

Meenakshi Sundararajan Engineering College

(An Autonomous Institution)

Managed by I.I.E.T Society, Approved by AICTE, New Delhi,
Affiliated to Anna University, Chennai,
Accredited by NAAC with 'A' grade and NBA for programs applied,
Recognized by UGC with 2(f) & 12(B) status















PG REGULATIONS 2024

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Meenakshi Sundararajan Engineering College

(An Autonomous Institution, Affiliated to Anna University, Chennai)

Prof. K. R. Sundararajan, a well-known educationalist, established the Indian Institute of Engineering Technology (I.I.E.T) society in the year 1947 in Chennai. The total area of 14 acres was purchased with enormous hardship and was donated to the IIET Society for the cause of education. The society's main objective is to provide quality education and it has been ensured since 1951.

The HET Society has the following to its credit:-

- An uninterrupted and continuous education since 1951 in its premises
- All Colleges run by the institution are ranked among the top 5 top 10 programs in Tamil Nadu
- 350 KW Solar Power Plant Generating upto 70% of its electricity needs
- Significant portion of the students are first generation learners
- Campus holds approximately 7000 plus students from the ages of 4 to 35 plus.
- Large Green Campus in the heart of the city of Chennai, Tamil Nadu
- In existence since 1947 Completed 75 years
- Targeting to be Carbon Neutral from the end of the year 2025

The society currently has the following institutions:-

- Meenakshi Sundararajan Engineering College(MSEC) established in 2001 & affiliated to Anna University offering engineering programs with about 2000 plus students.
- Meenakshi Sundararajan School of Management(MSSM) established in 2000 & affiliated to University of Madras offering MBA programs with about 100 plus students.
- The NEST School (TNS)- established in 2022 offering IB (International Baccalaureate) & CAIE (Cambridge) boards.

All of the institutions have earned an enviable name and are rated as one among Top 10 colleges in the Tamil Nadu state in their respective programs. Efforts are on to make the campus carbon neutral in 2 years (end of 2025) by using our community of staff and students.

Meenakshi Sundararajan Engineering College (MSEC) was established by the IIET Society in 2001. MSEC is defined by two keywords "Industry Ready" & "Vibrancy". Creating a new generation of self- actualized learners is our raison d'etre. If children are our future, then education is the key to their future. When education is shaped around them, and not the other way around, we are laying the foundation for a future/world where creativity, diversity and caring, independent-thinkers thrive. Our curricula thrive on continuous learning while interacting with and incorporating real-world situations and challenges.

MSEC's Hallmark of Quality

- Affiliated to Anna University, Chennai
- Approved by AICTE, New Delhi
- Accredited by NBA for programs in:
 - Civil Engineering
 - Computer Science and Engineering
 - Electronics and Communication Engineering
 - Mechanical Engineering
 - Electrical and Electronics Engineering
 - Information Technology
- Accredited by NAAC with a prestigious "A" grade
- Declared under Section 2(f) and 12(B) of the UGC Act
- Conferred with Autonomous status for 10 years (2024-25 to 2033-34) by the University Grants Commission (UGC) on February 1, 2024
- Meenakshi Sundararajan Innovation and Incubation Centre (MSIIC)
- Meenakshi Sundararajan Career Development Cell (MSCDC)
- MSEC Research Centre (MSEC RC)
- Center of Excellence Industry Tie Up in Specialized Labs
- Industry MOU's 200 Plus

Vision of the Institute

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 Institute

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.

We offer following courses:

| S.No | Course | Intake | | | | | |
|------|---|--------|--|--|--|--|--|
| | Undergraduate courses in B.E / B. Tech | | | | | | |
| 01 | B.E Civil Engineering | 60 | | | | | |
| 02 | B.E Computer Science and Engineering | 120 | | | | | |
| 03 | B.E Electronics and Communication Engineering | 120 | | | | | |
| 04 | B.E Electrical & Electronics Engineering | 60 | | | | | |
| 05 | B.E Mechanical Engineering | 60 | | | | | |
| 06 | B. Tech Information Technology | 120 | | | | | |
| 07 | B. Tech Artificial Intelligence & Data Sciences | 120 | | | | | |
| | Postgraduate courses in M.E / M. Tech | | | | | | |
| 08 | M.E. Construction Engineering and Management | 18 | | | | | |
| 09 | M.E. Computer Science and Engineering | 18 | | | | | |
| 10 | M.E. Embedded System Technologies | 18 | | | | | |
| 11 | M.E Energy Engineering | 18 | | | | | |

DEPARTMENT OF HUMANITIES AND SCIENCE

The H&S Department stands out for its commitment to providing a well-rounded academic experience for first-year students. Covering key subjects like Physics, Chemistry, Mathematics, English, and Tamil. The department boasts a high pass percentage in semester exams, a testament to the hard work and dedication of the faculty. This year, the department enhanced offerings with industry and alumni talks, foreign language courses, engaging games, and specialized coaching for AEP and ICS. Additionally, the department introduced an industry-oriented and department-specific syllabus to better prepare students for future challenges and opportunities

DEPARTMENT OF CIVILENGINEERING

The Civil Engineering Department at our college, established in 2002, is a beacon of academic excellence and research innovation. Offering both undergraduate program and postgraduate program in M.E. Construction Engineering and Management, the department is committed to integrating advanced technologies and sustainable practices into its curriculum. The department boasts state-of-the-art laboratories and strong industry collaborations. Graduates of the department have made significant contributions to civil engineering, both nationally and internationally, and continue to shape the future of the discipline through unwavering commitment to excellence.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

The Department of Computer Science and Engineering was established in 2001. It has its mission to inculcate innovative thinking and analytical abilities in addition to imparting quality education in the theory and application of Computer Science and Engineering. The department offers UG and PG programmes with State-of-the-art Computer laboratories equipped with high end hardware and software packages provided with high-speed leased line connectivity. The department takes pride in its academic excellence and outstanding placement records. It has consistently produced 68 university rank holders till 2023 batch and accredited by National Board of Accreditation.

DEPARTMENT OF ELECTRICALAND ELECTRONICS ENGINEERING

The Electrical and Electronics Engineering Department, established in 2003, is expanding its offerings to M.E. program in Embedded System Technologies from the 2024-25 academic year. With a focus on knowledge - based training, the department faculty empowers students with a deep understanding of concepts and industry - ready skills. The department forged partnerships with 22 companies through MOUs, facilitating collaboration and knowledge exchange.

The Electrical Technocrats Association (ETA) is a vibrant platform for technical activities, including the publication and showcasing of newsletters by staff and students every fortnight. Our mission is to drive technological advancements, foster research, and address industry needs.

DEPARTMENT OF MECHANICAL ENGINEERING

Meenakshi Sundararajan Engineering College inaugurated the Department of Mechanical Engineering in the academic year 2011-12. The department has well qualified faculties with excellent teaching, training and industrial experience. It has state-of-the-art laboratories which include VMC, CNC Wire Cut, Spark Erosion, 3D CMM etc catering to academic, consultancy and research requirements. The department's endeavor is to develop its students to be industry ready when they graduate. Students of mechanical engineering department gain industrial exposure and are prepared to face future challenges by carrying out their Final Year Project work in various PSU/Private sectors as per their field of interest relevant to their program. The department has a memorandum of understanding with various Institutions, Industries and Research organizations for collaborative research and development work. There is a huge potential in the department for Consultancy as well as Technology and Product incubation.

DEPARTMENT OF

ELECTRONICS AND COMMUNICATION ENGINEERING

The Department of Electronics and Communication Engineering, established in 2001, has grown significantly increasing its sanctioned intake from 60 to 120 in 2010. With NBA accreditation, the department is committed to delivering quality education, producing graduates who excel technically, socially, and professionally. Its state-of-the-art infrastructure, featuring ICT-enabled classrooms and advanced laboratories with cutting-edge tools like Cortex M4, Spartan 6, IoT kits, MATLAB, Cadence and PSPICE that supports academic excellence.

The Department's industry linkages with renowned organizations including ISRO, DRDO, NLTVC, and Ericson enhance students' technical skills through interactive events.

