



## VINAYAKA MISSION'S RESEARCH FOUNDATION

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

# **REGULATIONS 2024**

**CHOICE BASED CREDIT SYSTEM (CBCS)** 

(FOR THE STUDENTS ADMITTED FROM 2024-25 ONWARDS)

BACHELOR OF ENGINEERING (B.E.)
Regular Degree Programme for Working Professionals

Under FACULTY OF ENGINEERING AND TECHNOLOGY

#### VINAYAKA MISSION'S RESEARCH FOUNDATION

# (Deemed to be University under Section 3 of UGC Act, 1956) SALEM, INDIA BACHELOR OF ENGINEERING (B.E.)

### **Regular Degree Programme for Working Professionals**

#### **UNDER**

### FACULTY OF ENGINEERING AND TECHNOLOGY REGULATIONS 2024

#### (FOR THE STUDENTS ADMITTED FROM 2024-25 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 Regular Undergraduate Programme and the award of the Degree of Bachelor of Engineering (B.E) for the working professionals.

#### 1. TITLE AND COMMENCEMENT

These regulations shall be called "Bachelor of Engineering (B.E.) – Regular Degree Programme for the Working Professionals – Regulations 2024". These Regulations come into force with effect from Academic year 2024-25 and modifications if any may be approved by the Apex bodies of the University from time to time.

#### 2. PREAMBLE

The Degree of Bachelor of Engineering (B.E.) 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.

#### 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	B.E.	Bachelor of Engineering
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 B.E. Degree Programme, such as Mechanical Engineering, Civil Engineering, Electronics and Communication 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. approved by UGC, AICTE and the 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	ToC	Transfer of Credit
3.33	UG	Under Graduate
3.34	UGC	University Grants Commission
3.35	VMRF	Vinayaka Mission's Research Foundation, Deemed to be University, Salem, Tamil Nadu, India
3.36	VC	Vice - Chancellor of the University
3.37	YRC	Youth Red Cross of the Institution

#### 4. DURATION OF THE PROGRAMME

#### 4.1. B.E – REGULAR DEGREE PROGRAMME FOR WORKING PROFESSIONALS

The duration for the Bachelor of Engineering (B.E.) REGULAR DEGREE PROGRAMME for working professionals is for a period of 3 years (6 semesters) and not more than 6 years (12 semesters).

**4.2** The Total duration for completion of the Programme starts from the commencement of the First Semester to which the student was admitted and shall not exceed the maximum duration specified. In compliance with the UGC norms, no Student will be allowed to complete B.E. in less than 6 Semesters. The above-mentioned time duration is counted excluding the Semesters withdrawn on medical grounds etc.

4.3 The academic year is divided into Two Semesters; Odd Semester normally starts from July to December and the Even Semester from January to June.

#### 5. MEDIUM OF INSTRUCTION

The Medium of instruction for all academic activities is English, except for Language courses other than English.

#### 6. FEE STRUCTURE

The Fee Structure for the Programmes shall be fixed by the Committee constituted for this purpose by the VMRF from time to time.

#### 7. ADMISSION ELIGIBILITY

#### **7.1 B.E. – Working Professionals** - All Programmes – 03 Years Duration

The Candidate seeking Admission to the First Semester of B.E. Regular Degree Programme for Working Professionals should have passed Diploma as per the AICTE Guidelines.

**7.2** The Candidates seeking admission to the First Semester of B.E. Regular Degree Programme for Working Professionals should have a Minimum of **1 Year Full Time Work Experience** in a Registered Firm/Company/Industry/Educational or Government or Autonomous Organization.

#### 8. PROGRAMMES OFFERED

The Regular Degree programme for working professionals offered by the VMRF in Faculty of Engineering and Technology are as mentioned below and are subjected to addition or removal of the Programmes depending on the decision taken by BoS and further approval of VC.

<u>PROGRAMMES OF STUDY –</u> B.E. REGULAR DEGREE PROGRAMME FOR WORKING PROFESSIONALS

Sl. No.	UG Degree	Programme
1	B.E.	Computer Science and Engineering
2	B.E.	Civil Engineering
3	B.E.	Electronics and Communication Engineering
4	B.E.	Electrical and Electronics Engineering
5	B.E.	Mechanical Engineering

#### 9. MODE AND TIMINGS FOR CONDUCT OF CLASSES:

As per the AICTE guidelines for working professionals with effect from Academic year 2024-25 as per Annexure - I.

