



**VINAYAKA MISSION'S  
RESEARCH FOUNDATION**  
(Deemed to be University under section 3 of the UGC Act 1956)

# **VINAYAKA MISSION'S RESEARCH FOUNDATION**

**(Deemed to be University under Section 3 of UGC Act, 1956),  
SALEM, INDIA.**

# **REGULATIONS 2021**

**CHOICE BASED CREDIT SYSTEM (CBCS)**

**(FOR THE STUDENTS ADMITTED FROM 2021-22  
ONWARDS)**

**MASTER OF ENGINEERING / TECHNOLOGY (M.E./M.Tech.)  
Degree Programme –Part Time  
Under  
FACULTY OF ENGINEERING AND TECHNOLOGY**

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PROGRAMME – PART TIME**

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FACULTY OF ENGINEERING AND TECHNOLOGY  
REGULATIONS 2021**

**(FOR THE STUDENTS ADMITTED FROM 2021-22 ONWARDS)**

In exercise of the powers conferred by the Revised Memorandum of Association rules of the Vinayaka Mission's Research Foundation, Deemed to be University Salem, the Board of Management of the University hereby issues the following Regulations pertaining to the Postgraduate Programme and award of the degree of Master of Engineering/Master of Technology (M.E. /M.Tech.) at this University.

## **1. TITLE AND COMMENCEMENT**

These revised regulations shall be called "REGULATIONS FOR MASTER OF ENGINEERING / MASTER OF TECHNOLOGY (M.E./M.Tech) – PART TIME DEGREE PROGRAMME – (R2021). These Revised Regulations come into force with effect from the Academic Year 2021-2022 and are subject to modifications which may be approved by the apex bodies of the University from time to time.

## **2. PREAMBLE**

The Degree of MASTER of Engineering / MASTER of Technology (M.E./M.Tech) in Faculty of Engineering and Technology shall be awarded to a Candidate who, as per these Regulations, has successfully undergone the Programme, passed the prescribed Examinations and thereby qualified to receive the Degree.

### **General Considerations and Teaching Approach**

The tremendous growth of Science and Technology has made inroads in every sphere of Human activity. It has created Opportunities, Challenges and opened new Horizon in the pursuit of Knowledge, Career and accomplishments. Aspirants are crossing oceans in the pursuit of Knowledge and for successful Career. The Globalization and subsequent opening of our Economy have provided

ample opportunities in the quest of Knowledge to the Students of our Nation. Hence a need has arisen to provide flexible, need based, versatile and learner oriented Education / Knowledge to our Students and make them competitive. If the present rigid academic system and the Institution methodologies are continued to be imposed, the Learners may not have the choice of courses of their liking and hence will not meet the requirements to strengthen their Knowledge in specific areas needed for their Career. In view of the above a move has to be initiated from Institution Centric to Learner Oriented Education System.

The Choice Based Credit System (CBCS) provides ample opportunity for multiple entries, large number of Electives, Flexible pace for earning Credits, carryover of such Credits, and Choice of Courses from other Branches. Further it has the ability to accommodate diverse choices that the Students may like to have. In view of the above advantages the CBCS has been implemented from the academic year 2012-2013 onwards.

As part of continuous improvement in providing Quality Education, we have taken the right step in this direction by introducing the Flexible Credit System into our Academic Curriculum. Through this, the Students can register for Courses of their choice altering at will, the pace of learning within the broad framework of an Academic Course and credit requirements, as time progresses.

Students also have the option of choosing from a ‘Basket of Courses’ within each classification. Ample options are given to choose Interdisciplinary Courses from other Programs which will help the Student develop additional Skills. Slow Learners will also benefit since important Courses are offered in both Semesters in any given academic year. This arrangement helps the Students to re-register the course and clear the backlog in subsequent Semesters. Suitable provisions are included to reward academically sound Students, allowing them to carry out Research activities.

### **3. DEFINITIONS AND NOMENCLATURE**

In the Regulations, unless the context otherwise requires, certain terms used in the form of abbreviation and their meanings are as under.