The Department's achievements include academic excellence, impressive placement records, and students' accomplishments in sports, arts, and culture, with alumni globally represented in top companies like Intel, Yahoo, and Apple.

DEPARTMENT OF INFORMATION TECHNOLOGY

The department of Information Technology was started in the year 2001 with an intake of 60 students focusing on the area. The department has won laurels to to the college. The department constantly strives with the singular aim of producing students with outstanding academic excellence and sterling character to benefit the society, our nation and the world at large. The department's commitment to high academic standards and successful student placements. It has consistently produced 65 university rank holders till 2023 batch and accredited by National Board of accreditation. Campus Agreement has been signed with leading software and hardware giants like Microsoft, IBM, Adobe and HP. The department has received a certificate partnership as a "Center of Excellence" with Virtusa Technology.

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

The Department of Artificial Intelligence & Data Science was established in 2021 with an initial intake of 60 students, which was subsequently increased to 120 in 2024. Our department boasts a team of highly qualified, experienced, and competent faculty members and features spacious infrastructure with modern amenities, including six well-equipped computer laboratories with backup and internet facilities. We emphasize continuous knowledge enrichment through seminars, guest lectures, workshops, and skill enhancement programs for both students and faculty, and engage in meticulous academic planning to ensure a well-structured approach to each semester. Additionally, our student-driven club, serves as an incubation center, nurturing innovative ideas and fostering creativity.

INTERNAL QUALITY ASSURANCE CELL (IQAC)

MSEC established the Internal Quality Assurance Cell (IQAC) in 2016 to develop and implement quality standards and benchmarks in key performance areas. In alignment with the National Education Policy (NEP) 2020 and subsequent reforms, the IQAC has been further strengthened to ensure compliance with the new policy directives.

Through IQAC, the institute strive to:

- Maintain and enhance the quality of education and services
- Align with our institution's vision and mission
- Foster a culture of continuous improvement and excellence
- Ensure accountability and transparency in institutional functioning
- Promote innovative practices in teaching, learning, and research
- Develop and implement effective quality benchmarks and parameters
- Facilitate student-centered learning and feedback mechanisms
- Enhance faculty development and capacity building
- Strengthen industry-academia partnerships and collaborations
- Ensure efficient governance and administrative processes
- Promote a culture of sustainability and social responsibility
- Facilitate accreditation and ranking processes
- Identify and mitigate quality assurance risks

CONTROLLER OF EXAMINATION

The institution, granted autonomous status by UGC and Anna University from the academic year 2024-2025, has established the Controller of Examinations (COE) office to oversee assessment processes with confidentiality, ensuring quality and standards. The COE conducts fair examinations, declares results, and manages examination activities for Internal Assessment Tests (IATs) and Semester End Examinations (SEE). Their yearly schedule includes planning, coordinating, conducting, evaluating, and reviewing exams, as well as issuing certificates and transcripts. The COE ensures smooth conduct, maintains exam integrity, and coordinates with stakeholders, adapting to the institution's specific needs and exam cycle.

MEENAKSHI SUNDARARAJAN RESEARCH CENTRE(MSRC)

The MSEC Research Centre has a steadfast commitment to fostering a strong research culture. It empowers students and faculties in their intellectual exploration and discovery. The center aims to advance knowledge, drive neoteric innovation, and contribute to the broader academic and industrial fraternity ultimately aimed at uplifting humankind.

THE MEENAKSHI SUNDARARAJAN CAREER DEVELOPMENT COMMITTEE (MSCDC)

The Meenakshi Sundararajan Career Development Committee (MSCDC) is a strategic group dedicated to fostering students' professional growth and development. Our mission is to support students in achieving their career goals, fostering a culture of professional growth and development.

The MSCDC plays a vital role in aligning individual career goals through various initiatives, including:

- 1. Career Pathways
- 2. Specialised Expert Talk & Guidnace on Different Career Pathways
- 3. Higher Education Awareness Sessions on various Geographical Locations
- 4. University Fairs
- 5. Training / Coaching Programs for different Competitive Exams
- 6. Repository / Text Books for various Competitive Exams

By providing a career pathway, we help students understand the opportunities available to them and what is required to achieve their career goals. We encourage students as they navigate their professional journey, providing them with the tools, knowledge, and opportunities needed for successful career development.

OFFICE OF STUDENTS AFFAIRS

Our mission is to create a supportive and inclusive educational environment that empowers students to succeed in their academic, personal, and professional lives. We achieve this by:

- Providing individualized support and responding to student needs
- Fostering a culture of academic integrity and excellence
- Promoting personal hygiene, cleanliness, discipline and sprucing
- Encouraging a moral code of conduct and respect for others
- Cultivating a sense of campus decency and decorum
- Modeling exemplary behavior and attitudes

By fulfilling these responsibilities, the institution aims to inspire students to become responsible, successful, and compassionate individuals who make a positive impact in their communities.

COLLEGE COUNSELING SERVICES

College counseling services are essential in supporting students' overall well-being and academic success. These services often encompass various areas, including healthy mind well-being, career guidance, and academic counseling. Here's a breakdown of the typical counseling services available for college students in the institution:

Individual Counseling: One-on-one sessions with RCI registered counselors or psychologists to address personal issues such as stress, anxiety, depression, relationship problems, and any other psychological concerns.

Group Counseling: Support groups where students with similar issues can share experiences and strategies for coping in a safe and supportive environment.

Crisis Intervention: Immediate support for students in distress, trauma response, and any emergency psychological concerns.

TRAINING AND PLACEMENT CELL

Meenakshi Sundararajan Engineering College training and placement cell is committed to providing exceptional placement opportunities for its students. The Placement Cell takes meticulous efforts to ensure that students are recruited by topnotch companies in the industry.

The training pathway is established starting from the first semester with 180 Hours of Placement training which includes Communications Skills, Aptitude Training. Specialised Programming, Guidance on Certifications, Projects, Competitions, Grooming, Etiquette, Group Discussion and Mock Interviews.

The Placement Cell functions under the leadership of Placement Officer, Faculty representatives and Coordinators from each department. The Cell's ultimate aim is to achieve 100% placement. Its Other Functions include

- 1. Implementation of the training pathway at appropriate semesters
- 2. Industry Talks
- 3. Alumni Talks
- 4. Arranging Internships & Projects
- 5. Centers of Excellence with Industry
- 6. Industry Specialised training & guidance

This comprehensive training empowers students to face the campus interviews with confidence through enhancing their employability skills for a successful future.

DEPARTMENT OF PHYSICAL EDUCATION

Our college campus boasts an array of sports facilities, including

- Basketball Court
- Badminton Court
- Pickle Ball Court
- Volleyball
- Cricket/Foot Ball/Athletics Ground
- Tennis Court
- Kho Kho

The institution is much dedicated in nurturing the talent through specific college sports teams:

- Expert coaching and mentorship
- Formation of new sports teams
- Dedicated Sports Hour (1 hour/week)
- Regular Sports Day events that are meticulously planned for maximum student participation.

DEPARTMENT OF SAFETY AND SECURITY

MSEC's Safety Department include the Chief Security Officer (Retd. Lt. Col), Trained & Certified Safety Officers (18) and Chief Safety Officer.

The department ensures a secure and hazard-free environment within the campus through:

- Monitoring all areas of the campus to ensure a secure environment
- Conducting daily reviews and maintaining a register to track and address any safety issues
- Performing maintenance tasks such as securing compound walls, replacing damaged fencing, and ensuring proper drainage
- Educating the community through regular safety awareness programs and training sessions
- Organizing fire drills and evacuation procedures to prepare for emergencies
- Identifying and mitigating potential hazards to prevent accidents
- Developing and implementing comprehensive safety policies to guide the community
- Continuously monitoring CCTV cameras to quickly respond to any security incidents

The department's proactive approach helps to prevent accidents, minimizes risks, and fosters a culture of safety among students, staff, and faculty members.

