in the Journals notified on UGC website during the last five years.

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
12	51	16	7	7

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document

3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

Answer: 0.85

3.3.3.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
15	20	26	12	12

File Description	Document
List books and chapters edited volumes/ books published	View Document
Any additional information	View Document

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Answer:

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues for their holistic development and impact thereof during the last five years:

Meenakshi Sundararajan Engineering College(MSEC) organized the extension activities in the rural communities (neighborhood) for sensitizing the students to social issues, ethical values and service orientations. The institute established the National Service Scheme (NSS) unit running successfully in collaboration with the Anna University, Chennai. MSEC conducted many awareness programs through the Youth Red Cross unit.

- **Meenakshi Sundararajan Engineering College organized a service project in collaboration with Campus Lions clubs and donated steel vessels worth Rs.95, 000 to Bala Mandir Kamaraj trust, Chennai.**
- **To create social responsibility among students, college donated funds for single teacher schools, Cancer Institute ,Adyar of amount Rs 3,86,88,000/-.**
- **Students of MSEC donated a “one day meal” for the Differently abled kids in “My Child Foundation”,Chennai.**
- **We confirm that the Lions Club in Meenakshi SundararajanEngineering College is doing their projects, providing lunch for the Senior Citizens in Anandam Home for Senior Citizens, regularly.**
- **A screening camp on “Hepatitis B and C” organized in the campus. These kind of generous activities developed new perspective, authentic values like empathy and also foster students’ focus on their own problems.**
- **We have donated Covid relief fund of Rs.1,55,000 to Consortium of Self-Financing Professional, Arts and Science Colleges in TamilNadu on 31st March 2021.**
- **We have donated fund Rs.45,000 /- for The Voluntary Health Service on 29th April 2021.**
- **We have donated honorable Chief Minister Covid relief fund of Rs.20, 00,000/- on 28th June 2021.**
- **We have donated the Big Playing Slide to Bala Mandir home.**
- **We have donated the Essential items for the school and the students for Regular Basis for Pathiappaga Chemmal K.Ganapathi .**
- **Students initiated the “Tree Plantation programme” and planted 30 tree saplings in and around the campus to improvise the eco-friendly environment.**
- **To infuse Art of gardening to the students, one hour is allotted in the regular time table.**
- **MSEC students learn gardening as well as enjoy the benefits of breaking their sweat like lowered academic stress level improves their desire and energy.**

- **Every year the NSS unit organizes Seven days camp in the nearby villages with the help of village panchayats.**
 - **NSS volunteers educated the masses of Ottiyambakkam about waste management.**
 - **They also joined hands with members from Solarillion Foundation to teach the youth of Ottiyambakkam on LED light manufacturing.**
 - **They also participated in a rally and created awareness on the usage of solar power among 500 residents.**

Thus MSEC promotes social change or development in the society which includes the principles based on social justice, human rights, moral values and the responsibility of a good citizen to the diverse culture of the country.

File Description	Document
Upload any additional information	View Document

3.4.2 Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

Answer: 15

3.4.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
4	4	3	3	1

File Description	Document
Number of awards for extension activities in last 5 year	View Document

e-copy of the award letters

[View Document](#)**3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years****Answer:** 83**3.4.3.1 Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years**

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
16	16	17	17	17

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years**Answer:** 91.23**3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years**

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
1428	1459	1448	1540	1670

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document

3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

Answer: 889

3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
198	190	220	127	154

File Description	Document
e-copies of related Document	View Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Answer: 20

3.5.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
4	5	3	1	7

File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document
Any additional information	View Document

4. Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

Answer:

Meenakshi Sundararajan Engineering College (MSEC) has a campus spread over 8 acres which includes **Sri Abhinava Vidya Theertha block** (Main block), **Sri Vidhushekhara Bharathi** (Civil block) and **Sri Bharathi Theertha block** (Mechanical block), **IJET block**, Hostel block, Workshop and reprography facility for the students and staff. There are **30** Classrooms, **6** Tutorial Classrooms, **55** Laboratories, **28** Computing Laboratories, **2** Conference Rooms, **5** Seminar Halls, **3** Drawing Halls and Workshop etc as per details given below. The classrooms in Main block are utilized for Computer Science Engineering (CSE), Electronics and Communication Engineering (ECE), Electrical and Electronics Engineering (EEE), and Information Technology (IT) UG programs; Civil and Mechanical blocks are utilized for Civil Engineering (Civil), Mechanical Engineering (Mech) UG programs, First years and PG program in Construction Engineering and Management (CEM); and IJET block houses Physics, Chemistry, English Language labs and Engineering Graphics Hall.

Number of Classrooms: Civil-4, CSE-4, ECE-8, EEE-4, IT-4, Mech-4, PG CEM-2; total **30**;

Number of Classrooms with ICT facilities: **27**;

LMS facilities: **Google Classroom and Zoom**;

Number of Tutorial Classrooms: **6** (one in each department);

Number of Laboratories: First Year-5, Civil-9, CSE-8, ECE-8, EEE-8, IT-8, Mech-9, PG CEM-2; total of **55**;

Number of Computing Laboratories: First Year-1, Civil-1, CSE-8, ECE-4, EEE-2, IT-8, Mech-2, PG CEM-1, one common Computer Laboratory; total of **28**;

Number of Department Libraries: **6** (one in each department);

Number of Conference Rooms and Seminar Halls: **7**

Number of Drawing Halls: **3**

Number of Internal Research Centres: **4**

Number of Computers: **1050**

Number of Legal and Licensed Software: **41**

Available bandwidth: **150 Mbps**

Smart rooms with latest ICT tools are utilized for virtual learning and interaction among stakeholders. The projectors are mounted in Seminar halls and Classrooms, and movable projectors are provided to departments to facilitate virtual programs in the classrooms. Further, LMS - **GCR** and **Zoom** were used for on-line classes during the pandemic. The Seminar halls host major events such as national and international conferences, guest lectures, technical seminars, workshops and symposiums etc.

The College has a spacious Central Library (**working hours 8 AM to 8 PM**) with a carpet area of **950 sq.m**, reading area of **450 sq.m** and seating capacity of **108**. Specialized collection of Books (**35093** books and **12718** titles) and Journals are available in Humanities and Sciences, and Engineering and Technology. The college has access to e-resources such as **IEEE, SPRINGER, ASME, ASCE, ASTM and J-Gate**. The Digital Library has **13** computers with LAN and internet connectivity of 150 Mbps.

The college has latest IT facilities including **1050** Computers (**465 computers with i7 configuration**), **35** Printers, **16** UPS, 24 hours UPS backup and Wi-Fi connections at prominent places. All computer labs, seminar halls, conference rooms, library and staff rooms has LAN with Internet access 150 Mbps. The campus has maximum electric power supply system (450 KW), HT consumer rated 11KV/433V, 800 KVA, and **250 KVA Diesel Generator** for uninterrupted power supply.

The college has adequate infrastructure and physical facilities for teaching-learning more than the requirement specified by Anna University.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

4.1.2 The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

Answer:

Sports and Games

Sports Ground and Courts for outdoor games such as **Cricket, Volley Ball/Throw Ball, Basket Ball, Badminton, Tennis, Long Jump and Kabaddi** are available for the students. Facilities for indoor games such as **Carrom, Chess and Table Tennis** are also available in Mechanical Block. The Campus has a well-equipped **Gymnasium** covering an area of **102 sq.m** with Fore Station (Heavy Duty), Biceps and Triceps (Manual), **Flat Bench Deluxe, Olympic F/I/D Bench, F/I/D Bench Smith, Hexagn Dumbells (22 numbers - 200 kgs), Olympic Black Plates (18 numbers - 200 kgs), Olympic Rods and Motorized AutoIncline Folding Treadmill**. The students are well trained for sports events by qualified physical director.

Cultural Activities

The Institution encourages the students to achieve their interests and passion outside the classroom. Various student's activities are functioning with an objective to engage, stimulate the body of students in their recreational time and promote cordial relationship among students. The college organizes various cultural events for the students every year such as **classical dance, mono act, mime, magic show, miruthangam, classical vocal etc.** The **KRS Centenary Seminar Hall** (Main block), **Srimathy Meenakshi Ammal Centenary Seminar Hall** (Civil block) and **Shri K.S. Nagarajan Mini Auditorium** (Mechanical block) are utilized for cultural activities.

Yoga

Yoga programmes are being organized every year for the wellbeing of both the students and faculty. **Shri K.S. Nagarajan Mini Auditorium** (Mechanical block) is utilized for yoga programmes. During the covid pandemic, in the induction programme (UHV module), yoga activities were conducted through **Zoom** meeting for the first year students by **yoga guru V.L. Govindaraju** in November 2020. "**Yoga for better health**" programme was conducted for all the students by yoga guru V.L. Govindaraju through Zoom meeting on 15/05/2021.

NSS and YRC

NSS and **Youth Red Cross Units** are involved in several **social service** activities. The motto of NSS "**Not Me, But You**" reflects the essence of democratic living and upholds the need for selfless service. The volunteering team coordinates with the programme officer in organizing various service camps. The Youth Red Cross Unit conducts **eye camps** and **blood donation camps**. Adequate facilities such as **computers, projectors, audio systems** and **cleaning/gardening equipment** are provided by the college for conducting the NSS/YRC events.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT-enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Answer: 91.18

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Answer: 31

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document

Upload any additional information	View Document
Paste link for additional information	View Document

4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs)

Answer: 45.48

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
47.51	215.35	150.46	216.28	564.65

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document
Upload any additional information	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Answer:

The Central Library is automated with **AutoLib Software** for book circulation service. All the books in the library are **bar-coded** and barcode laser scanners are used in the circulation counter for book transactions. Books are classified based on **Dewey Decimal Classification (DDC)**.

Name of ILMS software	AutoLib software
Nature of automation (fully or partially)	Full automation
Version	1. Java Web Based software 8.2 2. DataBase-MySQL 3. Web Server-Tomcat7.0
Year of Automation	2019

AutoLib - is completely a web based Library Management Software (LMS), designed, developed and promoted by AutoLib Software Systems, Chennai using latest **JAVA** Technologies. It can handle lakhs of records more efficiently. AutoLib has many **integrated modules** to take care of all the technical, in-house activities and also provide various services such as:

- **Cataloging module** - to create databases for various types of documents and also users,
- **Circulation Management System** - to monitor all the transactions in a library such as issue, return, renewal, reservation, etc,
- **Serial Control module** - to maintain periodical subscription and management,
- **Acquisition module** - to procure various resources,
- **Report Management System** - to generate various reports and statistics.

Besides, additional modules are available to handle all other activities. The **Admin module** allows to set-up various parameters for library policies; rules and regulation related to transactions and other access facilities.

Library Services

- **Circulation Services**
- **Reference Services**
- **E-Access Services**
- **CD-Rom Services**
- **Digital Services**
- **Question Paper Services**

Digital Library: The digital library with 13 computers facilitates access to Electronic Information Services to cater the needs of students, faculty and staff. Subscriptions/Memberships for E-journals - **IEEE/ASPP, ASME, ASCE, ASTM, SPRINGER and J-GATE, e-books, National Digital Library** etc are available for the access of staff and students.