3.1	AC	Academic Council, the highest academic body of the University, headed by the Vice Chancellor.
3.2	AB	Absent
3.3	AICTE	All India Council for Technical Education, New Delhi.
3.4	M.E / M.Tech.	Master of Engineering/Master of Technology

3.5	BoM	Board of the Management- the highest governing body of the University.
3.6	BoS	Board of Studies of the University under the Faculty of Engineering and Technology.
3.7	Specialization	Discipline of M.E/M.Tech. Degree Programme, such as Embedded Systems Technology, Construction Engineering & Management, Power Systems Engineering , Manufacturing Engineering etc.
3.8	CBCS	Choice Based Credit System
3.9	CO	Course Outcomes
3.10	CoE	Controller of Examinations of the University.
3.11	Course	Subject of study offered by various departments.
3.12	Credit	Course work measured in units, based on hours conducted/week and content of course. 01 Hour Lecture/Tutorial and 02 Hour Practical per Week is equivalent to 01 Credit.
3.13	Curriculum and Syllabus	Courses studied in each Programme that provides appropriate knowledge in the chosen branch. The Curriculum and Syllabus for study is as prescribed by the Board of Studies (BoS) with the approval of the concerned Academic Council (AC) based on the UGC / AICTE Regulations.
3.14	Dean	Dean for the Faculty of Engineering and Technology of the University.
3.15	EA	External Assessment
3.16	HoD	Head of the Department of the Institution.
3.17	HoI	Head of the Institution or Principal of the Constituent Engineering College of the University.
3.18	Institution	Constituent Engineering College of the University.
3.19	IA	Internal Assessment
3.20	MoE	Ministry of Education.
3.21	MOOCs	Massive Open Online Courses
3.22	NCC	National Cadet Corps
3.23	NPTEL	National Programme on Technology Enhanced Learning
3.24	NSS	National Service Scheme
3.25	OBE	Outcome Based Education
3.26	PO	Programme Outcomes

3.27	Programme	Under Graduate Programme leading to the award of Degree B.E./B.Tech. approved by UGC, AICTE and University.
3.28	PSO	Programme Specific Outcomes
3.29	RRC	Red Ribbon Club of the Institution.
3.30	RA	Reappear
3.31	SWAYAM	Study Webs of Active Learning for Young Aspiring Minds is a Programme of the MHRD, Government of India.
3.32	Teacher	Professors, Associate Professors, Assistant Professors, Pro-term Lecturers and other persons engaged in teaching of the Students and assisting the Students in the conduct of studies and Research in the College/University.
3.33	UGC	University Grants Commission.
3.34	VMRF	Vinayaka Mission's Research Foundation, Deemed to be University, Salem, Tamil Nadu, India.
3.35	VC	Vice - Chancellor of the University.
3.36	YRC	Youth Red Cross of the Institution.

#### **4. REGISTRATION**

A Candidate admitted in the Post Graduate Programme in the constituent Engineering Colleges of the University shall register with the University by remitting the prescribed Fees along with the application form for registration dully filled in and forwarded to the Controller of Examinations of this University through the Head of the Institutions within the stipulated date. The name of the Candidate must be registered in the University within Three months from the date of admission. If the candidate fails to satisfy the requirements, the admission of the Candidate stands cancelled.

#### **5. ELIGIBILITY**

The Eligible entry qualifications approved by the University are listed in Annexure -I.

#### **6. PROGRAMMES OFFERED BY THE UNIVERSITY**

A Candidate may be offered one of the Branches of study from those approved by the University and as specified in Annexure I.

#### **7. MODES OF STUDY: Part Time Mode**

In this mode of study, the students are required to attend classes conducted in the evenings and complete the course in three years. Violation of the above rules will result in cancellation of admission to the PG Programme.