MEENAKSHI SUNDARARAJAN INNOVATION AND INCUBATION CENTRE (MSIIC)

Meenakshi Sundararajan Innovation and Incubation Centre (MSIIC) is a dynamic and forward-thinking organization dedicated to fostering innovation, entrepreneurship, and skill development etc. Our center serves as a catalyst for a transformative change - providing aspiring entrepreneurs with the resources, mentorship, and support that is needed to turn their ideas into successful ventures. MSIIC is dedicated to promoting entrepreneurship and an innovative mindset among students and entrepreneurs at institutions. Through mentorship MSIIC helps to develop talents and support their initiatives, provide knowledge on market access and funding, and empower individuals to identify opportunities, take risks, and create positive change. The institution solely believes in entrepreneurship as a catalyst for innovation and societal impact, providing resources and a supportive environment for individuals to thrive and make a difference in their communities and beyond. Its activities include

- 1. Managing the 100 Seat Innovation & Incubation Center
- 2. Guidance to both Internal & External Start-ups from Ideation to Funding
- 3. Competitions Identification & Mentoring
- 4. Conducting Competitions :- 30 Hour Hackathons, All India Hackathons etc.
- 5. Managing Student Clubs
- 6. Art & Music Festival
- 7. Skill Development / Value Added Courses
- 8. Societal Beneficial Projects

MSEC STUDENTS CLUBS

MSEC Students Clubs were initiated with the objective to provide a platform for students to discover, showcase and improve their interests, strengths and passion. There are 7 clubs in our college namely, AI Epoch Club, Eco Design Club, Adyant Coding Club, Renewables Club, Nodenova IOT Club, Dev Dynasty Web App Development Club and Product Development Club. Clubs foster vibrant student community in the campus by conducting variety of events and activities which include workshops, seminars, technical and non-technical events, campus benefit projects, long term projects such as SAE Baja etc that cater to diverse interests. Clubs help the students to collaborate with different disciplines and exchange knowledge with peer groups.















CHOICE BASED CREDIT SYSTEM Degree of Master of Engineering

(For the students admitted to M.E. Degree Programmes during the Academic year 2024-2025 & onwards)

- 1. PRELIMINARY DEFINITIONS AND NOMENCLATURE In these Regulations, unless the context otherwise specifies.
- **i. "Programme"** means Degree Programme, that is M.E. Degree Programme.
- **ii.** "**Discipline**" means specialization or branch of M.E. Degree Programme, Construction Engineering and Management ,Computer Science and Engineering etc.
- **"Course"** Means Theory or Practical subject that is normally studied in a semester, like Applied Mathematics, Advanced Thermodynamics, etc.
- iv. "Dean Academics/ Vice Principal" means the authority of the College who is responsible for all the academic activities and for the implementation of relevant rules and regulations.
- v. "Controller of Examinations" means the Authority of the Institution responsible for all activities of the Examinations and hereafter called COE.
- vi. "Head of the Institution" means the Principal of the College.
- vii. "Head of the Department" means head of the Department concerned.
- viii. "College" means MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE, Chennai.
- ix. "University" means ANNA UNIVERSITY Chennai.
- **x.** "Bonafide students" means one who has enrolled for at least one course in the curriculum as per regulation and has paid the tuition fee for the same.
- 2 PROGRAMMES OFFERED, MODES OF STUDY AND ADMISSION REQUIREMENTS
- 2-1 P.G. PROGRAMMES OFFERED
 - 1. M.E. Construction Engineering and Management
 - 2. M.E. Computer Science and Engineering
 - 3. M.E. Energy Engineering
 - 4. M.E. Embedded System Technologies

2.2 MODES OF STUDY

Full-Time Mode:

Students admitted under 'Full-Time' should be available in the College / Institution during the entire duration of working hours (From Morning to Evening on Full Time basis) for the curricular, co-curricular and extracurricular activities assigned to them.

The Full-Time students should not attend any other Full-Time programme(s) / course(s) or take up any Full-Time job / Part-Time job in any Institution or Company during the period of the Full-Time programme. Violation of the above rules will result in cancellation of admission to the P.G. programme. However, taking up of job is permitted with authorised break of study as explained in Clause 19.7.

2.3 ADMISSION REQUIREMENTS

Candidates for admission to the first semester of the Post-Graduate Degree

Programme shall be required to have passed an appropriate Under-Graduate Degree Examination of Anna University or equivalent as specified under qualification for admission as per the Centre for Admissions (CFA) for PG ADMISSIONS criteria. This is applicable for students admitted both under Single Window Counselling process and through the Management Quota.

Note:

- Centre for Admissions (CFA) releases the updated criteria during the admissions every academic year.
- Admission shall be offered only to the candidates who possess the qualification prescribed against each programme.
- Any other relevant qualification which is not prescribed against each programme shall be considered for equivalence by the committee constituted for the purpose. Admission to such degrees shall be offered only after obtaining equivalence to such degrees.

Student should also satisfy other eligibility rules as prescribed by Anna University, Chennai, from time to time.

3 STRUCTURE OF THE PROGRAMMES

3.1 Categorization of Course

Every Post Graduate Degree Programme will have a curriculum with syllabi consisting Theory, Laboratory, Theory with Laboratory component and project work courses that shall be categorized as follows:



- I. Foundation Courses (FC) may include Mathematics or other basic courses
- II. Professional Core (PC) courses include the core courses relevant to the chosen specialization.
- **Professional Elective (PE)** courses include the elective courses relevant to the chosen specialization.
- **Employability Enhancement Courses (EEC)** include Internship, Seminar, Professional Practices, Case Study and Industrial / Placement I Training.
- **V.** Research Methodology and IPR Courses (RMC) to understand the importance and the process of creation of patents through research.
- VI. Open Elective Courses (OEC) are of importance in the context of Special Skill Development and courses offered in other PG programme
- **VII. Audit/Mandatory Courses**: expose the students to the Constitution of India, Disaster Management, Yoga, and English for Research Paper Writing, Value education, Pedagogy Studies, Stress Management, and Personality Development through skills for Life Enlightenment.

3.2 Courses per Semester

Curriculum of a semester shall normally have a blend of Theory courses, Theory with Practical courses and Practical courses including Employability Enhancement Courses. Each course may have credits assigned as per clause 3.3.

3.3 Credit Assignment

Each course is assigned certain number of credits based on Table-1:

Table - 1

| Contact period(s) per week | Credit(s) |
|--|-----------|
| 1 Lecture Period | 1 |
| 1 Tutorial Period | 1 |
| 2 Laboratory Periods | 1 |
| 2 periods of EEC courses like Seminar / Case study etc., | 1 |

3.4 Project Work

- 3.4.1 The Project work is an important component of Post-Graduate programmes. The Project work for M.E. consists of Phase I and Phase II. The Phase I is to be undertaken during III semester and Phase II, which is a continuation of Phase I is to be undertaken during IV semester.
- **3.4.2** The Project Work-II shall be pursued for a minimum of 16 weeks during the final semester.
- **3.4.3** The Project work shall be carried out under the supervision of a "qualified teacher" in the Department concerned. In this context "qualified teacher"

means a faculty member possessing (i) PG degree with a minimum of 3 years of teaching experience or (ii) Ph.D. degree.

3.4.4 A student may, however, undergo Project Work-II in industry/academic institution of repute offering PG programmes in Engineering/Technology (other than affiliated colleges of Anna University) / research institutions for a minimum of 16 weeks during the final semester. In such cases, the students shall undergo the Project Work-II with the approval obtained from the Head of the institution and Dean-Academic Courses preferably one month before the start of the industrial project.

The Project Work-II carried out in industry/academic institution of repute/research institutions need not be a continuation of Project Work-I. In such cases, the Project Work shall be jointly supervised by a supervisor of the department and an expert as a joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Head of the Department and suitable record of the meetings shall be maintained.