Details of Volume of Books

S.No	Name of the Programme	No. of Volumes	No. of Titles
1	B.E. Civil Engineering	5176	2295
2	B.E. Computer Science and Engineering	5773	1661
3	B.E. Electronics and Communication Engineering	5808	2101
4	B.E. Electrical and Electronics Engineering	5071	1806
5	B.Tech Information Technology	5560	1686
6	B.E. Mechanical Engineering	3068	1081
7	M.E. Construction Engineering and Management	267	109
8	Humanities and Science (Common to all branches of B.E. programmes)	4370	1979
	Total	35093	12718

Details of the Journals

S.No	Name of the Department	National Journals	International Journals
1	Department of Civil Engineering	6	6
2	Department of Computer Science and Engineering	6	6
3	Department of Electronics and Communication Engineering	6	6
4	Department of Electrical and Electronics Engineering	6	6
5	Department of Information Technology	6	6
6	Department of Mechanical Engineering	6	6
7	M.E. Construction Engineering and Management	2	4
8	Department of Humanities and Science	6	-
	Total	44	40

File Description	Document
Upload any additional information	View Document
Paste link for Additional Information	View Document

4.2.2 The institution has subscription for the following e-resources

1. e-journals
2. e-ShodhSindhu
3. Shodhganga Membership
4. e-books
5. Databases
6. Remote access to e-resources

Answer: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document

Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership, Remote access to library resources, Web interface etc (Data Template) [View Document](#)

4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e- journals during the last five years (INR in Lakhs)

Answer: 22.18

4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
19.68	27.00	16.42	23.07	24.71

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e-journals during the last five years (Data Template)	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year

Answer: 46.98

4.2.4.1 Number of teachers and students using library per day over last one year

Answer: 739

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Answer:

All the computer systems in the college campus viz., computing labs, central library, administrative office, placement cell, Secretary room, Principal room, department offices and also photocopy centre are provided with **LAN connection** with a **bandwidth of 150 Mbps**. The college has adequate internet facilities including **Wi - Fi** connections in placement room, Secretary Room and library. However, Wi-Fi connection if required in any other place, necessary arrangements can be made. All the computers are connected to uninterrupted power supply for safe operations and security is also ensured through the usage of Firewall and Anti-virus (Symantec). The internet services are provided by Tata Tele Business Services. The bandwidth was upgraded from 30 Mbps to 50 Mbps in June 2018 and subsequently the speed was increased to 100 Mbps in May 2019 and 150 Mbps in April 2022. Juniper Networks and Symantec are the service providers of Firewall and Antivirus respectively. LAN and network connections are monitored by IT Consultant QUADSEL SYSTEMS Pvt. Ltd.

Windows server was upgraded to server OS 2019 standard on 27th March 2019. The server model includes HPE PROLIANT DL380 GEN 10 SERVER. It is a multiprocessor with count of 2. Processor 1 is Intel(R)Xeon(R) silver 4114 with speed cpu@2.20Ghz. Processor 2 is Intel(R)Xeon(R) silver 4114 with speed cpu@2.17Ghz. Each processor has 10 cores (20 logical cores), summing to 40 cores, running inside. The server has three caches namely L1 cache:1.3mb, L2 cache:20 mb, and L3 cache:27mb. The RAM capacity is 64 GB (2*32 GB). The Hard Disk(HD) is physically divided into 8 HD. HDs 1 and 2 are reserved for host OS with mirroring. Both having 300GB space. If the first HD is corrupt then the mirror disk will act. HDs 3,4,5,6,7, and 8 are usable. Each having 1.2 TB with RAID-5 concept. HD is partitioned into three logical disk. Local Disk(C)-reserved for host OS (300 Gb). Local Disk(D)-for common DATA (2 TB). Local Disk(E)- for virtual machine (3.4 TB). There are four virtual machines created - three for domain control and other for antivirus.

The conference halls are equipped with computers, LCD projectors and internet facility. Smart Room facilities are available for student learning with adequate student:computer ratio.

Details of Internet connection:

Name of the Internet Provider	Tata Tele Business Services
Available bandwidth	150 Mbps
Link Commissioning Date	11-Apr-17
Availability of Firewall	Yes (Juniper firewall)
Availability of Anti-virus	Yes (Symantec)
Availability of Wi-Fi	Yes (Secretary room, Placement cell, library, on demand)

File Description	Document
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Upload any additional information	View Document
Paste link for additional information	View Document

4.3.2 Student - Computer ratio (Data for the latest completed academic year)

Answer: 1.52

File Description	Document
Upload any additional information	View Document
Student – computer ratio	View Document

4.3.3 Bandwidth of internet connection in the Institution

Answer: A. ≥ 50 MBPS

File Description	Document
Upload any additional Information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Answer: 57.83

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
195.64	351.27	324.06	345.98	299.31

File Description	Document
Upload any additional information	View Document
Details about assigned budget and expenditure on physical facilities and academic	View Document

support facilities (Data Templates)	
Audited statements of accounts	View Document

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Answer:

Budget allocation for maintenance

The college ensures regular maintenance of all the infrastructure facilities. Separate budget provision is allotted every year based on the requirements of each department to meet the expenses for the upkeep of physical, academic and support facilities such as furniture and fittings, laboratory equipment and consumables, library journals membership/subscription, sports/games rooms, restrooms, landscaping/gardening, repairs and maintenance etc. The Accounts department holds regular meetings to discuss the requirement of different departments. Accordingly, budget is approved by the management for maintenance.

Responsibilities assigned for maintenance of facilities

Different departments/in-charges have been identified and entrusted with the responsibilities for the maintenance of various facilities as illustrated below:

1. Civil works : Dr. L. Ramajeyam, Dean & HOD (Civil) & Dr. R. Arivazhagan, Associate Professor (Civil)
2. Electrical works : Mrs. S. SoundaraBala, HOD (EEE), Mr. G. Sethuraman (EEE)
3. IT facilities : Dr. A. Kanimozhi, HOD (IT)
4. Laboratory : Respective lab in-charges
5. Workshop & Machinery : Mr. Thameemul Ansari Ameen, AP (Mech)
6. Central Library : Mrs. V. Ramadevi & Ms. M. Leema Plaris
7. Sports : Mr. V. Siva Baskaran, PD & Mrs. J. Thilageswari, AP (Physics)
8. Fire and Safety : Mr. G. Sethuraman (EEE)
9. Environment & Greenery : Mrs. M. Malini Gayathri, AP (Civil)
10. General Maintenance (Housekeeping & Cleanliness) : Mr. E. Selvakumar & Mr. Aadhi

Civil and General Maintenance

- The college ensures that the functionality and aesthetics of the buildings are properly maintained to ensure maximum efficiency.
- Stability check for all buildings is carried out periodically.
- Separate maintenance teams are available for housekeeping and landscaping etc. The sanitation and cleanliness of the college campus is ensured at all times.
- The repair and maintenance of civil works has been outsourced to **Mr. J. Vijay Kumar, JV Consultants, Chennai.**
- The following civil works are carried out periodically.
 - Repair works in classrooms, faculty rooms, restrooms etc
 - Replacement or repair of wood works, window glasses and flooring tiles etc.
 - External and internal painting of buildings
 - Repair of plumbing and sanitary fixtures
 - Cleaning of overhead water tanks and sumps
 - Maintenance of internal roads

Electrical Maintenance

The maintenance of electrical equipment, fittings and fixtures has been entrusted to the EEE department. Suggestion/complaints register is placed in the administrative office. The complaints are duly attended by the inspection team on a daily basis. In case of contingencies, the students and the staff members are advised to call the maintenance team's phone number displayed in the notice board available in the class rooms and the laboratories in each floors. At times, major electrical maintenance works has been outsourced to **Mr. Antony** of AM Flora Electricals, Chennai. The campus has a 250 KVA Diesel generator set to ensure uninterrupted supply of power during routine maintenance.

Laboratory Maintenance

The college has established procedures for the maintenance and service of laboratory equipment.

- All lab equipment is checked for its working condition before the commencement of each semester.
- The equipment is calibrated/serviced periodically through suppliers and service personnel.
- Service register is maintained in each laboratory.
- AMC with the manufacturers are also made available for major lab equipment.
- Cleaning of equipment and work tables is done periodically.
- All rotating parts of machines are provided with protective guards.
- DO's and DONT's, safety measures are displayed in the laboratory.
- Wearing lab coats are made mandatory for the students.
- All laboratories are spacious and well-furnished with good ventilation and lighting facilities.
- Uninterrupted power supply is provided which helps unhindered working atmosphere.
- Earthing is maintained to prevent shocking.
- The fire extinguishers are provided for each lab.

- When there are minor repairs in machinery/equipment, the lab assistant or technical staff of the respective laboratory tries to fix the repair.
- Major defects are repaired by the Supplier/Service personnel.

Maintenance of Central Library

The Central Library is maintained by adequate staff members headed by the Librarian.

- The procurement of books is done based on the suggestions of the faculty members and students.
- After approval, the books are purchased from the Suppliers. While receiving new books, the stock is verified with invoice by the Librarian.
- Details of new books are updated in AutoLib software.
- Stock verification of library books is carried out every year.
- Rare collection of books is maintained in separate space for reference
- Dusting of books and racks, cleaning of computers in Digital Library are done on a daily basis.

Maintenance of Computers / Printers / Network (LAN) / UPS / Wi-Fi:

The maintenance, servicing and repair of all the IT facilities viz., computers, printers, networks, LAN, server, UPS, Wi-Fi of the entire college is entrusted to the IT department.

- The IT machines and computers are provided with 24 hours UPS backup. There are 16 UPS installed in our Campus.
- Updating of Antivirus software is done for proper working of the systems.
- Lab in-charges and lab assistants check the working condition of the systems regularly.
- Complaints regarding IT facilities can be raised through google platform with the IT support team. On receiving the complaints, qualified technical staff will be assigned by the IT department for service/repair.
- As per the IT policy, it is ensured that unauthorized websites are not accessible to the students inside the campus.

Sports

- The college has a Sports Development Room with adequate sports equipment.
- Sports kits are issued to the students after making entry in the Issue/Return Register.
- Outdoor Sports Ground and Courts are maintained by a team of ground men and gardeners.
- The Gymnasium equipment are cleaned regularly and maintained in perfect working condition.
- The Physical Director of the college conducts regular meetings with the students (sports coordinators) of all the departments to know their demand for sports kits.

Fire and Safety

Sufficient fire extinguishers, exit sign boards, safety charts and instructions are installed at appropriate locations in the campus. The health of the fire extinguishers is ensured by periodical inspection carried out every three months. Fire drills are conducted every semester for the staffs and students to create awareness on fire safety and ensure their preparedness during emergencies.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

5.Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

Answer: 36.93

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
730	686	697	451	440

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	View Document
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	View Document

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Answer: 5.47

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
269	71	38	23	20

File Description	Document
Upload any additional information	View Document
Number of students benefited by scholarships and freeships institution / non-government agencies in last 5 years (Date Template)	View Document

5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

1. *Soft skills*
2. *Language and communication skills*
3. *Life skills (Yoga, physical fitness, health and hygiene)*
4. *ICT/computing skills*

Answer: A. All of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Answer: 76.38

5.1.4.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
1140	1194	1285	1332	1374

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

1. Implementation of guidelines of statutory/regulatory bodies
2. Organisation wide awareness and undertakings on policies with zero tolerance
3. Mechanisms for submission of online/offline students' grievances
4. Timely redressal of the grievances through appropriate committees

Answer: B. 3 of the above

File Description	Document
Upload any additional information	View Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Answer: 72.75

5.2.1.1 Number of outgoing students placed year - wise during the last five years.

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
315	329	341	288	376

File Description	Document
Upload any additional information	View Document

Self attested list of students placed	View Document
Details of student placement during the last five years (Data Template)	View Document

5.2.2 Average percentage of students progressing to higher education during the last five years

Answer: 52.54

5.2.2.1 Number of outgoing student progression to higher education during last five years

Answer: 217

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education (Data Template)	View Document
Any additional information	View Document

5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Answer: 96.1

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, etc.)) year-wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
20	31	18	29	19

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year-wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
---------	---------	---------	---------	---------

23 31 18 31 19

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	View Document
Any additional information	View Document

5.3 Student Participation and Activities

5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

Answer: 19

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) year-wise during the last five years.