#### 10. SELECTION OF STUDENTS

Guidelines issued from time to time for selection of Students for admission in Constituent Colleges of the VMRF are followed for admitting eligible Students in various UG Programmes. Applications received are checked for completeness and a Merit list based on the Marks obtained in Qualifying Examination is prepared. The students are admitted as per the Merit List.

#### 11. REGISTRATION

A Candidate admitted in the UG Programme in the Constituent Engineering Colleges of the University shall register with VMRF by remitting the prescribed Fees along with the Application form for registration duly filled in and forwarded to the University through the Head of the Institution within the stipulated date.

#### 12. COMMENCEMENT OF THE COURSE

The Academic Year for the courses shall commence in the month of July every year except First Year. The First-Year classes shall commence in the month of August or as decided by the regulatory bodies and the University.

#### 13. WORKING DAYS IN A SEMESTER

Each semester normally consists of 90 Working Days inclusive of End Semester Theory & Practical Examinations and 75 Teaching Days.

#### 14. BREAK OF STUDY

14.1 Two Semesters or One Year break of Study may be allowed in the entire duration of the course for genuine reasons beyond the control of the Student like Natural calamity, serious Health problems etc. At a time only One Semester break will be admissible. If a student is declared not eligible for appearing in Examination for lack of minimum attendance percentage or due to any misconduct, the period spent in that Semester will not be considered as Break of Study. 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.

#### **14.2 During the Break of Study,** a student:

- a. Cannot attend any regular classes.
- b. Will not be permitted to stay in the Hostel.
- c. Will not be permitted to participate in any of the Institution's activities inside the Campus.
- d. Can reappear for the 'End Semester Final Examination' for such courses in which he/she might have obtained 'RA' / 'AB' Grade.

#### 15. DISCONTINUATION / READMISSION

A Student who undergoes a break in studies in the current Semester (Odd/Even) can get readmitted only in the subsequent corresponding (Odd/Even) Semester in the next academic year only. The Vice – Chancellor is vested with the power to permit the break or discontinuation and re-joining the course for which the candidate must apply in the prescribed form duly recommended by HoD and HoI with mapping of the Courses already passed before discontinuation and to be passed in the forthcoming

Semesters along with necessary supporting documents.

#### 16. PROGRAMME STRUCTURE

The structure of curriculum related to each Programme complying CBCS and OBE framework shall be submitted to the Academic Council for approval based on the recommendation of BOS for different programmes.

Each Programme shall have a Curriculum in accordance with OBE framework comprising of Theory, Theory cum Practical and Practical courses and Syllabus designed as per Blooms' Taxonomy Level for the achievement of POs as stated in Annexure II and PSOs.

#### **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

**16.1** Range of Credits – Respective BoS will decide for a Credit of 120 for a student to be eligible to get awarded with B.E Regular Degree Programme for Working Professionals.

## STRUCTURE OF UNDERGRADUATE ENGINEERING PROGRAMME FOR WORKING PROFESSIONALS

Sl. No.	Category of Courses	<b>Types of Cours</b>	ses	Suggested Breakup of Credits
1.	<b>A.</b> Foundation	Humanities and including Mana	Social Sciences gement courses	3 – 6
2.	Courses		nd Engineering courses	3 – 9
3.	<b>B.</b> Professional	Core courses		48-54
		Professional Ele	ectives	12
	C. Elective Courses	Industry Designed / Industry Supported / Industry Offered / Industry Sponsored Courses		6
			Innovation, Entrepreneurship, Skill Development etc.	6-9
4.		Open Electives	Emerging Areas like 3D Printing, Artificial Intelligence, Internet of Things etc.	6-9
			Lean Six Sigma	
		Special Elective	Project Management and Team Work	3
			Design Thinking	

	D.	Mini Project	3
	Courses for Presentation	Project work	8
5.	of technical Skills related to the specialization	Seminar	1
6.	**E. Mandatory Courses	Indian Constitution, Essence of Indian Traditional Knowledge, Employability Enhancement; Yoga and Practice / NCC / NSS / RRC / YRC / Rotaract club, Sports and Games, Student Clubs, Unnat Bharat Abhiyan and Swachh Bharat.	Zero Credit Course (Minimum 2 courses to be completed)
		120	