- 3.5 The deadline for submission of final Project Report (Project Work-II for M.E. programmes) is 6 calendar days from the last working day of the semester in which project work / thesis / dissertation is done. However, the Project Work-I in the case of M.E. programmes shall be submitted within the last working day of the semester as per the academic calendar published by the College
- 3.6 Industrial Training / Internship (Summer / Winter Vacation)
- 3.6.1 The students may undergo Industrial Training for a period as specified in the curriculum during the summer / winter vacation. In this case, the training has to be undergone continuously for at least two weeks in an organisation. The students may undergo Internship at a Research organization / University/ Industry (after due approval from the Head of the Department) for the period prescribed in the curriculum during the summer / winter vacation, in lieu of Industrial training. Attendance Certificate signed by the competent authority of the industry, as per the format provided by the COE shall be submitted to the Head of the Department. The attendance certificate shall be forwarded to COE, by the Head of the Department for processing results.
- **3.6.2** If Industrial Training/ Internship is not prescribed in the curriculum, the student may undergo Industrial Training/ Internship during Summer/Winter vacation

optionally and the credits earned will be indicated in the Grade Sheet. If the student earns three credits in Industrial Training/ Internship, the student may drop one Professional Elective (only one professional elective can be dropped). In such cases, Industrial Training / Internship need to be undergone continuously from one organization or with a combination one two week and one four week programme, from one/two organizations. However, if the number of credits earned is 1 or 2, these credits shall not be considered for classification of the degree. Students shall get permission from the Head of the Institution for taking industrial training/internship and the Certificate of completion of Industrial Training /Internship shall be forwarded to COE.

Table-2

| DURATION | OF | TRAINING | 1 | CREDIT |
|------------|----|----------|---|--------|
| INTERNSHIP | | | | S |
| 2 Weeks* | | | | 1 |
| 4 Weeks | | | • | 2 |
| 6 Weeks | | | | 3 |

^{*1} Week = 40 Internship Hours

3.7 Instead of two electives (professional elective/open elective) in the curriculum, the student may be permitted to choose a maximum of 2 courses from other PG programmes with the approval of the Head of the Department offering such courses.

3.8 Value Added Courses

- The Students may optionally undergo Value Added Courses apart from the courses mentioned in the curriculum and the credits earned through these optional Value Added Courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree.
- One / Two credit courses shall be offered by the Department with prior approval from the Dean Academics and Head of the Institution.
- The details of the syllabus, time table and faculty may be sent to the Dean-Academics and the Controller of Examinations after approval from the Head of the department concerned before the commencement of the course.
- Students shall be allowed to take these courses offered in other Departments also, but with the permission of the Head of the Department of student and Head of the department offering the course.
- The students can take a maximum of two one credit courses or one
 Two credit course. The credits earned through these optional courses

will not be counted for CGPA calculation but will be indicated in the grade sheet.

3.9 Off campus courses and Transfer of Credits

Students are permitted to optionally enroll and study a maximum of three off campus courses in physical/online/hybrid mode under each PG programme with the approval of Dean Academic & Head of Institution courses as per the Regulations.

The successful completion of these courses through any of the following modes shall be considered in lieu of professional elective / open elective courses of curriculum as approved by the Head of the Institution.

3.9.1 Students may be permitted to optionally enroll and earn credits in online courses (which are conducted and provided with a certificate by any reputed institution or SWAYAM / NPTEL platforms, approved by appropriate authorities of the college) and these credits may be transferred after due approval of the Dean- Academics subject to a maximum of 9 credits.

The credits earned in such online course(s) can be 4 or 3+1 or 2+2 or 3 or 2+1 credits, which can be considered, instead of one elective course subject to maximum of three electives. The duration of the course and corresponding number of credits are listed **in table 3**

Table 3: Duration of the course and Number of credits

| SI. No. | No. of Weeks | No. of Credits. |
|---------|-----------------|--------------------|
| 1. | 4 | 1 |
| 2. | 8 | 2 |
| 3. | 12 | 3 |
| 4. | 16 | 4 |

Table 4: Mapping of Marks scored in NPTEL course and Credits earned

| Letter Grade | Marks |
|--------------|--------|
| 0 | 90-100 |
| A+ | 80-89 |
| Α | 70-79 |
| B+ | 60-69 |
| В | 50-59 |
| С | 40-49 |

3.9.2 Students are permitted to optionally enroll and study the courses in physical /hybrid / online modes offered by reputed Central / State funded Universities / Institutions which are in the top 20 positions in the latest NIRF ranking and also conducting examination towards award of marks and grades. . (NIRF Ranking of any of the last three years with respect to the year in which course is to be registered; NIRF ranking is based on respective stream for professional elective courses and based on any stream for open elective courses). Students are also permitted to enroll and undergo such courses in Online mode at Universities abroad in top 500 in QS ranking in the last three years.

Students are also permitted to study courses of a particular semester in a University / Institution abroad based on MoU. A learning agreement shall be evolved to map all the courses offered in the programme and the courses offered in University abroad as per the procedure outlined by the institute. The credits earned by the students in the University abroad shall be transferred as per the learning agreement.

In the case of 3.9.2, the students can enroll for the courses with the approval of the Head of the Institution only if the course is offered directly by Institution/University and not with the edutech platforms.

The transfer of credits shall be decided by the committee constituted by the Dean- Academics of the college, as per the guidelines of NEP-2020

3.9.3 Students are permitted to optionally study courses offered in physical/online/ hybrid mode by reputed companies practicing Engineering / Technology having MoU with the college. The transfer of credits shall be decided by the committee constituted by the Dean-Academics of the college. The design of the courses with regard to the syllabus content, duration of each course and number of credits offered for each course by the companies shall be discussed and recommended by Department Advisory Board (DAB) and approved by the Dean- Academics, as per the guidelines of NEP-2020.

Students are also permitted to enroll and study the courses in physical/hybrid mode (not less than 50% in physical mode) that are offered by

- (i) National/State funded research institutions/laboratories and
- (ii) (a) reputed companies (manufacturing or software) related to the programme, and
 - (b) reputed companies involved in transfer of knowledge provided the knowledge transferring company is a spinoff from an Engineering/Technology practicing Industry and sharing the work experience of the respective industry.

The companies mentioned in 3.9.3 (ii) (a) and the company with which the knowledge transfer company associated in the case of 3.9.3 (ii) (b) should have average annual turnover of more than 200 crores over a period of 5 years. However, the academic content and delivery shall be in consonance with the University academic standards and norms.

The minimum qualification of the course instructor from the company as mentioned in 3.9.3. (ii) shall be B.E./B.Tech with 10 years of research / industrial experience. Such courses shall be offered through MOU / MOA between Institute and such institutions/organizations/ companies. The design of the courses with regard to the syllabus content, duration of each course and number of credits offered for each course by the companies shall be discussed and recommended by Department Advisory Board (DAB) and approved by the Dean-Academics, as per the guidelines of NEP-2020.

For the offer of each course under 3.9.3, a course coordinator shall be nominated from the Department who shall also attend such course and shall coordinate the question paper setting and answer script evaluation with the course instructor from research institution/ laboratories/ industry/ company for the continuous assessment and end semester examination conducted by the institute. The passing requirements are as per regulations.

3.10 A student is permitted to register a maximum of two courses in total from clause 3.7 and 3.9.

3.11 Audit courses

The student may optionally study audit courses prescribed by the Institute and it will be mentioned in the Grade Sheet. However, it will not be considered for computation of CGPA.

3.12 Medium of Instruction

The medium of instruction and assessment for the courses which can be written test, seminar presentations and project / thesis / dissertation reports will be in English.

4 DURATION AND STRUCTURE OF THE PROGRAMMES

- **4.1** The minimum and maximum period for the completion of the P.G. Programmes are 4 and 8 semesters respectively for M.E.
- 4.2 The Curriculum and Syllabi of all the P.G. Programmes shall be approved by the Academic Council of the institute. The number of credits to be earned for the successful completion of the programme shall be as specified in the

Curriculum of the respective specialization of the P.G. Programme.

4.3 Each semester shall normally consist of 75 working days or 540 periods of each 50 minutes duration, for full-time mode of study The Head of the Institution shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus and that the teacher teaches the full content of the specified syllabus for the course being taught. For the purpose of calculation of attendance requirement for writing the end semester examinations (as per clause 10) by students, following method shall be used. Semester End Examinations conducted by the Institute will be scheduled after the last working day of the semester.