## **8. ADMISSION**

Candidates who have been awarded or qualified for the award of the Bachelor's degree in Engineering / Technology, from an Institution approved by AICTE are eligible for admission to the M.E. /M.Tech. Programme. Eligibility of Candidates will be decided from time to time by following the Guidelines issued by All India Council for Technical Education (AICTE). Sponsored candidates from Industries, R&D organizations, National Laboratories as well as Educational Institutions, with a Bachelor's Degree in Engineering are eligible for admission to the M.E. /M. Tech. Programme. The number of Candidates to be admitted to each M.E. / M.Tech. Stream will be based on approval received from the AICTE. Admission will be complete only on meeting all the other requirements mentioned in the letter of admission and on payment of the fees. Candidates who have the Associate Membership of Professional Bodies that are approved by the University and have qualified in GATE shall also be eligible for admission to the M.E/M.Tech. Programme. Non Resident / Foreign Nationals can be admitted up to 15% of total seats as per norms and guidelines of the University.

## **9. DURATION OF THE PROGRAMME**

The normal duration of the M.E. /M. Tech. Programme, including the Project Work, shall be Six Semesters.

## **10. EXTENSION OF MAXIMUM DURATION**

The Candidates who fail to complete the Year-wise Programme as mentioned in Clause 9 would be permitted to complete the Programme within a period of 6 Years (12 Semesters) for Part Time Candidates .Those who fail to complete within the extended period shall be discharged from the Course.

## **11. COMMENCEMENT OF THE COURSE**

The Academic year for the Programme shall commence in the month of September every year.

## **12. WORKING DAYS IN AN ACADEMIC YEAR**

Each Semester normally consists of **75 Working Days or 250 Hours** inclusive of End Semester Theory & Practical Examinations and **60** Teaching Days.

## **13. BREAK OF STUDY**

Break of Study may be permitted for genuine reasons like serious Health problems and calamitous family situations. The Vice Chancellor is vested with the power to permit the break for which the Candidate must apply in the prescribed form enclosing necessary supporting documents and Fees

through his/her HoI, sufficiently ahead of the proposed period of break. A Break of Study may cast for a period of 6 to 12 Months. If a Student does not have a minimum of 75 % attendance in at least 2 or more courses in the previous Semester he will not be allowed to enroll for current Semester and has to undergo a year of break in studies.

The period of Break of Study of the candidate for rejoining the course shall be calculated from the date of commencement of the discontinuance of the course. A maximum of *One Year (two spells having Six Months duration each)* of break of study for PG degree courses will be allowed for the entire duration of the Course. Any further break of study shall entail the Candidate to be de-registered and his/her admission will stand cancelled. A Candidate having a break of more than 12 Months for PG Degree course, the course of study shall be extended by that period and the Candidate is permitted to appear for the Examination only after completing this Extension period. The Candidate shall apply to the University through his/her HoI for the extension using the prescribed form and fees. The duration specified for passing all the courses for the purpose of awarding Degree as per Clause 9 and 10 shall be increased by the period of such break of study permitted. If a Student is detained for want of requisite attendance, progress and good conduct, the period spent in that semester shall not be considered as permitted Break of Study.

#### **14. REJOINING / DISCONTINUING AFTER THE BREAK**

For PG degree courses the Candidate having availed a break of study between 6 and 12 Months shall apply for rejoining the course by remitting the stipulated fee for condonation of Break of Study to the through the Principal of the concerned College for issue of necessary permission to rejoin the course. The concerned Principal of the College shall not permit any candidate with a Break of Study as stipulated above to rejoin the course without obtaining the prior permission from the authorities of the University. Any Break of Study beyond Three Years for Part Time candidates is considered as discontinuation of Study. This is applicable for all the years of study of the Post Graduate Degree courses. However, in exceptional cases, if a Candidate having a break of study beyond Three Years for Part Time Candidates and the break of study is in Six Months one spell, the Board of Management, may, on the recommendation of the Vice Chancellor, permit the Candidate to rejoin the Course from the beginning of the Year. The Candidate shall be permitted to rejoin at the beginning of the First year of the course (i.e.) the candidate has to Re-Do the Course from the beginning and shall after fulfillment of the Regulations this University to the Course concerned be admitted to the Examinations. The Candidate shall not be exempted in the Subjects already passed.

## **15. READMISSION AFTER EXTENSION**

If the Candidates name is not registered with the University within Three Months from the cutoff date prescribed for the respective courses for Admission without any valid reasons / ground for such non-registration, permission for re-admission for such Candidates will not be issued by the University.