#### 17. Components of Curriculum

#### 17.1 Category A - Foundation Courses (FC)

The Courses in this Category belong to Humanities and Social Sciences including Management courses, Basic Science courses, Gender sensitization related courses and Design courses and Engineering Science courses including Workshop, Engineering Drawing, Basics of Electrical/ Mechanical/ Computer etc., Universal Human Values (UHV) is a course covered on the basis of recommendation of AICTE which is a 3 Credit course and should be offered to the Students as decided by the respective Boards. The Credits earned in this category will be used for overall CGPA calculation.

#### 17.2 Category B – Professional Core Courses (PCC)

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 also 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.

#### 17.3 Category C - Elective Courses (EC)

#### 17.3.1 Professional Elective courses relevant to chosen specialization

Programme specific professional 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 also opt for programme specific professional elective courses offered through MOOC, 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.

#### 17.3.2 Industry Designed / Industry Supported / Industry Offered / Industry Sponsored courses

Courses which are designed / supported / offered / sponsored by the industries and are included in curriculum through Board of Studies are coming under this category. Generally, these courses are meant to equip the students with necessary theoretical as well as practical skills related to the requirements of industries for placement on completion of degree programme.

#### 17.3.3 Open Electives

#### 17.3.3.1 Courses on Innovation and Entrepreneurship

The Courses offered in this category include courses related to Innovation, Entrepreneurship, Skill Development, Startups and Intellectual Property Rights (IPR) etc.

#### 17.3.3.2 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. Ex. 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 also 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.

#### 17.3.3.3 Special Electives

The Courses offered in this category include Courses on Lean Six Sigma, Project Management and Team work & Design Thinking. These Courses do not have any Prerequisite condition and can be chosen as and when desired by the students. A Student may also opt for Open Elective Courses offered through MOOCs, 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

### 17.4 Category D – Courses for Presentation of Technical Skills related to the specialization 17.4.1 Mini – Project

Preferably in the 2<sup>nd</sup> last semester, the students must involve in a mini-project which will provide sufficient preliminary exposures including industrial applications for developing skills in handling

engineering projects and also to build strong foundation on theoretical i.e. literature review and methodology to be adopted to do his/her final semester project. The procedure adopted for evaluation of this mini-project will be same as mentioned for final semester project. The students should be encouraged to do industry sponsored project.

#### 17.4.2. 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. 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 the presence of HoD. The progress and presentations in the Semesters will be used for internal evaluation and allocating 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.

#### **17.4.3** Seminar

The student has to present his technical knowledge gained in his/her specialization using Power point presentations on various topics. In order to develop research aptitude, the student may also be encouraged to read and understand research papers published in indexed journals, patents applied etc. and present in front of a committee constituted by HoD for evaluation and assessment. The student should also be encouraged to publish technical papers in National as well as in International conferences and in indexed journals. Record of 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.

#### 17.5 Category E – Mandatory Zero Credit Courses

The courses under this category do not have any credit and will not be Included for CGPA calculations. Courses like Yoga and Meditation, Indian Constitution, Essence of Indian Traditional Knowledge, NCC/NSS/RRC/YRC/Student Clubs / Unnat Bharat Abhiyan / Swachh Bharat, Sports and Games, Gender Equity and Law are included under this. The student should complete a minimum of two courses to be completed other than Yoga and Meditation under this category.

#### 18. BLENDED MODE OF LEARNING & ADOPTION OF SWAYAM COURSES

Students are allowed to take a **maximum of 40% of the** total number of credits of 120 to be earned as per the curriculum, which are offered through MOOCs like NPTEL/SWAYAM.

The credits earned should be transferred in mark sheet on successful completion of the courses and recommendations by the Transfer of Credit (ToC) committee constituted for this purpose. The credits earned for the courses completed through MOOC like NPTEL/SWAYAM will be used for overall CGPA calculation. Scores of the MOOC courses completed by the students on permitted platforms are valid till 1 year. Please refer Annexure – III for the Standard operating procedure.