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
6	3	5	3	2

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	View Document
e-copies of award letters and certificates	View Document

5.3.2 Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)

Answer:

Administration:

Students are selected from first year to final years as representatives and commanders to engage them in all activities for building up social responsibilities.

1.Class representative

Representatives and class teachers conduct class committee meetings

Periodical discussion with Management Heads' and Head of the Department

Maintaining records and class logbooks

Class attendance and other circulars

2. Commanders

Commanders are identified and suitably honored by designations and badges.

Safety commander: To look after the students' safety, following the precautions given by the management and class furniture

Class cleanliness commander: Maintain cleanliness in the class room, dress code and also maintaining the cleanliness of the rest room

Environmental commander: Making the surroundings clean and also help the students' health related issues

Energy audit commander: Electricity and water resources provided for the students are monitored and advised to use economically

Talent Promotional Commander E-Cube and seminars are conducted periodically for the students on relevant topics related to their subjects and prizes are distributed based on their talents on Valedictory and College Day function

The duty of the commanders is to identify the brilliant ideas from their classmates and coordinate with the subject teachers for their improvement in the technical knowledge and thereby making the learning process more effective.

These activities enhance their responsibilities during their employment and personal life.

Students are actively participating in regulatory committees such as Anti-Ragging Committee, SC/ST Committee.

Curricular activities

Top 10 ranked students are selected from the Internal Assessment Tests and General Proficiency in the all subjects and instructed to participate in mini project, symposium and technical workshops.

The selected students are advised to help the slow learners in improving their knowledge and also peer coaching is conducted after the college hours and study holidays.

Symposium is an event conducted during every even semester and it is fully managed by the pre final year and final year students to develop their managerial skills, organizational skills and finance management skills. Students are invited from the neighboring institutions and make them to participate in all the events conducted on that day. This opportunity provided by the department will help them to manage their career during placement.

Co-Curricular activities

Students are encouraged by the class advisors and mentors to participate in competitions of various professional societies and also technical events in other institutions

Sports

Students coordinators are selected for sports designated as **Sports Coordinators** and they will be coordinating for organizing sports events in college and other institutions at zonal/national level.

Depending on their interest they are allowed to enhance their skills and make them to participate in inter collegiate competitions and National level competitions.

Regular practices are provided after college hours through respective class teachers and Physical Training Instructors.

Students are encouraged to participate in college and other institutions' **cultural and sports events**. During Annual Sports day the best performers and achievers are honoured by prizes on sports day celebrations. Complete records are maintained every year. The best department is awarded by **trophy**.

File Description	Document
Paste link for additional information	View Document

5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

Answer: 12.2

5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
13	9	14	15	10

File Description	Document
Report of the event	View Document

Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)

[View Document](#)

5.4 Alumni Engagement

5.4.1 *There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services*

Answer:

Alumni Association:

Meenakshi Sundararajan Engineering College (MSEC) Alumni Association is to coordinate and support the alumni activities for promoting institution's academic, soft skills, industry interface, placement/internship, research and outreach programs. The main motto is to facilitate

Communication with alumni and to strengthen alumni bonds of fellowship, professional association, and institutional affiliation. The Association is functioning through its chapters across the country and abroad.

Alumni Contribution:

1. Alumni Scholarships
2. Reunions
3. Academic and Industrial Interaction by Alumni

Alumni Scholarships

MSECAA provides financial support to needy students based on merit. The donations received from the alumni is used for scholarship.

Every year Alumni students are visiting the institution and interact with the students and help them in academically as well as financially. More than 500 students are benefitted by the funds provided by our alumni. The funds are given to the students in the name of "Merit & Means Scheme" which identifies the under privileged students. The benefitted students will contribute back to the Merit & Means Scheme when they start earning.

Reunion

Alumni reunion brings in new opportunities for the students, which paves the way for recruitment and increases placement results. Besides, they take the role as Mentors, provide financial support and gives suggestions as per the need. It motivates the students and channelize the career path according to their desire and interest. It establishes and creates a support system, used beyond college days for career development, work life integration, etc. Alumina hones the soft skills in the right direction and brings in the leadership skills and prepares them as next generation leaders and entrepreneurs.

Prepare the next generation leaders & entrepreneurs.

Provide motivation and mentorship to guide in career path options

Create a support system which can be used beyond college days for career development, work-life integration, etc.

Develop and hone leadership skills in potentials.

Getting mentoring and exposure from Industry experts

Establish a sustainable framework between College, Alumni & Students

Academic and Industrial Interaction by Alumni

Member in Board of Studies: Alumni students are actively participating in development of academic process that ensure the growth of institution.

Resource person for E-CUBE (Enrichment Enhancement Empowerment) support events such as paper presentation, Project presentation, Mock interviews, Group Discussion etc wherein they share their knowledge gained through their work experience that motivate our students.

Guest Lectures: Alumni students are committed to participate in technical events that enhance the learning capabilities of young minds.

In-plant Training/Internships /Placements: Alumni are actively involving themselves in arranging Internship, In-plant training and Projects for the students

Lab Development/Training: Alumni students involve in improving the lab infrastructure by spending their time with the students and upgrade the laboratories.

File Description	Document
Upload any additional information	View Document

5.4.2 Alumni contribution during the last five years (INR in lakhs)

Answer: D. 1 Lakhs - 3 Lakhs

File Description	Document
Upload any additional information	View Document

6. Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 *The governance of the institution is reflective of and in tune with the vision and mission of the institution*

Answer:

Vision of the Institution:

To impart state of- the art technical education, including sterling values and shining character, producing engineers who contribute to nation-building thereby achieving our ultimate objective of sustained development of an unparalleled society, nation, and world at large.

Mission of the institution:

Meenakshi Sundararajan Engineering College (MSEC) constantly strives to be a Centre of Excellence with the singular aim of producing students of outstanding academic excellence and sterling character to benefit society, our nation, and the world at large. To achieve this, the college ensures:

- M1: Continuous up-gradation of its teaching faculty to ensure a high standard of quality education and to meet the ever-changing needs of society.**
- M2: Constant interaction with its stakeholders.**
- M3: Linkage with other educational institutions and industries at the national and international level for mutual benefit, provision of research facilities and infrastructure in line with global trends.**
- M4: Adequate opportunities and exposure to the students through suitable programs, to mould their character and to develop their personality with an emphasis on professional ethics and moral values.**
-

MSEC always tries to inculcate the Institute's Vision and Mission amongst all its stakeholders. Institution firmly believes that the institutional activities are highly oriented towards the vision and mission statements.

MSEC believes that the Vision and Mission is the only driving force to reach pinnacle.

The overall performance of the institution is being monitored by “Internal Quality Assurance Cell (IQAC).

This committee is headed by Dean Academics and Principal.

The committee prepares a strategic plan for a period of every five years. The entire institution would function towards achieving this strategic plan.

The committee is responsible for evaluating the academic performance of the students, as well as monitoring co-curricular and extra-curricular activities.

The committee meets periodically and analyses the feedback collected from stakeholders and corrective measures are suggested for improvement.

T

he plan for every year to uplift the administrative facilities available in the Institution is prepared by Heads of the Departments after discussion with dept staff.

The suggestions are communicated to the College Governing Council through Dean Academics and Head of institution.

All academic-related activities recommended by Dean Academics and the Head of the Institution, Secretary of MSEC gives approval by discussing with all Heads of Departments for implementation in the areas of lab renovation, class rooms, library along with the measured sporting and health-related activities.

The Head of the institution and IQAC Coordinator discuss regularly with the Heads of the Departments along with the faculty to monitor and evaluate the academic progress for Quality Assurance.

The Head of the Institution ensures smoothness in communication at all levels. Based on needs and excellence, organizational changes also take place on the approval of the Head of the institution. T

hus, the Management Committee and the Governing Body monitors the overall progress of the institution towards Vision and Mission. It motivates, encourages, and assists the stakeholders wherever and whenever necessary.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management

Answer:

TRAINING AND PLACEMENT CELL (TPC)

- **To monitor the progress and to improvise the performance of the students, "TRAINING AND PLACEMENT CELL (TPC)" was instantiated 15 years ago.**
- **This cell directly controls the activities related to training methodologies, recruitment opportunities, and student's skill upliftment.**
- **The students are thus provided high-level 'Leads and Pathways' that enable them to gain access to a broad range of 'high potential' and 'hi-tech' Career Opportunities.**
- **Every academic year, the Secretary holds a meeting with the members of the Placement Cell, initiates the placement session officially. The placement officer discusses the overview of the training and recruitment plan with the Secretary and request for inducting placement staff in charge of all the departments.**
- **The Training and Placement Cell is formed with the Placement Officer, Assistant Placement Officer, and with 2 placement staff in charge for each department.**
- **The Placement Officer holds a meeting with all the members of the TPC Cell and requests them to select "PLACEMENT STUDENT CO-ORDINATORS".**
- **Equal opportunity is given to both boys and girls to be the members of TPC.**
- **The placement Officer frequently arranges for "TRAINING AND PLACEMENT CELL" meetings to discuss the progress, upcoming recruitment opportunities and to collect feedback from the stake holders. Based on the feedback received, TPC Head and Officer evaluate the progress and bring in new modifications if necessary.**
- **MSEC clearly understands that participative management and decentralization is improved the TRAINING AND PLACEMENT CELL's performance.**
- **Every year to evaluate the overall efficiency, TPC collects feedback from all stakeholders.**
- **By analysing the feedbacks, the pros and cons of the year-long activities of the Training and Placement Cell is validated.**
-

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 *The institutional Strategic / Perspective plan is effectively deployed*

Answer:

The institute follows a strategic procedure in providing better placement for the students in reputed companies. The strategic plan with respect to placement and training activities is to make more than 95% of students get placement in highly reputed companies with very good packages.

To support the placement process, Placement Cell has an effective system for recruitment of the final year students. Depending upon the availability, the non-placed students are given opportunity for recruitment.