## **16. PROGRAM STRUCTURE**

### **Curriculum**

The Curriculum and the Syllabus for the Course pertaining to the M.E. / M.Tech. Programme shall be prescribed by the Academic Council based on the recommendation of concern Board of Faculty and Board of Studies.

The M.E./M.Tech. Programme in all streams of Specialization will be structured on a Credit based system following the Semester pattern with continuous evaluation. Every stream of Specialization in the M.E. /M.Tech. Programme will have a Curriculum and Syllabi for the courses. The Curriculum should be so drawn up that the number of Credits for successful completion of the M.E/M.Tech. Programme in any stream of specialization is 75. All Subjects/Courses are to be registered by the Student in a Semester to earn Credits which shall be assigned to each Subject/Course in an L: T: P: C (Lecture Periods: Tutorial Periods: Practical Periods: Credits) structure based on the following general pattern:

### **Definition of Credit:**

1 Hour Lecture (L) per week	1 Credit
1 Hour Tutorial (T) per week	1 Credit
2 Hours Practical (Lab) per week	1 Credit

Other Student activities like Study Tour, Guest Lecture, Conference/Workshop participations, Technical Paper Presentations, and identified Mandatory courses, if any, will not carry Credits.

## **STRUCTURE OF POSTGRADUATE ENGINEERING PROGRAM – PART TIME STUDENTS**

<b>Sl. No.</b>	<b>Category of Courses</b>	<b>Types of Courses</b>	<b>Suggested Breakup of Credits</b>
<b>1.</b>	<b>A. Foundation Courses (FC)</b>		<b>5</b>
		Mathematics / Applied Mathematics	3
		Research Methodology and IPR	2
<b>2</b>	<b>B. Program Core Courses (PCC)</b>		<b>32</b>
<b>3</b>	<b>C. Elective Courses (EC)</b>		<b>18</b>
		Professional Electives	15
		Open Electives (Courses on Emerging Areas)	3
<b>4</b>	<b>D. Employability Enhancement Courses and courses for presentation of Technical skills related to the specialization</b>		<b>20</b>
		Project Work Phase I	06
		Project Work Phase II	12
		Technical Seminar	1
		Research Presentation Skills	1
<b>5</b>	<b>E. Mandatory Courses/Audit Courses</b>		
	Any two courses on: 1. English for Research Paper Writing 2. Disaster Mitigation and Management 3. Value Education 4. Constitution of India 5. Pedagogy Studies 6. Personality Development Through Life Enlighten Skills		Zero Credit
<b>Minimum Credits to be earned</b>			<b>75</b>

### **Components of Curriculum**

#### **16.1 Category A - Foundation Courses (FC)**

The Courses in this category belong to Mathematics / Applied Mathematics, Research Methodology & IPR. The Credits earned in this category will be used for overall CGPA calculation.

#### **16.2 Category B – Program Core Courses**

The Courses related to the Programme are called Core Courses and the same has to be selected by the Students in every Semester in consultation and guidance of their Mentor / Faculty Advisor. A Student may opt for Core courses offered through MOOCs (Massive Open Online Courses),

SWAYAM, NPTEL etc. and the credits earned after successful completion of the courses will be recommended by HoI for transfer of credits and endorsement in marks statement. The credits earned in this category will be used for overall CGPA calculation.

### **16.3 Category C - Elective Courses (EC)**

#### **16.3.1 Program Elective Courses relevant to chosen specialization**

Program Electives are Courses which are not offered under Professional Core Courses. These Courses may not have any Prerequisites and can be chosen as and when required by the Students. A Student may opt for Program Elective courses offered through MOOCs (Massive Open Online Courses), SWAYAM, NPTEL etc. and the Credits earned after successful completion of the Courses will be recommended by HoI for transfer of credits and endorsement in Marks statement. The Credits earned in this category will be used for overall CGPA calculation.