Over and above the maximum limit of 40% of the total number of credits of 120, the students if interested can take any number of courses offered through MOOCs like NPTEL/SWAYAM. Credits earned on successful completion of these courses will not be transferred in mark sheet and will not be used for overall CGPA calculation.

#### 19. COURSE REGISTRATION IN A SEMESTER

- 19.1 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 the Class Committee meeting in the presence of Mentor and allotted Mentee. Faculty Advisor of the Class may also assist in planning and selection of the courses for registration in a Semester.
- **19.2.** In a Semester, a student can register new courses for minimum of 14 Credits and maximum of 26 Credits except in Final Semester. Registration of courses will not include courses registered in NPTEL/ SWAYAM.
  - The criteria for registration of courses for minimum of 14 Credits will not be applicable for those students who are having less than 14 Credits to be earned for the award of Degree. In such cases, the students will be allowed to register for the remaining courses for less than 14 credits. The limit of Maximum 26 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.
- **19.3.** 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.

#### 20. ASSESSMENT

#### **20.1 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.

#### 20.2 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.

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

#### 20.3 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.

#### 20.4 Eligibility for End Semester Examinations

The Student maintaining a minimum of 75% attendance in each Course will only be eligible for appearing in External Assessment Tests / Examinations. If a student fails to secure 75%

attendance in three or more courses, he/she has to redo all the courses in that semester in the following academic year. In exceptional emergency cases, HoI may permit the Students with attendance of 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.

**20.4.1 Compensatory Courses**: The system of compensatory courses is meant only for those students who are unable to cope up with the academic vigor and hence fails to secure 75% attendance in 1 or 2 courses in a semester. Students can register those courses under Compensatory Courses in the forthcoming semesters subject to the following conditions:

- i. Compensatory courses are conducted only for a student who is 'Detained from Study' due to lack of attendance of 75% minimum in 1 or 2 Courses.
- ii. Compensatory courses may be announced after the publication of results, by the respective Department, by the HODs, with the approval of the Principal.
- iii. Student has to register for the Compensatory Course and pay the prescribed fee for the Compensatory Courses within the specified time limit. A maximum of two Compensatory Courses alone will be permitted to be registered by a student during the semester next to the semester of detainment.
- iv. Withdrawal from Compensatory courses is not permitted.
- v. These Compensatory courses will be held either during weekends or in evenings.
- vi. A student has to obtain a minimum of 75% attendance in each of these courses.
- vii. A student has to score the minimum passing criterion to be declared 'Pass' in that course.
- viii. Students cannot demand a compensatory course for a course in any semester as a matter of right. Compensatory courses will be conducted subject to availability of faculty, class rooms and logistics.
  - ix. Students who have done a Compensatory Course will not be considered for rank, medal or distinction.

#### 21. PASSING REQUIREMENTS – THEORY & 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 B.E. Degree if he/she has registered and successfully completed the Courses and has earned the minimum Credit requirements for the respective Engineering Programme.

- a) Successfully acquired the required learning Credits as specified in the Curriculum corresponding to the Branch of his/her study within the stipulated time duration.
- b) No disciplinary action is pending against him/her.

#### 23. SPECIALIZATION IN B.E. DEGREE PROGRAMME

If a student earns 15 credits in program specific specialization electives and fulfilling the minimum requirement of credits for the award of the B.E. Degree, he / she shall be awarded with an additional certificate of recognition for SPECIALIZATION. These credits can also be earned through MOOCs. For example, B.E. in parent discipline Mechanical Engineering with an additional certificate for Specialization in "Renewable Sources of Energy".

#### 24. 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.

#### 24.1 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
О	9	85-89
A++	8.5	80-84
A+	8	70-79
A	7	60-69
B+	6	55-59
В	5.5	51-54
С	5	40-50
AB	ABSENT	
	(Failure due to nonappearance in examination)	
	REAPPEAR	
RA	(Failure due to insufficient marks in the course)	

#### 24.2 Semester Grade Point Average (SGPA)

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

$$SGPA = \frac{\sum (c_i * c_i)}{\sum c_i}$$

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.