Selection

- 1. The students are informed about the placement drive and criteria by Placement Officer in the form of notice or mail, along with any other information furnished by company/organization.**
- 2. Interested and eligible (as per the criteria specified by the company) students reply for willingness to appear for the recruitment process through online registration.**
- 3. Students are advised to be in possession of their updated Resumes during the visit of the company/organization.**
- 4. Company/organization visits the campus and carry out their recruitment process with the assistance of the student coordinators and the Placement officer.**
- 5. During Lockdown the company/organization carries out the recruitment process through online mode with the help of the college staff .List of Selected candidates and offer letters are received by the Placement Officer at the end of the process.**
- 6. The feedback from recruiters is collected to assess quality of students at end of the selection process and also after training period for improvement.**

Acceptance:

- 1. Company/organization provides the final list of selected students, and waitlisted students (if any) at the end of the recruitment process to the Training and Placement Officer (TPO).**
- 2. The Placement Officer coordinates for the signing of offer letters by the selected students to ensure that they reach the company/organization as per the joining dates.**

In the year 2016, the highest package of 4.9 Lakhs/Annum was offered by Verizon for the students of MSEC. To enhance our student's potential, we implemented a strategic training plan with the following ideas:

- Exclusive hands on training in programing and problem solving using C.**
- Increased the duration of training sessions.**
- Motivational career talks and mock interviews organized by alumni.**
- Strengthened our students in aptitude and logical reasoning.**
- Full stack STEP workshop conducted by Sirius Computer Solutions.**

All the hard work and vigorous training gave us an exceptional result in the year 2021. The students received the highest package of 7Lakhs/Annum from the reputed organization Tata Consultancy Service.

The Placement head discussed with staff coordinators about the current final year student's placement records.

- **Based on the observations, salary package and number of core companies needs to be improved.**
- **In that connection, The Placement head discussed with the staff coordinators about the strategic plan and its implementation for the next 5 years.**

It has been decided that the below plans are to be implemented.

- **To Provide hands on training in programing Languages.**
- **To Increase the training duration.**
- **To Increase Mock test and Mock Interview**
- **To create awareness about recent technologies**

The Placement Head suggested the above mentioned plan and recommended for approval from the deciding authority.

File Description	Document
Upload any additional information	View Document
strategic Plan and deployment documents on the website	View Document

Paste link for additional information

[View Document](#)

6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.

Answer:

The Institution's strategic plan for Institutional growth in 10 thrust areas

- 1. STAFF DEVELOPMENT**
- 2. STUDENT SERVICES**
- 3. INDUSTRY- INSTITUTE INTERACTION**
- 4. ENVIRONMENT DEVELOPMENT**
- 5. INFRASTRUCTURE FACILITIES**
- 6. INTERNAL QUALITY ASSURANCE SYSTEM (IQAS)**
- 7. RESEARCH AND DEVELOPMENT**
- 8. COMMUNITY SERVICES**
- 9. TRAINING AND PLACEMENT CELL**
- 10. MANAGEMENT INFORMATION SYSTEM (MIS)**

The institute follows a strategic procedure in providing better placement for the students in reputed companies. The strategic plan with respect to placement and training activities is to make more than 95% of students get placement in highly reputed companies with very good packages.

The institute follows the strategic process and procedure for placement as described below.

Placement process and procedure:

To support the placement process, Placement Cell has an effective system for recruitment of the final year students. Depending upon the availability, the non-placed students are given opportunity for recruitment

In the year 2016, the highest package of 4.9 Lakhs/Annum was offered by Verizon for the students of Meenakshi Sundararajan Engineering College. To enhance our student's potential, we implemented a strategic training plan with the following ideas:

- **Exclusive hands on training in programming and problem solving using C.**
- **Increased the duration of training sessions.**
- **Motivational career talks and mock interviews organized by alumni.**
- **Strengthened our students in aptitude and logical reasoning.**
- **Full stack STEP workshop conducted by Sirius Computer Solutions.**

All the hard work and vigorous training gave us an exceptional result in the year 2021. The students received the highest package of 7Lakhs/Annum from the reputed organization Tata Consultancy Service.

The Placement head discussed with staff coordinators about the current final year student's placement records.

- **Based on the observations, salary package and number of core companies needs to be improved.**
- **In that connection, The Placement head discussed with the staff coordinators about the strategic plan and its implementation for the next 5 years.**

Strategic Plan for Placement :

It has been decided that the below plans are to be implemented.

- **To Provide hands on training in programming Languages.**
- **To Increase the training duration.**
- **To Increase Mock test and Mock Interview**
- **To create awareness about recent technologies**

The Placement Head suggested the above mentioned plan and recommended for approval from the deciding authority.

File Description	Document
Upload any additional information	View Document
Link to Organogram of the Institution webpage	View Document
Paste link for additional information	View Document

6.2.3 Implementation of e-governance in areas of operation

- 1. Administration***
- 2. Finance and Accounts***
- 3. Student Admission and Support***
- 4. Examination***

Answer: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP (Enterprise Resource Planning) Document	View Document
Details of implementation of e-governance in areas of operation, Administration etc	View Document
Any additional information	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Answer:

Professional Development measures for Teaching :

- **Providing financial support to attend and present paper in National and International Conferences**
- **Providing financial support to attend Faculty Development Programme, Seminars, Workshops /Refresher Courses/ Orientation Programmes**
- **Honouring for publication of papers in refereed journals/research articles**
- **Providing Professional body membership fees**
- **Encouraging non doctoral faculty to get enrolled for PhD program and proving On duty for the same**
- **Promoting Research and Development, Consultancy by involving faculty at various level**
- **Encouraging faculty to undergo in- house R&D activities along with the students and obtaining patents**
- **Encouraging the faculty to attend online courses such as MOOCs, NPTEL, Coursera, Udemy, etc.**
- **Sponsoring faculty to deliver guest lectures at other higher learning institutes.**
- **Permitting the staff for industrial visits to enhance technical knowledge, sharing /creating modern tools facilities and to promote research activities.**
- **Appreciation for producing University Ranks**
- **Appreciation for academic excellence/100% pass**
- **Vacation holidays during summer and winter**
- **Special leave for religious festivals**
- **Conducting health camp**
- **Felicitation to all faculty members were given silver article .In commemoration of 100 th birthday centenary of founder K R Sundararajan Silk Saree were presented to all faculty members by the management.**
- **For every 5 years and 10 years salary hike for all faculties**
- **Faculties are QCFI members (Lakshmi Ma'am) and Lions club members (Noor Khan Sir), so faculties are involved in quality and social related activities**

- **24 Staffs are a member of lions club**
- **All hostel faculty members are given free accommodation and concession in food**
- **Visually challenged faculty member (Revathy Ma'am) is provided facilities for category classes and role from 2012 onwards**
- **Faculty having serious health issues are given full salary**
- **24x7 wi-fi facility**
- **Staffs club for research activities, various outings**
- **Dinner and lunch are given on various events**

Development Program for Non-Teaching Staff

- **Conducting and encouraging to attend programmes in modern tools to upgrade**
- **Providing support to attend skill Development Programme, Seminars, Workshops .**
- **Encouraging to attend training programs to hone their computer and e-skills .**
- **Conducting Communication skills lecture to improve their communication skills**
- **Encouraging for higher studies and proving On duty for the same**
- **Appreciation for technical research work**
- **Vacation holidays during summer and winter**
- **Special leave for religious festivals**
- **Ex gratia payment is offered(rs 5000 was given to Mr.Ramesh & Mr. Shabeer).**
- **Non-teaching staff Mr Ramesh and Institute electrician were provided with financial assistance for their medical expenses during the time of medical emergency**
- **Hygiene training was given for housekeeping staff.**
- **Non-teaching staff have been working from the IIET (Ramadevi, Vastula, Kanchana, Ravichandran, Sampath)**

Service benefits to staff

- **Paid Marriage leave and medical leave**
- **Paid maternity leave to women employees**
- **ESIC benefits are covered to the staff whose salary is equal and below RS.21000**
- **Approximately, 43 Faculties per year were given ESIC benefits .**
- **Approximately,123 Faculties per year EPF benefits are given to all employees with a management contribution of 12% of the pay.**
- **Faculties were given EPF benefits.**
- **Group insurance scheme was provided for 161 staff members.**
- **Public Utility Insurance scheme for staff**

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.3.2 Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Answer: 22.56

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
17	45	45	0	0

File Description	Document
Upload any additional information	View Document

Details of teachers provided with financial support to attend conference, workshops etc during the last five years

[View Document](#)

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Answer: 8

6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
10	10	5	8	7

File Description	Document
Upload any additional information	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP) during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Answer: 36.1

6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
66	35	13	8	54

File Description	Document
Upload any additional information	View Document
IQAC report summary	View Document

Details of teachers attending professional development programmes during the last five years

[View Document](#)

6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

Answer:

PARAMETERS FOR THE APPRAISAL SYSTEM:

Service conditions including Promotion Policy

- **The pay is fixed by the selection committee for teaching and non teaching staff.**
- **The performance appraisal is considered for promotion.**

Increments:

Increments are sanctioned only on satisfactory report on performance of the employee

Promotion policy:

- **The objective of the promotion policy is to recognize and reward, merit and competence. It improves the organisational and functional effectiveness.**
- **All promotions shall be subject to completion of minimum qualifying period and other requirements such as employee's current academic performance, their research work, number of publications, commitment of the staff to the improvement of the institution etc.**
- **The promotion of an employee is purely based on the merit and commitment to institutional development.**

Faculty Performance Appraisal is based on the following Process:

- **In the beginning of the academic year a circular is sent to all the faculty members about Faculty Performance Appraisal System along with various Appraisal Parameters.**
- **In the end of the academic year, all the faculty members are asked to submit the Faculty Performance Appraisal which is filled based on the guide lines.**
- **Based on the Evaluation parameters the performance of the Faculty members is self-evaluated.**
- **The appraisal committee members discuss with the faculty member about their Performance with respect to the Appraisal Performance Report (APR) and future plans for the growth of department and institution.**

- **In the end of the academic year, all the faculty members are asked to submit the Faculty Performance Appraisal which is filled based on the guide lines.**
- **Based on the Evaluation parameters the performance of the Faculty members is self-evaluated.**
- **The appraisal committee members discuss with the faculty member about their Performance with respect to the Appraisal Performance Report (APR) and future plans for the growth of department and institution**

Appraisal Evaluation parameters:

Appraisal Evaluation parameters for teaching faculty include

- **students results in Anna University Examination Results,**
- **Student Feedback on Faculty,**
- **PUBLICATIONS (International Journals/Conferences),**
- **Events Organized,**
- **Events Attended ,**
- **R&D Projects and Consultancy Activities**
- **Administrative Activities(Department Level).**

Other areas—

- **include their Attendance,**
- **Technical Knowledge,**
- **Quality of work, Communication,**
- **Taking Initiatives**
- **Effectively planning their load Independently,**
- **Creativity, team work**
- **Contribution towards Environment and Society / Community**

The assessment report is prepared based on the parameters shown above. The evaluation parameters are Outstanding, good, Fair, Improvement needed. The recommendations of HoD are included which is forwarded for the appraisal.

Effectiveness and follow-up action:

- **The performance review by the HoD Dean Academics and Secretary is taken for the follow up action for newly recruited/promoted on the probationary period, and is for faculty whose performance has not been satisfactory.**
- **The performance of non-teaching staff is monitored at the laboratory/ department level. In case of those working in the laboratory, the faculty in-charge for the laboratory conducts skill tests occasionally to make sure that their performance is up-to-date.**

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Answer:

The Secretary of the institution heads the team managing financial resources of the Institution.

She scrutinises and approves all financial transactions as per the norms and rules of the Institution.

The external financial audit is done at the end of each financial year by a chartered accountant.

The external auditors visit at regular intervals, and verify all financial transaction with the supporting documents and approval of proper authority for each financial transaction.

During the course of External Audit, the objections raised are clarified by the secretary of the institution by providing the appropriate documents, bills, vouchers etc.

Primarily the account of the Institution is maintained in a conventional manual basis.