4.4 The minimum prescribed credits required for the award of the degree shall be within the limits. M.E. Programme the Prescribed Credit Range is 70 – 75.

5 COURSE REGISTRATION

- 5.1 Flexibility to add or Drop courses
- **5.1.1** A student has to earn the total number of credits specified in the curriculum of the respective Programme of study in order to be eligible to obtain the degree.
- **5.1.2** From the first to pre- final semesters, the student has the option of registering for dropping existing courses. The total number of such courses cannot exceed 3 for PG programmes.

The student is permitted to drop the course(s) within 30 days of the commencement of the academic schedule.

5.2 The Institution is responsible for registering the courses that each student is proposing to undergo in the ensuing semester. Each student has to register for all courses to be undergone in the curriculum of a particular semester (with the facility to drop courses to a maximum of 6 credits (vide clause 5.1).

The registration details of the student shall be approved by the Head of the department and forwarded to the Controller of Examinations. This registration is for undergoing the course as well as for writing the Semester End Examinations.

The courses that a student registers in a particular semester may include:

- i. Courses of the current semester and
- ii. Courses dropped in the lower semesters.

The maximum number of credits that can be registered in a semester is 36. However, this does not include the number of Re-appearance (RA) and Withdrawal (W) courses registered by the student for the appearance of Examination.

6 EVALUATION OF PROJECT WORK

The evaluation of Project Work for Project Work-I & Project Work-II for M.E. shall be done independently in the respective semesters and marks shall be allotted as per the weightages given in Clause 6.1.

6.1 There shall be three assessments (each 100 marks) during the Semester by a review committee. The student shall make presentation on the progress made before the Committee. The Head of the Institution shall constitute the review committee for each programme. The review committee consists of supervisor, expert from the Department and a project coordinator from the Department.

If the project coordinator/expert member happens to be the Supervisor then an alternate member shall be nominated. In the case of project work II carried out in industry/academic/research institutions, the review committee shall have the supervisor, coordinator from industry / academic / research institutions and the project coordinator from the Department. The total marks obtained in the three assessments shall be reduced to 60 marks and rounded to the nearest integer (as per the Table given below).

There will be a vice-voce Examination during Semester End Examinations conducted by a Committee consisting of the supervisor, one internal examiner and one external examiner. The internal examiner and the external examiner shall be appointed by the Controller of Examination.

The distribution of marks for the internal assessment and End semester examination is given below in table 5.

Table-5

| Continuous assessment (60 Marks) | | | End Seme (4 | ster Exar I0 Marks) | | |
|--|-------|-------|----------------|------------------------|----------|----------|
| Revie | Revie | Revie | Project Report | Viva-V | oce Exar | mination |
| w I w II | | w III | External | Interna | Extern | Supervis |
| | | | LXICITIAI | | al | or |
| 20 | 20 | 20 | 10 | 10 | 10 | 10 |



- 6.2 The Project Report prepared according to approved guidelines as given by the COE and duly signed by the supervisor(s) and the Head of the Department concerned shall be submitted to the Head of the Institution.
- 6.3 If the student fails to obtain 50% of the internal assessment marks in the Project Work-I and Project Work-II / final project, he/she will not be permitted to submit the project report and has to register for the same in the subsequent semester.

If a student fails to submit the project report on or before the specified deadline as mentioned in clause 3.5, he/she is deemed to have failed in the Project Work and shall register for the same in a subsequent semester. This applies to both for Project Work–I and Project Work–II in the case of M.E. Project Work.

If a student fails in the end semester examinations of Project Work–I, he/she has to resubmit the Project Report within 30 days from the date of declaration of the results. If he / she fails in the Semester End Examination of Project Work–II of Project work of M.E., he/she shall resubmit the Project Report within 60 days from the date of declaration of the results. The resubmission of a project report and subsequent viva-voce examination will be considered as reappearance with payment of exam fee. For this purpose the same Internal and External examiners shall evaluate the resubmitted report.

If a student has submitted the project report but did not appear for the viva-voce examination, it will be considered as fail and he/she will be permitted to resubmit the report within 30/60 days from the declaration of results and permitted for reappearance in viva-voce examination, for Project Work-I and II respectively.

- **6.3.1** A copy of the approved Project Report after the successful completion of viva-voce Examinations shall be kept in the library of the college.
- **6.3.2** Practical / Industrial Training, Summer Project if specified in the Curriculum shall not exceed the maximum duration of 4 weeks and should be organized by the Head of the Department for every student.
- 6.3.3 At the end of Practical / Industrial Training, Summer Project, the student shall submit an Attendance certificate from the organization where he/she has undergone training and also a brief report. The evaluation for 100 marks will be carried out internally based on this report and a viva-voce Examination will be conducted by a Departmental Committee constituted by the Head of the Institution. The attendance certificate submitted by the students shall be

attached to the mark list sent by the Head of the Institution to the Controller of Examination.

7 FACULTY MENTOR AND CLASS ADVISOR

7.1 FACULTY MENTOR

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department of the students will attach a certain number of students to a teacher of the Department who shall function as faculty mentor for those students throughout their period of study. The faculty mentor shall advise the students in registering and reappearance registering of courses, authorize the process, monitor their attendance and progress and counsel them periodically. If necessary, the faculty mentor may also discuss with or inform the parents about the progress / performance of the students concerned.

The responsibilities for the faculty Mentor shall be:

- To inform the students about the various facilities and activities available to enhance the students' curricular and co-curricular activities.
- To guide students on enrolment and registration of the courses.
- To authorize the final registration of the courses at the beginning of each semester.
- To monitor the academic and general performance of the students including attendance and to counsel them accordingly.

7.2 CLASS ADVISOR

There shall be a class advisor for each class. The class advisor will be one among the course-instructors of the class. He / She will be appointed by the Head of the Department concerned. The class advisor is the ex-officio member and the Convener of the class committee. The responsibilities for the class advisor shall be:

- To act as the channel of communication between the HoD and the students of the respective class.
- To inform the interpretation of Regulations to the students and their rights and duties.
- To inform the students about the various facilities and curricular and cocurricular activities.
- To guide student's enrolment and registration of the courses.
- To authorize the final registration of the courses at the beginning of each semester.
- To monitor the academic and general performance of the students including attendance and to counsel them accordingly.



- To collect and maintain details of academic including feedback, training, scholarship, placement and co-curricular and extra-curricular activities of the students.
- To collect and maintain various statistical details of students.
- To attend to the students' welfare activities like awards, medals, scholarships and industrial visits.

8 CLASS COMMITTEE & COURSE COMMITTEES

- **8.1** A Class Committee consists of teachers of the concerned class, student representatives and a chairperson who is not teaching the class with the overall goal of improving the teaching-learning process. The functions of the class committee include:
 - Solving problems experienced by students in the class room and in the laboratories.
 - Clarifying the regulations of the programme and the details of rules therein.
 - Informing the student representatives, the "academic schedule" including the dates of assessments and the syllabus coverage for each assessment period.
 - Informing the student representatives, the details of regulations regarding
 the weightage used for each assessment. In the case of practical courses
 (laboratory / project work / seminar etc.) the breakup of marks for each
 experiment/ exercise/ module of work, should be clearly discussed in the
 class committee meeting and informed to the students.
 - Analysing the performance of the students of the class after each test and finding the ways and means of improving the performance of the students.
 - Identifying the slow learners, if any, in any specific subject and requesting the teachers concerned to provide some additional help or guidance or coaching to such students as frequently as possible.
- 8.2 The class committee for a class under a particular programme is normally constituted by the Head of the Department. However, if the students of different programmes are mixed in a class, the class committee is to be constituted by the Head of the Institution.
- **8.3** The class committee shall be constituted within the first week of each semester
- **8.4** At least 2 student representatives (usually 1 boy and 1girl) shall be included in the class committee.
- 8.5 The chairperson of the class committee shall invite the Class advisor(s) and



the Head of the Department to the meeting of the class committee.