#### 24.3 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.

$$CGPA = \sum_{j} \left\{ \frac{\sum_{i} (c_{ij} * c_{ij})}{\sum_{i} c_{ij}} \right\}$$

# 25. CLASSIFICATION OF SUCCESSFUL CANDIDATES FOR AWARD OF DEGREE

#### 25.1 First Class with Distinction

- **25.1.1** 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 for Students securing a CGPA of not less than 8.00 shall be declared to have passed in First Class with Distinction.
- **25.1.2** 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.

#### 25.2 First Class

- **25.2.1** 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.
- **25.2.2** 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.

#### 25.3 Second Class

All other Students not covered above and who qualifies for the award of B.E. Degree and passed the Examination in all the registered courses shall be declared to have passed in Second Class.

#### 26. 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 clean record of discipline during the period of Study. Special Certificates will be given to Rank Holders.

#### 27. 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

#### **GUIDELINES FOR WORKING PROFESSIONALS**



## Approval Process 2024-25

### Guidelines for Working Professionals (Engineering & Technology)

#### Guidelines for Working Professionals in AICTE Approved Institutions for Diploma, UG and PG Courses in Engineering & Technology (w.e.f. A/Y 2024-25)

AICTE Approved Institutes fulfilling the criteria mentioned below are eligible to run Diploma, UG (B.E/B.Tech) and PG (M.E /M. Tech) Courses from the A/Y 2024-25 for working Professionals ONLY in the approved disciplines/Courses. As per the Provisions of the Approval Process Handbook 2024-25 to 2026-27 following guidelines are applicable to run the courses w.e.f. A/Y 2024-25 ONLY with the Approval of AICTE.

1.	Eligibility Criteria for the Institutes for Obtaining AICTE Approval		
	Institutions having more than 80% average enrollment in last 3 years (Enrollment of First Year Only shall be considered (Lateral Entry Admission shall not be considered) for calculating Average Enrolment.		
	(OR)		
	Institutions operating in Aspirational Districts	s (as per the latest list notified by NITI Aayog).	
	(OR)		
	Institutions belonging to Jammu, Kashmir and	d Leh/ Ladakh and NER States.	
2.	Courses & Intake		
i	Number of Permitted Courses	Maximum Three Courses per Institute/Level	
ii	Permitted Intake per Course	15/30 (PG-Level Course) 30/60 (Diploma/UG Level Course) (Supernumerary in nature)	
ii	Minimum Admission Required to Run the Course	1/3 of the Approved Intake in each course	
3.	Eligibility for Admission		
i	Professionals working in Registered Industry / Organization (Central / State) / Private/ Public Limited Company/ MSMEs located within 50 KM radial distance from the Institute.		
ii	Minimum of ONE Year Full time / Regular working Experience		
iii	Qualification Same as candidates eligible for L Approval Process Handbook published by AIG		

FAQ APH-2024-25



## Approval Process 2024-25

## Guidelines for Working Professionals (Engineering & Technology)

4.	Duration of the Course
i	Diploma Level: Same as Lateral Entry to Second Year with a total course duration NOT less than TWO years and shall fulfill the total contact hours as prescribed by the Affiliating Body/Board/University for completion of duration of the course.  (or) Same as Lateral Entry to Second Year with at least minimum of one semester extra to fulfill the total contact hours as prescribed by the Affiliating Body/Board/University for completion of duration of the course.
ii	Under Graduate Level:  Same as Lateral Entry to Second Year with a total course duration NOT less than THREE years and shall fulfill the total contact hours as prescribed by the Affiliating University for completion of duration of the course.  (or)  Same as Lateral Entry to Second Year with at least minimum of one semester extra to fulfill the total contact hours as prescribed by the Affiliating University for completion of duration of the course.
iii	Post Graduate Level: Total course duration NOT less than TWO years and shall fulfill the total contact hours as prescribed by the Affiliating University for completion of duration of the course.
iv	Timings for conduct of classes normally shall be in the evening hours/any flexible convenient timings in alignment with timings of Industry / Organization.
v	Mode of Conduct of Classes shall be as applicable for Regular Programs as defined in the AICTE Public Notice Vide. No. AICTE/AB/Academic/2020-21, dated 13th August, 2020(In Regular Face to Face Mode).
05	Academic Requirements
i	Total Credits as specified in the AICTE Model Curriculum (or) Affiliating University are required to be earned for getting the Degree
ii	Syllabus shall be same as applicable to regular students.
iii	As per the AICTE Regulation up to 40% of credit transfer is permitted through MOOCs / SWAYAM. However for Diploma level institutes, other MOOCs plateform similar to NPTEL/SWAYAM recognised by State/Central Government may also be considered.
iv	Examination shall be same as the regular students.