Registers are maintained for predominant activities such as

- **staff**
- **provident fund**
- **Assets etc.**

In this account the audit is designed and carried out manually to verify almost all the Incomes and Expenditures, Assets and Liabilities of the Institution by 100% verification, and not on sampling basis.

The period of the audit verification is also spread out with intermittent breaks to give the benefit of varying the audit verification to cover any other items which would have been left out otherwise.

Further the secretary is directly involved in vetting the verification results and these vetting process include verification of the nature and relation of the transactions to the objects of the Institution, legal compliances, reconciliation and cross verifications and also exploring transaction in cash, if any, evaluating reasons as to why they were not transacted through bank.

With all these verifications it's convinced that apart from accuracy of financial statements there are no wilful misstatements and they reflect a true and correct state of affairs.

All necessary steps are taken to regularize the accounts and to obtain confirmations for the credit balances, to collect documentary evidences wherever inadequate in respect of payments and compliances of T.D.S.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropers during the last five years (not covered in Criterion III)

Answer: 437.18

6.4.2.1 Total Grants received from non-government bodies, individuals, Philanthropers year wise during the last five years (INR in Lakhs)

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
1.85	14.6475	280.73727	37.97616	101.9657

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	View Document
Any additional information	View Document
Annual statements of accounts	View Document

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Answer:

Mobilisation of Funds

Fees Collections:

- **Students are admitted as per the Tami Nadu Government prescribed Higher Education norms by admitting students through Anna University Counseling (TNEA) and through Consortium of Self Financing Professional, Polytechnic Colleges in Tamil Nadu.**
- **The latter kind are admitted with the Fees higher than Government Quota students.**
- **The fee amount is deposited in Public sector banks as short term deposits. The fees is utilized for the development of the college and towards recurring expenses like salaries, electricity maintenance, and infrastructural maintenance etc**

Term Loan and Hire Purchase Loans:

- **Institute is getting Loans from Banks with reduced rate of interest by maintaining the liquidity, Debt Equity Ratios which are sound and the Loans are availed through trust.**

Corpus Donation of Trust and Trust Contribution:

- **The College is functioning under the Indian Institute of Engineering & Technology Educational Society at Chennai .The society gets corpus donations from well-wishers, corporate and philanthropists.**

- **Donations are received from well-wishers (alumni and charity organisations), industries, individuals and philanthropists for institutional activities.**
- **The donations from Sringeri Math is used to construct the Mechanical Building , to buy latest computer and others regularly Grants and sponsorships from various organizations including Professional Bodies to conduct various Symposiums, Seminars, National and International Conferences and other similar activities are also obtained**

Optimal Utilization of Recurring Expenses

- **A clear budget is prepared well before the academic year begins and the expenses are reviewed by the society and management body.**
- **Salary to staff, academic activities are done with fees collection.**

Infrastructural development facilities and Building construction works:

- **Management allocates budget to create and upgrade the infrastructural facilities in tune with the modern trends and for construction works.**
- **Corpus donations received from well-wishers and philanthropist are judiciously utilized for the same.**

Research and project activities:

- **In order to motivate the faculty and students, the management sponsors funds for development of research projects with real time applications and Societal beneficial Innovation.**
- **The innovation activities were supported by institution and Industries under Corporate Social Responsibility .**
- **The students' project work and development activities is funded by Amounts received from alumni, philanthropists and other well-wishers.**

Seminars, Conferences and Faculty Development Programme and other co-curricular:

- **Every department of the institution organizes the seminars, workshops and conferences by way of collecting registration fees from the participants.**
- **The excess of income over expenditure is utilized effectively for the development of the department. In case of deficit the management supports by releasing funds.**

Extra-curricular activities:

- **During every academic year, funds are ear-marked for the conduct of sports and cultural activities to enable overall development of students.**
- **Funds are also allocated for social service activities as a part of social responsibility**

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Answer:

NBA Accreditation

IQAC has contributed significantly in the following areas

- 1. Maintaining the quality of the students**
 - 2. Continuous up gradation of each faculty member**
- Awareness program on National Board of Accreditation (NBA) attended by the all the faculty members.**
 - All the criteria discussion and suggestion given by the experts.**
 - Academic collaboration with Raja Lakshmi Engineering College under Margadharsan Scheme, to get various inputs of all criteria in order to upgrade the institute..**
 - Organized inter and intra institutional workshops, seminars on quality related themes for the faculty members mainly for the promotion of Accreditation.**

Based on above said areas, the quality of students and each staff enhance their knowledge day by day.

NBA is granted for the programs applied in the year of 2019 for the consecutive three years.

ACADEMIC PERFORMANCE IMPROVEMENT

- **IQAC focuses on the academic performance of the students, teaching-learning process and monitors the continuous improvement. There is a centralized academic team of faculty and students from all departments focussing on the initiatives for academic improvement.**
- **Students were divided into two categories as slow and fast learners based on their previous semesters' and internal exam performance by the Class-in-Charges. Motivation is done for weak students through their corresponding mentors to reward the students strength.**
- **IQAC suggested a peer-learning system, in which each student(peer-leader) is allotted 5-10 peer-learners in that class. The peer-leader helps the peer-learners in understanding the difficult concepts during allotted hours.The faculty-mentor assigned to the peer-learners will also monitor the system and guide them along with periodic contact with the parents(if required).**
- **After college working hours , extra one hour is extended for coaching weak students through subject teachers along with mentors by proving additional study materials, assignments, previous year university question papers for getting trained for all sets of exams.**
- **Slow learners will be taught the same course again which was earlier covered during the regular class to improve their understanding. Individual attention is given during this time which helps them to perform better.**
- **.For fast learners, during the extra extension one hour were asked to utilize for additional online courses like NPTEL, higher analytical tutorial problems, project discussions are assigned to improve their skills if needed. Fast learners are also given additional concept books from the department library to enhance the technical knowledge.**
- **By these working process the slow learners along with the help of fast learners ,subject teachers ,mentors gets better results in all assessment exams and university rank holders were awarded each year and increased in placement through good companies.**
- **The IQAC has consistently striven to institutionalize quality assurance strategies and processes at every level of the institution's functioning. From devising strategies to improve the teaching-learning process through use of ICT, expanding the scope of the library, transforming it into a multivalent knowledge portal and signing MoUs with research institutes a re-define the boundaries of a vitalizing, and holistic education the IQAC has been a proactive player in the overall benchmarking process.**

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

(For first cycle - Incremental improvements made for the preceding five years with regard to quality

For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Answer:**(I)ACADEMIC EXCELLENCE MONITORING**

IQAC has initiated several measures to review teaching, learning processes and implemented several reforms to evaluate students' learning outcomes. institute gives importance to all the guidelines given by IQAC.

STUDENT INDUCTION PROGRAM:

- **IQAC gives prime importance to the academic outcome of every student. Recently AICTE had introduced a students induction program based on universal human values in its modern curriculum.**
- **It was conducted as a one week program for the students during the academic year 2020-2021.**
- **Orientation programmes are organized for first years to ensure about the college activities and familiarization of the departments**

FACULTY DEVELOPMENT PROGRAM

- **Faculty development programs were organized for the enhancement of teaching skills to handle the students in a better way.**
- **Students feedback on programs were collected for each course and actions were taken. The faculty development program intends to provide opportunities for induction training to faculties which covers areas such as new concepts, methods and techniques, theories and skill development, motivation, communication skills, management and other relevant issues to keep pace with the changing scenario in technical education.**
- **As a result during the academic year 2020-2021, FDP organized by our faculty is gradually increased 109 faculties were participated. IQAC plays a key role in the process at the level of institution and faculty members.**

PROFESSIONAL SOCIETY ACTIVITIES

- **Students from all the departments involved in various professional society activities make them explore their interests and broader perspectives.**
- **In the year 2020-2021, 38 professional societies were organized, as a reflection students got awards and participation in activities also increased as per instruction given by the IQAC.**

INNOVATIVE TEACHING

- **The institute introduced the system of online test series and MCQ's during pandemic period, for easy and quick learning for students .**

- **Faculty members take classes for students through presentations in Google classroom/computer labs by replacing the black board which makes the learning process environmentally friendly.**
- **Demos are shown to the students related to their course, which helps to improve their skills. The institute arranges regular skill enhancement programs for all round development of the students. IQAC has taken effective steps to enhance the potential of students.**

EXAM CELL

- **Exam cell coordinator and department coordinator ensure the smooth conduction of the examinations as per the schedule.**
- **The question papers are checked with learning outcomes as per bloom's taxonomy, verified and answer key are evaluated by the course experts in all departments.**
- **Syllabus completion is monitored at regular intervals and special hours are allotted if needed. Allocation of invigilation duties are centralized and the Answer book evaluation is deputed to the staff concerned. Based on the performance, internal marks are calculated and entered in the Anna University web portal. After the declaration of university results.**
- **The performance is monitored and learning outcomes are measured by the IQAC and necessary steps are taken to ensure the academic excellence.**

INDUSTRY INTERACTION

- **IQAC plays an important role in teaching the learning process by motivating the students to attend internships and industrial visits.**
- **Each and every student acquires an excellent learning curve while meeting new people and making connections in the professional world.**

ACHIEVE EXCELLENCE PROGRAM

- **As per guidelines given by IQAC,ACHIEVE EXCELLENCE PROGRAM (AEP) is conducted for the advanced learner's to excel in the performance.**
- **Students are encouraged to attend technical contests.**
- **Industry interaction is organized by Arranging guest lectures, seminars, workshops, and conferences.**

NSS AND YRC ACTIVITIES

- **IAQC reviews and reports on teaching learning process, methods, learning outcomes on academics improvement. There are 12 activities carried out during the academic year 2020-2021.**

- **NSS activities are conducted for the students for personality development through community service. The NSS Volunteers are interacting with villagers and exposing them to the realities of life.**
- **Students participation in NSS and YRC activities helps the institution in a disciplined and organized way.**

TRAINING AND PLACEMENT

- **Training and placement provided to all the students from various training institutes, training period is gradually increased year by year recently during the academic year 2020-2021.**
- **Total duration of 160 hours was conducted which allowed the students to improve their confidence and employability skills.**
- **Number of companies visiting the college for recruiting the students has also increased.**

(II) USAGE OF ICT TOOLS BY FACULTY

- **The institution reviews its teaching learning process, methodologies in learning outcomes periodically through IQAC.**
- **The Institute implements the teaching learning reforms regularly and encourages the faculty members for ICT enabled teaching by replacing the traditional classroom**
- **The faculty members are encouraged to attend FDP, workshops, webinars and seminars to use digital interactive methods in teaching.**
- **The faculty members are advised to use the IT enabled tools such as PPT, Video clippings of NPTEL, YouTube videos and open source tools.**
- **The Institution adopted blended teaching and learning process during pandemic via online platforms like Zoom meetings, Google Meet, Webex meeting and Skype to enhance the teaching learning process.**
- **E-content for the respective courses are prepared by all the faculty and posted in the Google Class room in the form of PPT, recorded videos which includes MCQ, quizzes, question bank, previous year question paper, case studies, assignment questions, lecture notes, etc. All the E-content available is reviewed by the course committee and validated.**
- **The links of all the recorded videos are provided to the students.**
- **All the recorded videos, virtual lab tools for lab experiments were shared with the students through the link for effective teaching and learning.**
- **Examinations were conducted in online mode/ Auto Proctor mode for MCQ, quiz, short and essay type questions.**
- **Through online the training classes for Placements, various curricular events like technical Guest lectures, Webinars, FDP, National /International Conferences by all departments were conducted.**
- **Student Induction Program was conducted in November 2020 via Zoom platform, wherein the Secretary, Principal, Dean Academics and resource persons interacted with the first year students.**
- **The report on ICT tools usage is prepared and forwarded to the IQAC.**
- **The challenges faced in the implementation are discussed in the IQAC meetings and the IQAC members resolve the challenges.**

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements**
- 2. Collaborative quality initiatives with other institution(s)**
- 3. Participation in NIRF**
- 4. any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)**

Answer: A. All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document

Paste web link of Annual reports of Institution

[View Document](#)

7. Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

Answer:

- Meenakshi Sundararajan Engineering College (MSEC) organizes activities for students and staff regarding gender equity and social responsibility by promoting this in admissions, recruitment, administrative functionality and academic activities.
- NSS unit in MSEC encourages the students to take part in conducting various activities to serve the society.
- The girl students are nominated as members of various committees in the department, institute levels and encouraged to participate in co-curricular and extra-curricular activities.