- **8.6** The Head of the Institution may participate in any class committee of the institution.
- 8.7 The Chairperson of be Class Committee is required to prepare the minutes of every meeting submit the same to the Head of the Institution within two days of the meeting and arrange to circulate among the concerned students and teachers. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the management by the Head of the Institution.
- 8.8 The first meeting of the class committee shall be held within one week from the date of commencement of the semester in order to inform the students about the nature and weightage of assessments within the framework of the Regulations. Two or three subsequent meetings may be held at suitable intervals. During these meetings the student members, representing the entire class, shall meaningfully interact and express the opinions and suggestions of the class students to improve the effectiveness of the teaching-learning process.

9 COURSE COMMITTEE FOR COMMON COURSES

Each common course offered to more than one group of students shall have a "Course Committee" comprising all the teachers teaching the common course with one of them nominated as Course Coordinator. The nomination of the Course Coordinator shall be made by the Head of the Department / Head of the Institution depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The 'Course Committee' shall meet as often as possible and ensure uniform evaluation of the tests and arrive at a common scheme of evaluation for the tests. Wherever it is feasible, the course committee may also prepare a common question paper for the Assessment Test(s).

10 ATTENDANCE REQUIREMENTS FOR COMPLETION OF THE SEMESTER

10.1 A Student who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester.

Ideally every student is expected to attend all classes of all the courses and secure 100% attendance. However, in order to give provision for certain unavoidable reasons such as Medical / participation in sports, the student is expected to attend a **minimum of 75%** of the classes for every course of the semester.

Therefore, he/she shall secure not less than 75% attendance (after rounding

off to the nearest integer) in every course that he/she has registered as calculated as per clause 7.4.

- However, a student who secures an attendance for any course(s) between 65% and 74% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) / participation in sports events, may be permitted to appear for the current semester examinations subject to the condition that the student shall submit the medical certificate / sports participation certificate approved by the Dean-Academics periodically. This concession can be availed only for one semester during the entire course of the study.
- 10.3 Students who secure less than 65% attendance in any course and students who do not satisfy the clause 7.1 and 7.2 shall not be permitted to write the Semester End Examination of that course. They are required to redo the course in the subsequent semester when the course is offered next, as per the norms prescribed.

11 PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT TESTS

For all theory, laboratory courses, theory courses with laboratory component and project work the continuous assessment shall be awarded as per the procedure given below:

11.1 ASSESSMENT FOR THEORY COURSES

Two assessments each carrying 100 marks shall be conducted during the semester by the Department / College concerned. The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded to the nearest integer (This also implies equal weightage to the two assessments).

Table-6

| Assessment I (100 | Marks) | Assessment II (100 | Marks) | Total |
|-------------------------------------|-----------------------|--------------------|------------|----------|
| Individual | Written | Individual | Written | Internal |
| Assignment /Case | Assignment /Case | | Assessment | |
| Study / Seminar / Study / Seminar / | | Study / Seminar / | | |
| Mini Project/ any | | Mini Project / any | | |
| other experiential | ential other | | | |
| Learning | Learning experiential | | | |
| | | Learning | | |
| 40 | 60 | 40 | 60 | 200 |

^{*}The weighted average shall be converted into 40 marks for internal Assessment.

A minimum of two internal assessments will be conducted as a part of continuous assessment. Each internal assessment is to be conducted for 100 marks and will have to be distributed in two parts viz., Individual Assignment/Case study/Seminar/Mini project / any other experiential learning and Test with each having a weightage of 40% and 60% respectively. The tests shall be in written mode. The total internal assessment marks of 200 shall be converted into a maximum of 40 marks and rounded to the nearest integer.

11.2 ASSESSMENT FOR LABORATORY COURSES

The maximum marks for Internal Assessment shall be 60 in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records are to be maintained. There shall be at least one test. The criteria for arriving at the Internal Assessment marks of 60 are as follows: 75% marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25% marks for the test. The total mark shall be converted for a maximum of 60 marks and rounded off to the nearest integer.

Table-7

| Internal Assessment (100 Marks)* | | | | |
|---|----|--|--|--|
| Evaluation of Laboratory Observation, Record Test | | | | |
| 75 | 25 | | | |

11.3 ASSESSMENT FOR THEORY COURSES WITH LABORATORY COMPONENT / LABORATORY COURSES WITH THEORY COMPONENT

Weightage of internal assessment and End Semester Examination marks will be 50% each. The distribution of the marks for the theory and laboratory components in the internal assessments and Semester End Examination for the courses with different credit distributions are given below.

Table-8

| L | Т | P | С | Continuous Assessment I | Continuous Assessment II | End Semester Examination (50%) |
|---|---|---|---|-------------------------------|--------------------------------|-----------------------------------|
| 1 | 0 | 4 | 3 | Lab (25%) | Theory (25%) | Lab only (50%) |
| 1 | 0 | 2 | 2 | Lab (25%) | Theory (25%) | Lab only (50%) |
| 2 | 0 | 2 | 3 | Theory (25%) | Lab (25%) | Theory (25%) Lab (25%) |
| 3 | 0 | 2 | 4 | Theory (25%) | Lab (25%) | Theory (35%) Lab (15%) |
| 2 | 0 | 4 | 4 | Theory (25%) | Lab (25%) | Theory (15%) Lab (35%) |

The procedure for the conduct of internal assessments for theory and laboratory components shall be as per the clause 11.1 and 11.2 respectively.

*The weighted average shall be converted into 50 marks for internal Assessment.

11.4 OTHER EMPLOYABILITY ENHANCEMENT COURSES

- (a) The Seminar / Case study / Mini project course is to be considered as purely INTERNAL (with 100% internal marks only). Every student is expected to present a minimum of 2 seminars per semester before the evaluation committee and for each seminar marks can be equally apportioned. A three member committee appointed by Head of the Institution consisting of course coordinator and two experts from the department will evaluate the seminar and at the end of the semester the marks can be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper (40%), presentation (40%) and response to the questions asked during presentation (20%).
- (b) The Industrial / Practical Training shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical training / Internship / Summer Project, the candidate shall submit an attendance certificate from the organization where he / she has undergone training and a brief report. The evaluation will be made based on this report and a viva-voce Examination, conducted internally by a three member Departmental Committee constituted by the Head of the Institution consisting of course coordinator and two experts from the Department. The certificates submitted by the candidate shall be attached to the mark list sent by the Head of the Department
- **(c)** For all the courses under Employability Enhancement Courses Category, except the Project Work, the evaluation shall be done as described in Annexure.

11.5 Assessment for Value Added Courses

The value added course shall carry 100 marks and shall be evaluated through continuous assessments only. Two Assessments shall be conducted during the semester by the Department concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer. A committee consisting of the Head of the Department, staff handling the course and a senior faculty member nominated by the Head of the Institution shall do the evaluation process. The list of students along with the marks and the grades earned shall be The value added course shall carry 100 marks and shall be evaluated through continuous assessments only. Two Assessments shall be conducted during the semester by the Department

concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer. A committee consisting of the Head of the Department, staff handling the course and a senior faculty member nominated by the Head of the Institution shall do the evaluation process. The list of students along with the marks and the grades earned shall be forwarded to the Controller of Examinations for appropriate action at least one month before the commencement of Semester End Examinations. The grades earned by the students for Value Added Courses will be recorded in the Grade Sheet, however the same shall not be considered for the computation of CGPA.

- **11.6** Internal marks approved by the Head of the Institution shall be displayed by the respective HODs within 12 days from the last day of assessment exam.
- ASSESSMENT RECORD' which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topics covered), separately for each course. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of test marks and attendance. The Head of the department will put his/her signature and date after due verification. At the end of the semester, the record should be verified by the Head of the institution who will keep this document in safe custody (for five years).

11.8 Conduct of Academic Audit by every Institution

Our institution shall strive for a better performance of the students by conducting the internal assessments as mentioned in Clause 11.