#### **16.3.2 Open Electives**

##### **Courses on Emerging Areas (Multi-Disciplinary)**

The Courses offered in this Category include courses on Emerging areas which are Multi-disciplinary in nature like 3D Printing, Artificial Intelligence, Internet of Things etc. University may offer Multi-disciplinary Open Elective Courses which will be offered to all Students of the University irrespective of the Discipline he/she belongs. e.g. Students from Faculty of Engineering and Technology can take courses offered by the Faculty of Medicines, Faculty of Allied Health Sciences, Faculty of Pharmacy etc. and vice-versa.

These Courses do not have any Prerequisite condition and can be chosen as and when desired by the Students. A Student may opt for Open Elective courses offered through MOOCs (Massive Open Online Courses), SWAYAM, NPTEL etc. and the Credits earned after successful completion of the Courses will be recommended by HoI for Credit transfer and endorsement in Marks Statement. The Credits earned in this category will be used for overall CGPA calculation.

### **16.4 Category D – Employability Enhancement Courses and Technical Seminar related to the Specialization**

#### **16.4.1 Project Work**

The Student must represent his earned knowledge in the Engineering Programme by doing a quality Project in his/her last Semester of the Programme of study. The Project work for M.E./M.Tech. Consists of Phase-I and Phase-II. The Phase - I is to be undertaken during V Semester and Phase-II, which is a continuation of Phase-I is to be undertaken during VI Semester. This Project Work should be done under the regular guidance of Faculty Supervisor. In case of an Industry Sponsored Project,

a Co-Supervisor from the Industry will also be involved and there should be a regular interaction between the Student and Supervisor and the Proceedings should be recorded periodically. Once in a month the Student must report to the Faculty Supervisor with attendance report from Co-Supervisor and present progress and latest status of his/her project with the help of a Power Point presentation in presence of HoD. The Progress and Presentations in the Semesters will be used for Internal Evaluation and giving Internal Assessment Marks and End Semester Examination will be used for External Assessment Marks. The Credits earned in this category will be used for overall CGPA calculation.

#### **16.4.2 Technical Seminar**

In order to develop Technical expertise in the emerging trends the Student may be encouraged to present seminars on recent trends in their concerned specialization and present in front of a Committee constituted by HoD for evaluation and assessment. Record of seminars presented by the students with the presentations should be maintained by the Faculty In-charge. In a Semester, Minimum 03 Presentations have to be organized and Internal Assessment Marks will be awarded on the basis of performance in Best 02 (Two) of the 03 (Three) Presentations and External Assessment Marks will be awarded on the basis of performance in Final 4th presentation to be done during End Semester Practical Examinations. The Credits earned in this category will be used for overall CGPA calculation.

#### **16.4.3 Research Presentation Skills**

In order to develop Research Aptitude, the Student may be encouraged to read and understand Research Papers published in Indexed Journals, Patents etc. and present in front of a Committee constituted by HoD for evaluation and assessment. In a Semester, Minimum 03 Presentations on research have to be organized and Internal Assessment Marks will be awarded on the basis of performance in Best 02 (Two) of the 03 (Three) Presentations and External Assessment Marks will be awarded on the basis of performance in the Final 4th presentation to be done during End Semester Practical Examinations. Besides this it is mandatory for the student to present Technical Papers in one National or International Conference. Record of presentations and certificate should be maintained by the Faculty In-charge. The Credits earned in this category will be used for overall CGPA calculation.

## **16.5 Category E – Mandatory / Audit Credit Courses**

The courses under this category do not have any credit and will not be included for CGPA calculations. Courses like English for Research Paper Writing; Disaster Mitigation and Management ;Value Education ;Constitution of India; Pedagogy Studies; Personality Development Through Life Enlighten Skills,etc.,are included under this. The student should complete a minimum of two courses under this category.

## **17. Medium of Instruction**

The Medium of instruction for Lectures, Examinations and Project work is English, except for Language courses other than English.

## **18. COURSE REGISTRATION IN A SEMESTER**

### **18.1 REGISTRATION OF COURSES**

**18.1.1** The Students will register courses to be studied in a Semester (Even / Odd) in their Department in First Week of commencement of Semester or whenever it is asked for. The selection of Courses should satisfy the minimum Credit requirement for each category of Courses. This may also be discussed during First Class Committee meeting in presence of Mentor and allotted Mentee. Faculty Advisor of the Class may also assist in planning and selection of the courses for registration in the Semester.