ANNUAL GENDER SENSITIZATION PLAN

- During the first year orientation programs, Secretary of MSEC highlights the practices on gender equity to create awareness among the freshers.
- The institution conducts self-defense workshop to educate the girl students about different types of violence, provides knowledge on self-protection and self-defense techniques.
- Social media awareness programs are conducted to create awareness on the effective utilization of social media.
- Anti-ragging awareness programmes are conducted to create a conducive learning environment.
- Organized Entrepreneurial Development programmes, a special focus on women Entrepreneurs.
- Conducted awareness program on women's health & hygiene for students.
- Conducted Yoga training- a special focus on flexibility exercises for women and emphasis on mental and physical well-being of the students.

SPECIFIC FACILITIES PROVIDED FOR WOMEN

- Safety and security of women students inside the campus is ensured by CCTV surveillance cameras. CCTV Cameras are installed at various places in the campus to observe the movement and activities of students.
- First aid boxes are provided in all departments.
- Conducted Fire drill to create awareness among students and staff about the use of fire extinguisher and how to protect themselves during any emergency situations.
- The institution provides a dedicated help-line facility for staff and students in the administrative office to contact during emergency. (044 - 24801636).
- Contact details of members of Internal Complaints Committee and Complaints procedure are published in college website on complaints pertaining to sexual harassment and Grievance redressal committee members addresses the grievances faced by the students.
- Anti-Ragging Committee of the institution ensures a ragging free environment inside the campus.
- Physical or mental abuse of any student on the ground of colour, race, religion, caste, gender, sexual harassment, linguistic, identity or economic background is prohibited.
- Counselling is provided for students in academics and personal problems.

Group of students are assigned to a mentor (faculty) for guiding the students in all activities till the completion of their studies.

File Description	Document
Link for annual gender sensitization action plan	View Document
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	View Document

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

1. *Solar energy*
2. *Biogas plant*
3. *Wheeling to the Grid*
4. *Sensor-based energy conservation*
5. *Use of LED bulbs/ power efficient equipment*

Answer: B. 3 of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document
Any other relevant information	View Document

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- *Solid waste management*
- *Liquid waste management*
- *Biomedical waste management*
- *E-waste management*
- *Waste recycling system*
- *Hazardous chemicals and radioactive waste management*

Answer:

SOLID WASTE MANAGEMENT

The Institution takes many initiatives towards waste management. The Institute follows the principle of 3R (Reduce, Reuse and Recycle) to meet its objective of Sustainable Development by bringing ecological balance.

25Kg/day vegetable waste from the canteen is disposed of through Composting regularly to keep the campus clean. However, waste is generated by all sorts of routine activities carried out in the College that includes paper, plastics, glass, metals, foods, etc. The college believes its utmost responsibility to remove all waste not only for the safety of the students but also for the harm it causes to the environment.

Adequate number of trash cans and dust bins are placed all over the campus. **5 Kg** of non-degradable waste is disposed off with the help of Municipal Corporation on a daily basis.

Waste generated in the college is segregated using different color-Blue, Yellow, Green dustbins placed in the premises. Composting facility is available for managing biodegradable/horticulture waste. Recyclable waste, dry waste and biodegradable/wet waste are processed and recycled. The institute promotes minimal plastic usage and encourages staff and students to reduce the plastic waste.

LIQUID WASTE MANAGEMENT

Water conservation becomes the need of the day. At the time of downpour, rain water is collected under the ground and is channelized properly to recharge the groundwater level. Adequate arrangements are made to collect the roof water during rain is in place.

E-WASTE MANAGEMENT:

E-waste generated from various departments which cannot be reused or recycled is being disposed centrally through certified eco-friendly vendors. Instead of buying a new machine, a buyback option is taken for technology upgrade. Any damages or reductions in capacity are set right by repairs. In addition, the college emphasizes on minimum paper usage to save carbon emission through printers.

As per the Government of India guidelines, E-waste is processed and recycled without affecting the environment by the certified vendors. Efforts are taken to minimize the e-waste such as the electronic and electrical items, computers, printers, keyboards etc.

HAZARDOUS CHEMICALS AND RADIOACTIVE WASTE

Microbial waste from laboratories is discarded by autoclaving process and there is no opportunity for generation of radioactive waste in the college.

File Description	Document
Any other relevant information	View Document
Link for Geotagged photographs of the facilities	View Document

Link for Relevant documents like agreements/MoUs with Government and other approved agencies

[View Document](#)

7.1.4 Water conservation facilities available in the Institution:

1. *Rain water harvesting*
2. *Borewell /Open well recharge*
3. *Construction of tanks and bunds*
4. *Waste water recycling*
5. *Maintenance of water bodies and distribution system in the campus*

Answer: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document
Link for any other relevant information	View Document

7.1.5 Green campus initiatives include:

1. *Restricted entry of automobiles*
2. *Use of Bicycles/ Battery powered vehicles*
3. *Pedestrian Friendly pathways*
4. *Ban on use of Plastic*
5. *landscaping with trees and plants*

Answer: A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document
Link for any other relevant information	View Document

7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

1. *Green audit*
2. *Energy audit*
3. *Environment audit*
4. *Clean and green campus recognitions / awards*
5. *Beyond the campus environmental promotion activities*

Answer: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
Certificates of the awards received	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

1. *Built environment with ramps/lifts for easy access to classrooms.*
2. *Divyangjan friendly washrooms*
3. *Signage including tactile path, lights, display boards and signposts*
4. *Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment*
5. *Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading*

Answer: B. 3 of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document
Any other relevant information	View Document

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Answer:

MSEC believes in equality of all cultures and traditions. College organizes and conducts several activities to build a nation of youth who are noble in their attitude and morally responsible.

NATIONAL SERVICE SCHEME (NSS) and YOUTH RED CROSS (YRC)

The motto of NSS “Not Me, But You” reflects the essence of democratic living and upholds the need for selfless service. The NSS volunteers actively participate in the NSS activities.

Youth Red Cross is active in the institution. The Student volunteers coordinate the service camps like eye camp, blood donation camp, etc.

230 students on an average have participated in various social service related activities and awareness programs organized by NSS and YRC which contributed for 315 beneficiaries in average per year. It enables the students to understand the importance of teamwork and makes them voluntarily involved in providing humanitarian services to the society.

PROFESSIONAL SOCIETY

MSEC has student chapters of IEEE, IETE, ACE, ISTE, CSI and ICI professional societies. The professional chapters facilitate the students to enrich their knowledge on cultural diversified activities for the benefit of students. The Student members are encouraged to participate in different programs organized by college, inter-college, university and other Government and non-government organizations through these chapters.

JAPANESE LANGUAGE COURSE

All first year students learn Japanese-Language and appear for Japanese-Language Proficiency Test (JLPT) level N5 examination conducted by the Japanese foundation, ABK-AOTS DOSAKAI, Tamilnadu

In JLPT level N5 examination, 1560 students appeared in the previous four years and 272 students for NAT examination conducted in April 2021 and all the students received the participation certificate. This gives opportunity for the students to get job in foreign countries.

UNIVERSAL HUMAN VALUES (UHV) PROGRAM

Student Induction program (UHV) was conducted for all first year students in 2020-21 through online mode and 319 students benefitted from this program. It enabled students to understand human values for harmony to lead a happy and prosperous life. All teachers of MSEC are trained in this program conducted by AICTE.

SINGLE TEACHER SCHOOLS

The institution constructed **13** Single Teacher Schools in various villages voluntarily with the help of students and staff members from each department. Staff members, alumni and students are involved in various voluntary services to support human society.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Answer:

MSEC undertakes different initiatives to equip students with the knowledge and skill that are necessary for sustaining the balance between a livelihood and life by ensuring an effective, supportive, safe and conducive learning environment.

These elements are inculcated in the value system of the college through the policies reflecting the core values. Code of conduct is implemented for students and staff and everyone has to abide by the conduct rules. The affiliating University curriculum includes a mandatory course on “Professional ethics and human values” to inculcate values among the students.

The following practices ensure the dissemination of constitutional obligations:

1. Orientation Program for I year Students.
2. Universal Human Values and Student Induction Program by AICTE.
3. Appointment order.
4. Invited talks by eminent personalities.
5. NSS activities.
6. Swachh Bharat initiatives.

(a) ORIENTATION PROGRAM:

Orientation program is conducted for the First year students during the commencement of their study in the institution. In this program, Dr. K. S. Babai, Secretary of the institution elaborates the values, rights, duties and responsibilities of the students and parents.

(b) UNIVERSAL HUMAN VALUES:

59 faculty members of the institution attended the AICTE FDP on “Universal Human Values” and conduct Student Induction program for the first year students during the first two weeks of their course in the institution. This program emphasize on trust, right understanding, humanity and ethics.

(c) Appointment order:

Values, rights, duties and responsibilities are printed in the appointment order.

(d) INVITED TALK:

Invited talks by eminent personalities are organized for the students and faculty regularly to motivate and inspire them regarding their social rights, values and responsibilities.

- Mr. V. Irai Anbu, IAS., Mr. T.A.B. Barathi, Vice President, Wheels India Ltd., Dr. P. Duraisamy Vice Chancellor, University of Madras, Chennai , etc. addressed the students during various occasions.
- Created awareness on health and right living to all the teaching, non-teaching and administrative staff through a series of lectures by eminent doctors in all fields of medicine (Neurosurgery, Gastroenterology, Cardiology and Ophthalmology). On an average of 115 staff attended the program and got benefited.

(e) NSS ACTIVITIES:

- Eye-camp was organized through NSS to create awareness among the public about eye donation.
- Screening test and awareness session on hepatitis was conducted on 28 JULY (World hepatitis day).

(f) SWAACH BHARATH:

MSEC creates awareness among the students on issues such as the impact of usage of plastics, cleanliness, green campus by inviting illustrious speakers to address the students .

One hour per week is allotted to the students in the regular timetable to maintain cleanliness in the campus to clean and water the plants

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	View Document
Link for any other relevant information	View Document

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of Conduct is displayed on the website**
- 2. There is a committee to monitor adherence to the Code of Conduct**
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
- 4. Annual awareness programmes on Code of Conduct are organized**

Answer: B. 3 of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	View Document

Code of ethics policy document	View Document
Any other relevant information	View Document

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Answer:

The Institution celebrates / organizes the following national and international commemorative days, events and festivals.