In order to ensure the above, Academic Audit is to be done for every course taught during the semester. For the internal assessments conducted for each course as per details provided in Clause 11, the academic records shall be maintained in the form of documentation for the individual assignments / case study report / report of mini project submitted by each student and assessment test question paper and answer script. Report of industrial training / internship shall also be maintained, if applicable. For laboratory courses students' record shall be maintained. Further, the attendance of all students shall be maintained as a record.

The Head of the Institution shall arrange to conduct the Academic Audit for every course in a semester by forming the respective committees with an external course expert as one of the members drawn from a Technical institution of repute near the institute.

12 REQUIREMENTS FOR APPEARING FOR SEMESTER END EXAMINATION

- 12.1 A student shall normally be permitted to appear for the Semester End examinations of the current semester if he/she has satisfied the semester completion requirements as per clause10.1 & 10.2 and has registered for examination in all courses of the current semester.
- 12.2 Further, examination registration by a student is mandatory for all the courses in the current semester and all arrear(s) course(s) for the Semester End Examinations failing which, the student will not be permitted to move to the higher semester.
- 12.3 A student who has passed all the courses prescribed in the curriculum for the award of the degree shall not be permitted to re-enroll to improve his/her marks in a course or the aggregate marks / CGPA.

13 SEMESTER END EXAMINATIONS

13.1 There shall be an End-Semester Examination of 3 hours duration in each lecture based course.

The examinations shall ordinarily be conducted between October and December during the odd semesters and between April and June in the even semesters. For the practical examinations (including project work), both internal and external examiners shall be appointed by the COE of the institute.

13.2 WEIGHTAGE

The following will be the weightage for different courses:

Table-9

| i) | Lecture or Lecture cum Tutorial based course: | |
|------|--|-------------|
| | Internal Assessment | 40% |
| | Semester End Examination | 60% |
| ii) | Laboratory based courses | |
| | Internal Assessment | 60% |
| | Semester End Examination | 40% |
| iii) | Project work | |
| | Internal Assessment | 60% |
| | Evaluation of Project Report by external examiner | 10% |
| | Viva-Voce Examination | 30% |
| iv) | Industrial training/Internship/ Practical training | / Summer |
| | project / Seminar (All Employability Enhancement | ent Courses |
| | except Project Work) | |
| | Internal Assessment | 100% |



14 PASSING REQUIREMENTS

- 14.1 A student who secures not less than 50% of total marks prescribed for the course [Internal Assessment + Semester End Examinations] with a minimum of 45% of the marks prescribed for the Semester End Examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for both theory and laboratory courses (including project work).
- 14.2 If a student fails to secure a pass in a theory course (except electives)/ laboratory courses, the student shall register and appear only for the end semester examination in the subsequent semester. In such case, the internal assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain pass marks (IA + Semester End Examination) as per clause 14.1, then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the end semester examinations alone.
- 14.3 If the course, in which the student has failed, is a professional elective or an open elective, the student may be permitted to complete the same course. In such case, the internal assessment marks obtained by the candidate in the first appearance shall be retained and considered valid for all subsequent attempts till the candidate secures a pass.

However, from the third attempt onwards if a candidate fails to obtain pass marks (IA + End Semester Examination) as per clause 14.1, then the candidate shall be declared to have passed the examination if he/she secure a minimum of 50% marks prescribed for the end semester examinations alone.

If any other professional elective or open elective course is opted by the student, the previous registration is cancelled and henceforth it is to be considered as a new professional elective or open elective course. The student has to register and attend the classes, earn the continuous assessment marks, fulfil the attendance requirements as per Clause 10 and appear for the semester end examination.

14.4 If a student is absent during the viva voce examination, it would be considered as fail. If a student fails to secure a pass in project work even after availing clause (6.3), the **student shall register** for the course again.

- 14.5 The passing requirement for the courses which are assessed only through purely internal assessment (EEC courses except project work), is 50% of the internal assessment marks only.
- 14.6 A student can apply for revaluation of his/her semester examination answer paper in a theory course as per the guidelines of COE, on payment of a prescribed fee along with prescribed application to the COE through the Head of the Institution. The COE will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Institution.

Revaluation is not permitted for laboratory course and EEC courses.

15. AWARD OF LETTER GRADES

15.1 The award of letter grades will be decided using relative grading principle except

Laboratory Courses and Project Work. The performance of a student will be reported using letter grades, each carrying certain points as detailed below:

Table 10

| 14510 10 | | | | | |
|-----------------------------|---------------|--|--|--|--|
| Letter Grade | Grade Points* | | | | |
| O (Outstanding) | 10 | | | | |
| A + (Excellent) | 9 | | | | |
| A (Very Good) | 8 | | | | |
| B + (Good) | 7 | | | | |
| B (Average) | 6 | | | | |
| C (Satisfactory) | 5 | | | | |
| U (Re-appearance) | 0 | | | | |
| SA (Shortage of Attendance) | 0 | | | | |
| WD (Withdrawal) | 0 | | | | |

A student is deemed to have passed and acquired the corresponding credits in a particular course if he/she obtains any one of the following grades: "O", "A+", "A", "B+", "B", "C".

"SA" denotes shortage of attendance and hence prevented from writing the semester end examinations. "SA" will appear only in the result sheet.

"U" denotes that the student has failed to pass in that course. "WD" denotes withdrawal from the exam for the particular course. The grades U and W will figure both in the Grade Sheet as well as in the Result Sheet. In both cases, the student has to appear for the Semester End Examinations.

If the grade U is given to Theory Courses/ Laboratory Courses it is not required to satisfy the attendance requirements (vide clause 10), but has to appear for the end semester examination and fulfil the norms specified in clause 14 to earn a pass in the respective courses. If the grade U is given to Project work, the course has to be registered again and attendance requirement (vide clause 10) should be satisfied.

If the grade U is given to EEC (Employability Enhancement Course) (except Project Work), which are evaluated only through internal assessment, the student shall register for the course again in the subsequent semester, fulfill the passing requirements to earn pass in the course. However, attendance requirement need not be satisfied.

15.1.1 Relative Grading

For those students who have passed the course (theory course / laboratory integrated courses / theory integrated courses / all other EEC except laboratory course / Project Work Courses), the relative grading shall be done. The marks of those students who have passed only shall be inputted in the software developed for relative grading. The evolved relative grading method normalizes the results data using the BOX-COX transformation method and computes the grade range for each course separately and awards the grade to each student. (theory course / laboratory integrated courses / theory integrated courses and all other EEC Courses). If the students' strength is greater than 30, the relative grading method shall be adopted.

15.1.2 Absolute Grading

In all the courses, for those students who have passed the course, if their strength is less than or equal to 30 then absolute grading shall be followed with the grade range as specified in the Table.

For the Project Work / Internship and Laboratory Courses, absolute grading procedure shall be followed as given in the Table below irrespective of the number of students who have passed the course.

Table-11 Grade range for absolute grading

| 0 | A+ | Α | B+ | В | С | U |
|----------|---------|---------|---------|---------|---------|------|
| 91 - 100 | 81 - 90 | 71 - 80 | 61 - 70 | 56 - 60 | 50 – 55 | < 50 |

15.2 The grades O, A+, A, B+, B, C obtained for the one/two credit courses (not part of curriculum) under the title 'Value Added Courses' and 'internship/industrial training' (if not part of curriculum) shall figure in the Grade Sheet. For these courses if the grades obtained are RA, SA, it will not figure in the Grade Sheet.

15.3 For the students who complete the Audit Course satisfying attendance requirement, the title of the Audit Course will be mentioned in the Grade Sheet. If the attendance requirement is not satisfied, it will not be shown in the Grade Sheet.

15.4 GRADE SHEET

After results are declared, Grade Sheets will be issued to each student which will contain the following details:

- The Name of the college and affiliating university.
- The list of courses enrolled during the semester and the grades scored.
- The Grade Point Average (GPA) for the semester
- The Cumulative Grade Point Average (CGPA) of all courses enrolled from first semester onwards.