**18.1.2** In a Semester, a Student can register new courses for *minimum 09 Credits* and *maximum 15 Credits* as well as Online classes (in case of Blended mode of learning) except in Final Semester. Registration of courses will not include courses registered in NPTEL/ SWAYAM.

The criteria for registration of courses for minimum 09 Credits will not be applicable for those students who are having less than 09 Credits to be earned for awarding of Degree. In such cases, the Students will be allowed to register for the remaining courses for less than 09 Credits. The limit of Maximum 15 Credits will not include courses of Reappearance i.e. Courses could not be completed successfully in previous Semesters. The Students can register any number of courses for Reappearance.

**18.1.3** The Students are at liberty to drop the course of Reappearance and can choose a new Course. The Student has to attend the Classes of the new Course and has to satisfy the requirement of Internal as well as External assessment.

## **19. ASSESSMENT**

### **19.1 Learning Assessment Procedure**

All Assessments are designed based on Revised Bloom's Taxonomy levels of Thinking and Learning. The Learning of a Student is assessed and evaluated twice in an academic year at the end of Odd /Even semester respectively, and shall have learning assessments from the following perspectives with respect to all courses:

- (a) Evaluation with respect to Knowledge.
- (b) Evaluation with respect to Understanding.
- (c) Evaluation with respect to Skill.
- (d) Evaluation with respect to Applications
- (e) Higher Order Thinking Skills Registration for end-semester final examination for all courses enrolled in that Semester is mandatory.

The Student's learning in each Course, in general, is Assessed (Formative) and Evaluated (Summative) based on In-Semester Continuous Learning Assessment (Internal Assessment) and End-Semester Final Examination.

### **19.2 Internal Assessment (IA)**

60% Weightage of the total marks will be used for Internal Assessment of the Students by the Faculty in Charge / Course handler in theory as well as Practical Courses. An In-Semester Continuous Learning Assessment (also known as Internal Assessment Test) is spread through the duration of Course and is done by the Faculty Member facilitating the Course. The Internal Assessment Marks will be calculated based on the following guidelines.

<b>S. No.</b>	<b>Description</b>	<b>Marks</b>
01	Internal Assessment Test - 01 &02 and Model Exam (10 Marks each)	30
02	Seminar/Technical Quiz	20
03	Assignment/Project	10
<b>Total Marks</b>		<b>60</b>

### **19.3 External Assessment (EA)**

40% Weightage of the total marks will be used for External assessment of the Students and it will be mandatory for the Student to appear in the Exam. The Examination may be conducted Online/Offline depending on the prevailing situation.

## **19.4 Eligibility for End Semester Examinations**

The Student maintaining minimum 75% attendance percentage in each Course will only be eligible for appearing in Internal as well as External Assessment Tests/Examinations. In exceptional Emergency cases, HoI may permit the Students with attendance percentage 65% and above but below 75% to appear in the Tests/Examinations with Condonation fee as decided by the Fee Fixation Committee of the University.

## **20. EXAMINATION**

### **20.1 Commencement of Examinations**

The University Examinations will be conducted twice in an academic year. The CoE would notify the dates of examinations to the Candidates. The Examination shall be commences in the month of November/December and April/May in every academic year.

### **20.2 Requirements for Admission to Examinations**

#### **20.2.1 Attendance Requirements**

No Candidate shall be permitted to appear for the Examination unless he/she put in 75% attendance in individual course(s) including Laboratory course(s) inclusive of attendance in Non-Lecture Teaching i.e. Seminars, Group discussions, and Tutorials. If a Candidate fails to satisfy the attendance requirements they are required to repeat that incomplete course(s) in the next academic year whenever offered or complete the course(s) in the summer term if offered.

**Note:** All Students are expected to attend all classes and secure 100% attendance. The above provision is made to allow for unavoidable reasons such as Medical leave/ permitted participation in sports and Co-curricular activities.