Republic day and Independence day (26th JAN & 15th AUG)

MSEC students and faculty members assemble in the campus to hoist the national flag during Republic Day and Independence Day.

Students perform march-past to honor the freedom fighters. After hoisting the national flag, the guest of honor addresses the students on the importance of democracy.

Engineer's Day (15th SEP)

The Department of Mechanical Engineering conducts a series of events on Engineer's day. On an average 150 students participate every year.

Eminent speakers are invited to present their research work and discuss recent developments in industries.

A set of activities are conducted for the benefit of students to correlate engineering education and its true applications with emerging burning challenges of society.

Gandhi Jayanti (2nd OCT)

MSEC conducts essay competition every year for students on account of Gandhi Jayanti, to emphasis and instill the 'Gandhian Thoughts' in young minds.

Entrepreneurs' Day (21st AUG)

On account of Entrepreneurs' Day various awareness programs and activities are conducted to highlight the journey of an Entrepreneur.

Ayudha Pooja and Golu celebration

MSEC organizes dussehra festival at Sharadambal Temple which is located in the premises of the college. It continues for ten days to enhance spirituality. Sweets and fruits are distributed to all the students and staff during the celebration.

File Description	Document
Link for Annual report of the celebrations and commemorative events for the last five years	View Document
Link for Geotagged photographs of some of the events	View Document

7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Answer:

BEST PRACTICE 1

1. Title of the Practice

ENRICHMENT, ENHANCEMENT, EMPOWERMENT-(E Cube)

2. Objectives of the Practice

- To improve students' presentation skills and Communication skills.
- To drive out the fear in students and enhance their confidence levels.
- To enable the students to improve their technical skills
- To develop soft skills in students.
- To help students stay upgraded with the latest developments in their own field.
- To help students gain exposure towards project implementation.
- To promote teamwork.
- To bridge the gap between academics and advancement in technologies.

3. The Context

The exponential growth of technology in Industries warrants for the dynamic skill upgradation of students as they graduate from the Institution. Graduates are expected to possess the necessary skills before they enter into the Industries to deploy them in real time operational environments.

Students need to acquire knowledge on various new technologies, leadership skills, team playing skills, interpersonal & intrapersonal communication skills, problem solving and analytical skills.

To enable the students to acquire these skills, MSEC conducts E-CUBE every year. Students are encouraged to present technical papers on the latest technologies in their respective discipline. Third and final year students are encouraged to implement projects to solve various societal problems. Upgrading academics, technical skills and life skills of the students is a continuous endeavor for the institution.

4. The Practice

Events conducted as part of E3:

- 2nd year – Technical paper presentation.
- 3rd year - Technical paper presentation, Mini - project implementation.
- 4th year - Technical paper presentation, project implementation, group discussion and mock interview.

Top performing students are recognized with prizes.

Guidance and feedback are received from experts for further improvements.

Technical paper presentation

Paper presentation event is conducted to encourage the students to explore the advancements in various technologies and Industry practices. All 2nd, 3rd and 4th year students are encouraged to present papers to help them to share their knowledge through interaction with the participants, improve their technical knowledge, presentation skills and confidence level.

Industry Experts and experienced academicians from premiere Institutions are invited to review the presentations.

Project Implementation

Third and final year students are motivated to present their projects. This helps students to get practice on real time problem solving and project implementation. The implemented projects are reviewed by the judges from Industries and/or academia.

Domains for technical paper presentation and project implementation

Branch: CIVIL

Environmental engineering, Railways, Construction methodology, Soil mechanics, Solid waste management, Concrete technology and Structural engineering

Branch :CSE/IT

Artificial intelligence, Internet of things, Cloud computing, Data science, Cyber security, Ethical hacking and Big data analytics

Branch: ECE

VLSI, Embedded design, Image processing, Robotics, Wireless technology, Mobile computing and Network design technology

Branch : EEE

Home automation, Biometrics, IoT based agriculture, E-authentication and Security based application

Branch: MECH

Automobile engineering, Mechatronics, Automation, Robotics, Metallurgy, Thermal science and Production

Group Discussion

Experienced Industry professionals are invited to conduct the group discussions and students are evaluated individually based on their performance.

Mock Interview

Development of soft skills is necessary for the candidates who attend campus interviews. Mock Interviews are conducted for the final year students by alumni with an objective of preparing the students for the placement.

5. Evidence of Success

MSEC maintains very good placement records by regularly conducting E-Cube, for the enhancement of the student's technical skills and soft skills thereby ensuring good job offers from well reputed companies.

6. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED

Implementing Projects in emerging technologies require a research sand box for safe installation and testing.

BEST PRACTICE 2

1. Title of the practice

Achieve Excellence Program (AEP)

2. Objectives of the Practice

- To provide a platform for top performing students to achieve excellence in Engineering Field.
- To guide and mentor the students in the right direction to excel in academics and other co-curricular activities.
- To support students to stay updated with the recent trends and technologies by means of conducting workshops and invited talks.
- To guide the students to do innovative projects.
- To drive the students towards quality publications.

3. The context

MSEC strives to produce students of outstanding academic excellence to benefit the society.

The institution ensures the following,

- Continuous upgradation of teaching faculty to ensure a high standard of quality of education.
- Constant interaction with its stakeholders.
- Linkage with other educational institutions and industries.
- Provision of Research facilities and infrastructure.
- Adequate opportunities and exposure to the students through various programs.

4. The Practice

The interactive nature of the program brings together theory and knowledge from the respective stream of Engineering and practical ideas for change that can be applied to the real life practice.

MSEC conducts this excellence program for all the students with the masterclass series includes (workshops, seminar, paper presentation, project implementation). Peer learning and sharing of solutions are actively encouraged.

Paper presentation event is conducted to encourage our students to explore the advancements in various technologies and industry practices. All 2nd, 3rd and 4th year students are encouraged to present papers which will help them to share their knowledge through interaction with the participants, improve their technical knowledge, presentation skills and confidence level.

Third year and final year students across the institution from all the departments are motivated to implement projects and present them on the day of the program. This helps students to practice real time problem solving and project implementation. The implemented projects are reviewed by the judges from industries and /or academia.

5. Evidence of success

Industry experts are invited to assess and evaluate the students' performance in these activities. Guidance and feedback are provided for further improvements. Top performing students and teams are recognized with prizes.

With regular implementation of this AEP, MSEC maintains a high placement record. As a result of enhancing students in their technical skills and soft skills, students get job offers in well reputed companies.

6. Problems encountered and resources required

Conducting AEP activities require support from Industry experts and experienced academicians from reputed Institutions like IITs, IISc, etc. Invite more eminent people to drive the program in the right direction to achieve success.

Multidisciplinary Specialized laboratories are required to implement innovative projects and collaborative research work.

File Description	Document
Link for Best practices in the Institutional web site	View Document
Link for any other relevant information	View Document

7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Answer:

Placing the students in top MNCs with higher packages is the primary key focus of MSEC. The institution maintains an average of 90% placements (out of the number of students opted for placements) with above 95% placement in 2020-21.

MSEC established a well-structured system to ensure good placements for all the students.

INITIATIVE BY THE INSTITUTION:

1. ACADEMIC EXCELLENCE

- Institution is accredited by the National Board of Accreditation for 3 years from 2020 to 2023.
- College is ranked number 7 in Tamilnadu as per the rank list published by Anna University based on the academic results of the odd semester 2019-20. MSEC consistently produced university ranks and good results.
- Membership of various Professional associations including CSI, IEEE, etc. provides a platform for the faculty and students to participate in workshops, lectures and seminars organized by these associations.

- Eminent speakers are invited for seminars, guest lectures, and workshops for knowledge upgradation of students on various technologies and Career Counselling.

2. SKILL DEVELOPMENT

ACHIEVE EXCELLENCE PROGRAM

Achieve Excellence Program (AEP) of MSEC, is designed with special consideration to the needs of high achieving learners who thrive on being extended. Top performing students are selected from each department and they are given special attention by guiding them to participate in webinars, seminars, workshops, etc. to improve their knowledge and get placed in higher package companies based on their performance.

ENRICHMENT, ENHANCEMENT, EMPOWERMENT (E3)

MSEC conducts a “one week E3program” during every semester to ensure the holistic development of the students. Paper Presentation event is conducted to encourage/explore the advancements in various technologies and Industry practices. All 2nd, 3rd and 4th year students are encouraged to present papers to help them to share their knowledge through interaction with the participants, improve their technical knowledge, presentation skills and confidence level.

PLACEMENT TRAININGS:

The college organizes Guest Lectures, Industrial visits, and Internship/ In-plant training programmes to support students to enhance their technical knowledge.

Intensive skill development programmes are conducted to help students to improve their skills. Extensive training is provided to students in programming languages such as C and C++. It helps students to get placed in IT Sector. Mock interviews are organized for pre-final and final year students. The English Department conducts various activities such as essay writing competition, elocution and group discussions, periodically by helping the students to improve their communication skills.

Seminars, workshops and webinar are conducted regularly on current trending topics by eminent personalities from various industries to keep the students updated in advanced technology. Technical activities like symposium and field visits are arranged to expose the students to the real time challenges of the society. Students gain work experience through internships in reputed companies.

JAPANESE LANGUAGE COURSE:

Japanese language course is organised by the college through ABK-AOTS Dosokai. Students take-up the JLPT-Japanese Proficiency Test for level N5 during the first semester and this improves their job prospects.

PLACEMENT RECORD:

To ensure career opportunities for the students, the college has introduced various programmes to educate, train and support students. The placement cell of the college is working rigorously to ensure that all students are getting job offers in reputed Industries. The Institution has a stupendous record of achieving 95% placement in 2020-21. MSEC students are placed in various reputed companies and organisations like TCS, Amazon, ZOHO, HCL, IBM, Accenture, Larsen & Toubro , Juspay and Paypal.

In the academic year 2016-17, 376 students graduated in their respective courses and received 590 placement offers. In the academic year 2017-18, 288 students received job offers in top companies with 114 students in Accenture and 56 students in Infosys.

In the academic year 2018-19, 341 students received job offers in top companies with 100 multi placement offers. To mention, 151 students were recruited by Accenture, 119 students in Cognizant and 91 students in Infosys.

In the academic year 2019-20, a total of 329 students received placement offers from various reputed organisations. 101 students got double placement offers and 12 students received triple placement offers.

In the academic year 2020-21, MSEC students received 315 placement offers with 75 Double offers and 30 triple placement offers. With the gradual up-skilling through a series of development activities, students are able to grab their dream offers with more than Rs.4.00LPA of CTC.