GPA for a semester is the ratio of the sum of the products of the number of credits for courses acquired and the corresponding points to the sum of the number of credits for the courses assigned in the semester.

CGPA will be calculated in a similar manner, considering all the courses registered from first semester. RA grades will be excluded for calculating GPA and CGPA.

$$\sum_{i=1}^{n} CiGPi$$

$$GPA/CGPA = ----$$

$$\sum_{i=1}^{n} Ci$$

Where

- Ci is the Credits assigned to the course
- GPi is the grade point corresponding to the letter grade obtained in that course
- n is number of Courses successfully cleared during the particular semester in the case of GPA and during all the semesters in the case of CGPA.

15.4.1 Grade Sheet

In the consolidated grade sheet the CGPA earned shall be converted into percentage of marks as follows:

Percentage of Marks = CGPA × 10.

16 ELIGIBILITY FOR THE AWARD OF DEGREE



- **16.1** A student shall be declared to be eligible for the award of the PG Degree (M.E.) provided the student has
 - Successfully completed the course requirements, appeared for the Semester End Examinations and passed all the subjects prescribed in all the 4 semesters within a maximum period of 4 years reckoned from the commencement of the first semester to which the student was admitted.
 - Successfully passed all the prescribed audit courses.
 - Successfully passed any additional courses prescribed by Syllabus, whenever readmitted under subsequent new regulations (vide clause 16.3)
 - No disciplinary action pending against the student.
 - The award of Degree must have been approved by the authorized body of the University.

17 CLASSIFICATION OF THE DEGREE AWARDED

17.1 First Class with Distinction

A student who satisfies the following conditions shall be declared to have passed the examination in First class with Distinction:

- Should have passed the examination in all the courses of all the four semesters in the student's First Appearance within two years(without any break of study) or **three years**, which includes authorized break of study (if availed), of one year. Withdrawal from examination (vide Clause 18) will not be considered as an appearance.
- Should have secured a CGPA of not less than 8.50.
- Should NOT have been prevented from writing end Semester examination due to lack of attendance in any of the courses.

17.2 First Class

A student who satisfies the following conditions shall be declared to have passed the examination in First class:

- Should have passed the examination in all the courses of all four semesters within **three years**, which includes one year of authorized break of study (if availed) of one year or prevention from writing the End Semester Examination due to lack of attendance (if applicable).
- Should have secured a CGPA of not less than 6.50.

17.3 Second Class

All other students (not covered in clauses 17.1 and 17.2) who qualify for the award of the degree (vide Clause 16.1) shall be declared to have passed the examination in **Second Class**.



17.4 A student who is absent in Semester End Examination in a course / project work after having registered for the same shall be considered to have appeared in that examination (except approved withdrawal from end semester examinations as per clause 18) for the purpose of classification.

17.5 Photocopy / Revaluation

A student can apply for photocopy of his/her semester examination answer paper in a theory course, as per the guidelines of COE on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of Institutions. The answer script is to be valued and justified by a faculty member, who handled the subject and recommend for revaluation with breakup of marks for each question. Based on the recommendation, the student can register for the revaluation through proper application to the Controller of Examinations. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Institutions.

Revaluation is not permitted for practical courses and for EEC courses.

A student can apply for revaluation of answer scripts for not exceeding 5 subjects at a time.

17.6 Review

Students not satisfied with Revaluation can apply for Review of his/ her examination answer paper in a theory course, within the prescribed date on payment of a prescribed fee through proper application to Controller of Examinations through the Head of the Institution. Students applying for Revaluation only are eligible to apply for Review.

18 PROVISION FOR WITHDRAWAL FROM EXAMINATION

- 18.1 A student may, for valid reasons, (medically unfit / unexpected family situations / participants in sports approved by Director, Physical Education and Head of the Institution) be granted permission to withdraw from appearing for the semester end examination in any course or courses in ANY ONE of the semester examinations during the entire duration of the degree programme. The application shall be sent to Dean-Academics through HOD with required documents.
- 18.2 Withdrawal application is valid if the student is otherwise eligible to write the examination (Clause 10) and if it is made within TEN days after the date of the examination(s) in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations. For a

student to withdraw from a course / courses, he/she should have registered for the course, fulfilled the attendance requirements (vide clause 10) and earned continuous assessment marks.

- **18.2.1** Notwithstanding the requirement of mandatory TEN working days' notice, applications for withdrawal for special cases under extraordinary conditions will be considered based on the merit of the case.
- 18.3 In case of withdrawal from a course / courses, it will figure both in Marks Sheet as well as in Result Sheet. However, withdrawal shall not be considered as an appearance for the eligibility of a student for First Class with Distinction.
- 18.4 If a student withdraws from writing semester end examinations for a course or courses, he/she shall register for the same in the subsequent semester and write the semester end examination(s).
- 18.5 If a student applies for withdrawal from Project work, he/she will be permitted for the withdrawal only after the submission of project report before the deadline. However, the student may appear for the viva voce examination within 30/60 days after the declaration of results for Project Work I and II respectively and the same is not considered as reappearance.
- **18.6** Withdrawal is permitted for the semester end examinations in the final semester, as per clause 17.1.

19 AUTHORIZED BREAK OF STUDY FROM A PROGRAMME

- **19.1** A student is permitted to avail authorised break of study for a maximum period of one year in a single spell.
- 19.2 Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. However, in extraordinary situation the student may apply for additional break of study not exceeding another one year. If a student intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to rejoin the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Head of department, Dean-academics and Head of the institute in advance, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Institution stating the reasons therefore and the probable date of rejoining the programme.



- 19.3 The students permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new regulations shall register for additional courses, if any, as notified by Institution under change of regulations. These courses may be from any of the semesters of the curriculum in force, so as to bridge the curriculum in force and the old curriculum. In such cases, the total number of credits to be earned by the student may be more than or equal to the total number of credits prescribed in the curriculum in force.
- 19.4 The authorized break of study of maximum of one year is included in the duration specified for passing all the courses for the purpose of classification (vide Clause 17.1).
- 19.5 The total period for completion of the Programme reckoned from, the commencement of the first semester to which the student was admitted shall not exceed the maximum period specified in clause 4.1 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.

If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study' (Clause 19.1).

- 19.6 If a student in Full Time mode wants to take up job / start-up / entrepreneurship during the period of study he/she shall apply for authorised break of study for one year. The student shall undertake the job / start-up / entrepreneurship only after getting approval of the same by Head of the Institution with due proof to that effect.
- 19.7 If a student in Full Time mode wants to take up job / start-up / entrepreneurship during the period of study he/she shall apply for authorised break of study for one year. The student shall undertake the job / start-up / entrepreneurship only after getting approval of the same by Head of the Department, Dean-Academics and Head of the Institution with due proof to that effect.

No fee is applicable to students during the Break of Study period.

20 DISCIPLINE

20.1 Every student is required to observe disciplined and decorous behaviour both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the College. The Head of Institution shall

constitute a disciplinary committee consisting of Head of Institution, Two Heads of Departments of which one should be from the faculty of the student, to enquire into acts of indiscipline and initiate necessary action.

20.2 If a student indulges in malpractice in any of the semester end examination / internal examination he / she shall be liable for punitive action as prescribed by the college from time to time.

21 RANK OF A STUDENT

A Candidate who qualifies for the Degree by passing the examination in all courses of the entire Programme in first attempt within a period of Two consecutive academic years can be given his/her position in the class as rank. The Rank is determined through CGPA of semester end examination from I Semester to IV Semester. Students transferred from other institutions to Meenakshi Sundararajan Engineering College are not eligible for rank and students with history of arrears during the entire programme are not eligible for rank. The candidate who secures first position in the examination based on CGPA in corresponding programme will be given a rank certificate.

22 REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The College may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and scheme of examinations through the Academic Council.

23 SPECIAL CASES

In the event of any clarification in the interpretation of the above rules and regulations, they shall be referred to the Standing Committee. The Standing Committee will offer suitable interpretations/ clarifications/amendments required for the special case on such references and get them ratified in the next meeting of the Academic Council. The decision of the Academic Council will be final.