Before commencement of Examination of the Semester the Head of the Institutions of the Constituent Colleges has to furnish the consolidated attendance particulars of the Candidates for all Subjects enrolled by him/her, specifying the number of days of attendance in each Month for a period of One Semester to this University, in the prescribed format. The days of Suspension of a Student on disciplinary grounds will be considered as days of absence for calculating the percentage of attendance, for individual Courses.

#### **20.2.2 Condonation of Lack of Attendance**

Condonation of shortage of attendance up to a maximum of 10% may be permitted by the Head of the Institution in deserving cases. A Candidate lacking attendance shall submit an application in the prescribed form and remit the stipulated fee 15 days prior to the commencement of the Examination.

### **20.2.3 Other Requirements for Admission to the Examinations**

Registration for all Eligible Courses in the current Semester and Arrear Examination where ever applicable M.E./M.Tech. Examination as specified in the Curriculum of the Regulations. The University shall ensure that the Students of the Colleges, who do not fulfill the Regulation for Engineering/Technology (Minimum Standards of Education), are not sent for the University Examination. Each Theory paper shall be of Three Hours duration.

## **21. PASSING REQUIREMENTS – THEORY AND PRACTICAL COURSES**

A Candidate securing not less than 50% of Total marks (IA + EA) prescribed for the Course in both Theory and Practical courses will be declared to have passed the Examination. A minimum a 40% need to be scored in both IA and EA for Passing.

For Lab Embedded Theory Courses Student should compulsorily appear for both Theory and Practical Examination and secure a total of 50% to pass the Examination. If a Student fails to meet the minimum passing requirement he/she need to reappear for the course (Theory and Practice).

## **22. ELIGIBILITY FOR AWARD OF DEGREE**

A Student shall be declared to be eligible for the award of the M.E / M.Tech. Degree if she has

- a) Registered and successfully completed the courses and has earned the minimum Credit requirements for the respective Engineering Programme.
- b) Successfully acquired the required learning Credits as specified in the Curriculum corresponding to the Branch of his/her Study within the stipulated time duration.
- c) No disciplinary action is pending against him/her.

## **23. CLASSIFICATION OF PERFORMANCE**

Classification of Performance of Students in the Examinations pertaining to the Courses in a Programme is done on the basis of numerical value of Cumulative Grade Point Average (CGPA). The concept of CGPA is based on Marks, Credits, Grade and Grade points assigned.

### **23.1 Mapping of Marks to Grades**

Each Course (Theory/Practical) is to be assigned 100 Marks, irrespective of the number of Credits, and the mapping of marks to Grades may be done as given in the following table.

Assigned Grade	Grade Points(GP)	Range of Marks
O++	10	95-100
O+	9.5	90-94
O	9	85-89
A++	8.5	80-84
A+	8	70-79
A	7	60-69
B+	6	55-59
B	5.5	51-54
C	5	40-50
U	ABSENT (Failure due to nonappearance in Examination)	
	REAPPEAR (Failure due to insufficient marks in the course)	

### 23.2 Semester Grade Point Average (SGPA)

Each student is assigned a Semester Grade Point Average (SGPA) on completion and declaration of result of a Semester.

$$SGPA = \frac{\sum(C_i * G_i)}{\sum C_i}$$

where  $C_i$  is the credit for a Course in that semester and  $G_i$  is the Grade Point earned by the Student for that Course. The SGPA is rounded off to two decimal numbers and calculated on all courses appeared including Courses in which 'RA' grade is obtained.

### 23.3 Cumulative Grade Point Average(CGPA)

The overall performance of a Student at any stage of the Degree Programme is evaluated by the Cumulative Grade Point Average (CGPA) up to that point of time and is calculated on the Courses which are successfully completed.

$$CGPA = \sum_j \left\{ \frac{\sum_i (C_{ij} * G_{ij})}{\sum_i C_{ij}} \right\}$$

## **24. CLASSIFICATION OF SUCCESSFUL CANDIDATES FOR AWARD OF DEGREE**

### **24.1 First Class with Distinction**

**24.1.1** A Student who qualifies for the award of Degree and passed the Examination in all registered Courses in his / her first appearance within Three Years and securing a CGPA of not less than 8.00 shall be declared to have passed in First Class with Distinction.