File Description	Document
Link for appropriate web in the Institutional website	View Document
Link for any other relevant information	View Document

Extended Profile

Program

Number of courses offered by the Institution across all programs during the last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
277	300	299	296	294

File Description	Document
Institutional data prescribed format	View Document

Number of programs offered year-wise for last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
7	7	7	7	7

Students

Number of students year-wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
1481	1584	1665	1744	1808

File Description	Document
Institutional data in prescribed format	View Document

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
197	197	197	301	197

File Description	Document
Institutional data in prescribed format	View Document

Number of outgoing / final year students year-wise during last five years

Answer:

2020-21	2019-20	2018-19	2017-18	2016-17
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413 443 463 468 482

File Description	Document
Institutional data in prescribed format	View Document

Teachers*Number of full time teachers year-wise during the last five years***Answer:**

2020-21	2019-20	2018-19	2017-18	2016-17
92	93	98	108	107

File Description	Document
Institutional data in prescribed format	View Document

*Number of sanctioned posts year-wise during last five years***Answer:**

2020-21	2019-20	2018-19	2017-18	2016-17
92	93	100	132	132

File Description	Document
Institutional data in prescribed format	View Document

Institution*Total number of classrooms and seminar halls***Answer:** 34*Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)***Answer:**

2020-21	2019-20	2018-19	2017-18	2016-17
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441.84 520.25 585.40 541.84 515.01

Number of Computers

Answer: 973

Conclusion

Additional Information :

<http://Msec.edu.in/NAAC/ADDITIONALINFOPROOF.pdf>

Achievements and accomplishments are building blocks for MSEC to enable greater heights, success and recognition among the competitors. MSEC strongly believes in “ Strength and growth comes only through continuous efforts and struggle”.Meenakshi Sundararajan Engineering College continuously strives for the betterment of the students, staff and community at large.

- Best Student Chapter award for Quality promotion 2019 at National level from NIQR.
- Received AICTE – CII Survey of Industry:

PLATINUM Ranking in 2017, 2018 GOLD Ranking in 2020.

- Listed in 251-300 Rank band in the Engineering Category in All India **NIRF ranking survey 2020.**
- **239** University Ranks (including **2 Gold Medalists**) since inception.
- Secretary received the **Honorary ISTE Fellowship** in 2016.
- Murali Krishnan of Electrical and Electronics Engineering (2013-17) received “**NIQR -T.S. Krishna Student award**” for Best Paper Presentation on “**SKILL INDIA FOR GLOBAL SUSTAINABLE QUALITY**” and published in Quality and reliability journal Vol XIII- no .2.2016.
- Students of Mechanical engineering participated in **Virtual BAJA SAEINDIA** held in Chitkara University, Punjab 25 students on 14 th ,15 th July 2017.
- Students of Mechanical engineering participated in **Virtual BAJA SAEINDIA** held in Chitkara University, Punjab 10 students on 13 th ,14 th July 2018.
- Received "**Best Engineering College in Chennai**" award from **Mylapore Academy - Sep’ 2007,2014,2015**
- Vasudharini and D. Praveen of (2014-18) of Electrical and Electronics Engineering bagged first place in **The Big Idea Contest-2k17.**
- Department of Civil Engineering organized International Conference on“**Construction in civil engineering**” on 16th March,2017.
- Department of Computer Science Engineering organized: Two-days International **Conference on“Information System and software Engineering(ICISSE)”** on 16th ,17th March 2018. Two-days International Conference on “Information System and software Engineering(ICISSE)” on 23rd , 24th April 2021.

- Department of Information Technology organized **International Conference on “Innovations** in Information and Communication Technology (ICICT’18)” on 9th and 10th March, 2018.
- Mechanical Engineering, (2018-22) participated in **BAJA SAEINDIA 2021** and secured 17th place among 150 participants.
- Societal Beneficial Innovation(SBI) project initiated in 2019. Due to pandemic it was inaugurated in the academic year 2021-2022.
- **B.Tech Artificial Intelligence and Data Science program** is introduced from 2021-2022 .

Concluding Remarks:

Meenakshi Sundarajan Engineering College started its educational journey in 2001 to address the needs of the society by promoting the young generation to become valuable citizens by nurturing universal human values. The **Vision, Mission and Goals** statement is central to the development of the college **strategic plan**.

The management constantly endeavors to develop the institution into a "**CENTER OF EXCELLENCE**"; imparting Engineering education and grooming overall personality with the highest emphasis on ethical values and honing them to face the challenges of the industry and the Society at large. Planning is integral every year in the process of resource management. **IQAC** reviews and drives MSEC in all areas for overall improvements towards students, staff and institution. **IQAC** process helps and assures that the college's vision and mission is carried out in all its program and services. The institution practices, **Outcome Based Education**, and serve the society as per the guidelines of AICTE. MSEC focuses on academics, infrastructure, laboratories, industry-interaction, self-learning, co-curricular and extra-curricular activities to make the students as technocrats, scientists and entrepreneurs in the modern Era.

Faculty development is an important components of maintaining instructional quality, all faculty are encouraged to participate in FDP, Workshop, seminars, conferences to improve not only teaching and learning but also stay current in the discipline. Motivated to organize guest lectures, seminars, symposium and conferences to improve quality education. “Enrichment, Enhancement and Empowerment”(E-CUBE) is conducted every year to bridge the industry gap among the students. **13** Value added Courses including **Japanese Language Training** is offered to the students for better employability . **27 MOUs** are signed with Industries, Research Organizations and foreign Universities like USM Universiti Sains, and MMU Malaysia. 120 MoU’s are signed so far in the academic year 2021-22. The college is proud of its alumni who made remarkable achievements in various fields like public services, business , entrepreneurship and corporate companies.

29 committee are formed to address and monitor institutional activities and issues on student’s grievance, complaints, sexual harrasment for women employee and girl’s students. For the benefits of the society the students are involved in NSS, YRC and STUDENTS LIONS CLUB.

EXCLUDED METRICS

List of Excluded Metrics

3 Research, Innovations and Extension : Weightage (120)

3.1 Resource Mobilization for Research : Weightage (15)

Ref No	Details of Metric	weightage	Metric Performance
3.1.2	Percentage of teachers recognized as research guides (latest completed academic year) (Metric Type : Derived , Question Type : QN , Evaluation : By DVV , Nature : Value)	5	1.09

3.3 Research Publications and Awards : Weightage (25)

Ref No	Details of Metric	weightage	Metric Performance
3.3.1	Number of Ph.Ds registered per eligible teacher during the last five years (Metric Type : Derived , Question Type : QN , Evaluation : By DVV , Nature : Value)	5	0

5 Student Support and Progression : Weightage (130)

5.4 Alumni Engagement : Weightage (10)

Ref No	Details of Metric	weightage	Metric Performance
5.4.2	Alumni contribution during the last five years (INR in lakhs) (Metric Type : Direct , Question Type : QN , Evaluation : By DVV , Nature : MC)	5	D. 1 Lakhs - 3 Lakhs

ANNEXURE

1.Metrics Level Deviations

Metric ID Sub Questions and Answers before and after DVV Verification

1.1.3 **Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years**

1. **Academic council/BoS of Affiliating university**
2. **Setting of question papers for UG/PG programs**
3. **Design and Development of Curriculum for Add on/ certificate/ Diploma Courses**
4. **Assessment /evaluation process of the affiliating University**

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: B. Any 3 of the above

Remark : Input edited as HEI has not provided Supporting documents from Affiliating University for option 3- Design and Development of Curriculum for Add on/ certificate/ Diploma Courses.

Average percentage of courses that include experiential learning through project work/field work/internship during last five years

1.3.2

1.3.2.1. Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

Remark : Input edited as per supporting documents

Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

2.1.2

2.1.2.1. Number of actual students admitted from the reserved categories year-wise during the last five years

Remark : Input edited as per data template

Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

2.3.3

2.3.3.1. Number of mentors

Answer before DVV Verification : 92

Answer after DVV Verification: 92

Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

2.4.3

2.4.3.1. Total experience of full-time teachers

Answer before DVV Verification : 917.83

Answer after DVV Verification: 917.83

3.2.2

Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

3.2.2.1. Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

Remark : Input edited excluding workshops like Webinar on World After College and invited talks on special subjects etc

Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

3.3.3

3.3.3.1. Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years

Remark : Input edited excluding books and chapters without ISBNs.

Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

3.4.2

3.4.2.1. Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

Remark : Input edited excluding Awards to the individuals, Appreciation / Participation certificates and Awards received by local in nature such as Urban / local bodies / Panchayat etc

Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

3.5.1

3.5.1.1. Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

Remark : Input edited as Internship, project work by more than one student at a collaborating agency to be taken as one. Industrial visit may not be considered.

Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

3.5.2

3.5.2.1. Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years

Remark : Input edited as The MOUs for resource persons, Industrial visits and webinars can not be considered and One MOU should be considered once in a assessment period

4.1.3

Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

4.1.3.1. Number of classrooms and seminar halls with ICT facilities

Answer before DVV Verification : 31

Answer after DVV Verification: 31

Average annual expenditure for purchase of books/e-books and subscription to journals/e- journals during the last five years (INR in Lakhs)

4.2.3

4.2.3.1. Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year

4.2.4

4.2.4.1. Number of teachers and students using library per day over last one year

Answer before DVV Verification : 739

Answer after DVV Verification: 739

Remark : Input edited referring data uploaded by HEI

The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

1. **Implementation of guidelines of statutory/regulatory bodies**
2. **Organisation wide awareness and undertakings on policies with zero tolerance**
3. **Mechanisms for submission of online/offline students' grievances**
4. **Timely redressal of the grievances through appropriate committees**

5.1.5

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: B. 3 of the above

Remark : Input edited as HEI has not provided supporting documents for Mechanisms for submission of online/offline students' grievances

Average percentage of placement of outgoing students during the last five years

5.2.1

5.2.1.1. Number of outgoing students placed year - wise during the last five years.

5.2.3

Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

5.2.3.1. Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, etc.)) year-wise during last five years

5.2.3.2. Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year-wise during last five years

Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

5.3.1

5.3.1.1. Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) year-wise during the last five years.

Remark : Input edited by excluding Participation/appreciation certificates and awards from regional/local /institutional levels and Awards from intra or inter institutions activities

Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

5.3.3

5.3.3.1. Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

Remark : Input edited as Events cannot be split in to activities

Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

6.3.4

6.3.4.1. Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years

The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment

7.1.2

Answer before DVV Verification : A. 4 or All of the above

Answer After DVV Verification: B. 3 of the above

7.1.7

The Institution has disabled-friendly, barrier free environment

1. Built environment with ramps/lifts for easy access to classrooms.

2. **Divyangjan friendly washrooms**
3. **Signage including tactile path, lights, display boards and signposts**
4. **Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment**
5. **Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading**

Answer before DVV Verification : A. Any 4 or all of the above

Answer After DVV Verification: B. 3 of the above

Remark : Input edited as per supporting documents

The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 7.1.10
1. **The Code of Conduct is displayed on the website**
 2. **There is a committee to monitor adherence to the Code of Conduct**
 3. **Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
 4. **Annual awareness programmes on Code of Conduct are organized**

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: B. 3 of the above

Remark : Input edited as per supporting documents

2.Extended Profile Deviations

ID Extended Questions

Number of programs offered year-wise for last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
7	7	7	7	7

1.2

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
7	7	7	7	7

2.2 Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
285	285	285	432	285

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
197	197	197	301	197

Number of full time teachers year-wise during the last five years

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
111	93	98	108	107

3.1

Answer After DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
92	93	98	108	107

Total number of classrooms and seminar halls

4.1

Answer before DVV Verification : 37

Answer after DVV Verification : 34

4.2 Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)

Answer before DVV Verification:

2020-21	2019-20	2018-19	2017-18	2016-17
243.15	566.62	474.51	562.26	863.96

Answer After DVV Verification:

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2020-21	2019-20	2018-19	2017-18	2016-17
441.84	520.25	585.40	541.84	515.01

Number of Computers

4.3 Answer before DVV Verification : 1050

Answer after DVV Verification : 973