**24.1.2** A Student who qualifies for the award of Degree and passed the Examination in all registered Courses in his / her first appearance within Four Years including the authorized Break of Study of One Year and securing a CGPA of not less than 8.00 shall be declared to have passed in First Class with Distinction.

### **24.2 First Class**

**24.2.1** A Student who qualifies for the award of Degree and passed the Examination in all registered Courses within Three Years and securing a CGPA of not less than 6.5 shall be declared to have passed in First class.

**24.2.2** A Student who qualifies for the award of Degree and passed the Examination in all registered Courses within Four Years including the authorized Break of Study of One Year and securing a CGPA of not less than 6.5 shall be declared to have passed in First Class.

### **24.3 Second Class**

All other Students not covered above and who qualifies for the award of ME / M.Tech. Degree and passed the Examination in all the registered Courses shall be declared to have passed in Second Class

## **25. RANKING**

Students obtaining top 3 Positions in CGPA ranking in a Programme at the University level will be considered as a Rank Holder. They should have passed all the prescribed Courses in the First appearance and should have obtained a CGPA of 8.0 and above. The Student should also have a clean record of discipline during the period of study and without break of studies. Special Certificates will be given to Rank Holders.

## **26. MODIFICATIONS OF REGULATIONS**

These Regulations are subject to modifications from time to time as per the decisions of the apex bodies of the University.

## ANNEXURE - I

### **ELIGIBLE ENTRY QUALIFICATIONS FOR ADMISSION TO P.G PROGRAMMES OFFERED IN UNIVERSITY (VMKVEC & AVIT)**

<b>S. No.</b>	<b>PG Programme Offered</b>	<b>Eligible Qualification</b>
1.	M.Tech. in Bio-Technology	B.E. / B.Tech. in Chemical Engineering/ Leather Engineering / Genetic Engineering / Bio-Chemical Engineering / Industrial Bio-Technology / Petroleum Engg. / Tech. / Bio-Technology / Petrochemicals Engineering / Agricultural Bio-Technology / Petroleum Refining& Petro Chemicals / Chemical and Electrochemical Engineering
2.	M.E. in Construction Engineering and Management	B.E. / B.Tech in Civil Engineering
3.	M.E.in Computer Science and Engineering	B.E. / B.Tech. in Electrical and Electronics Engineering / Electronics and Communication Engineering / Electronics Engineering /Electronics and Telecommunication Engineering/Information Technology / Computer Science and Engineering / Instrumentation and Control Engineering / Electronics and Instrumentation Engineering/Instrumentation Engineering / Computer Hardware &Software Engineering / Computer Science and Software Engineering  M.Sc. (5 years integrated) in Information Technology / Computer Science / Software Engineering  B.Sc. (3 years) in IT related major courses & M.Sc. (2 years) in IT related major courses in Information Technology / Computer Science M.C.A(10+2+3+3) years Pattern
4.	M.E. in Manufacturing Engineering	B.E. / B.Tech. in Production Engineering / Automobile Engineering / Mechanical Engineering/ Industrial Engineering / Metallurgy Engineering / Manufacturing Engineering / Mechatronics Engineering/ Material Science Engineering
5.	M.E. in Power Systems Engineering	B.E. / B.Tech. in Electrical and Electronics Engineering
6.	M.E.in Embedded Systems and Technologies	B.E. / B.Tech. in Electrical and Electronics Engineering/Electronics and Communication Engineering / Computer Science and Engineering /

		Instrumentation and Control Engineering / Electronics and Instrumentation Engineering / Information Technology / Electronics Engineering / Instrumentation Engineering
7.	M.E.in VLSI Design	B.E. / B.Tech. in Electrical and Electronics Engineering/Electronics and Communication Engineering / Computer Science and Engineering / Instrumentation and Control Engineering / Electronics and Instrumentation Engineering / Information Technology / Electronics Engineering / Instrumentation Engineering