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## Approval Process 2024-25

# **Guidelines for Working Professionals**

(Engineering & Technology)

06	Faculty & Staff Requirement
i	As per the prevailing AICTE Norms. Existing Faculty in the Institute / Industry Experts with requisite qualification as per AICTE Norms are permitted with additional remuneration / honorarium as per the Affiliating University / State Government / Institute Norms.
ii	Existing staff (Technical / Supporting) are permitted with additional remuneration / honorarium as per the Affiliating University / State Government Norms.
07	Infrastructure Requirements
	Existing Infrastructure can be used. No additional Infrastructure is Required.
08	Mode of Admission or Admission Policy
i	As per the University /State Admission Policy. In absence of any such Admission Policy, Institute can devise transparent mechanism for short listing the eligible candidates in a highly transparent manner based on Merit of the Qualifying Examination.
ii	Reservation Policy of the respective State/UT is applicable. However, One Seat in Every Institute Shall be Reserved for Candidates working in Central Government Organizations / Industries /Companies / Autonomous Organizations purely on MERIT Basis. In absence of any such Candidates the vacant seat may be transferred to General Category.  Note: If any seats are vacant after the last round, candidates from other States/UTs may also be considered for admission, if they reside within a 50 KM radial distance from the institute.
09	State Government, Board & University Requirements
	State Government, DTE (Board) & University (as applicable) should devise a mechanism to affiliate the Working Professionals admitted in AICTE Approved Institutes for Courses under this Policy of AICTE.
10	Other Requirements
	AICTE Approved Institutes shall fulfill any other requirements as specified / required which are notified from time to time.
]	NOTE-1: Above Guidelines are also applicable to State Public Universities/State Private Universities, provided, ONLY if they are having Approval of AICTE. NOTE-2: UGC Norms /Guidelines /Rules (If any) are also applicable.

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# ANNEXURE II PROGRAMME OUTCOMES (POs)

### On completion of a Programme of Engineering, Graduates will be able to:

Sl. No.	Outcome	Description		
PO 1	Engineering Knowledge	Apply the Knowledge of Mathematics, Science, Engineering fundamentals, and an Engineering specialization to the solution of Complex Engineering problems.		
PO 2	Problem Analysis	Identify, Formulate, Review Research literature, and analyze Complex Engineering problems reaching substantiated conclusions using first principles of Mathematics, Natural Sciences, and Engineering Sciences.		
PO 3	Design / Development of Solutions	Design Solutions for Complex Engineering problems and Design System components or processes that meet the specified needs with appropriate consideration for the Public Health and Safety, and the Cultural, Societal, and Environmental considerations.		
PO 4	Conduct Investigations of Complex problems	Use Research-based Knowledge and Research methods including Design of Experiments, Analysis and Interpretation of Data, and Synthesis of the information to provide valid conclusions.		
PO 5	Modern Tool Usage	Create, Select, and Apply appropriate techniques, Resources, and Modern Engineering and IT Tools including Prediction and Modeling to Complex Engineering activities with an understanding of the limitations.		
PO 6	The Engineer and Society	Apply Reasoning informed by the contextual Knowledge to assess Societal, Health, Safety, Legal and Cultural issues and the consequent responsibilities relevant to the Professional Engineering practice.		
PO 7	Environment and Sustainability	Understand the impact of the Professional Engineering solutions in Societal and Environmental contexts, and demonstrate the Knowledge of, and need for Sustainable development.		
PO 8	Ethics	Apply Ethical Principles and commit to Professional Ethics and responsibilities and norms of the Engineering Practice.		
PO 9	Individual and Team Work	Function effectively as an Individual, and as a Member or Leader in diverse Teams, and in Multidisciplinary settings.		
PO 10	Communication	Communicate effectively on Complex Engineering activities with the Engineering Community and with Society at large, such as, being able to comprehend and write effective reports and Design Documentation, make Effective Presentations, and give and receive clear instructions.		
PO 11	Project Management and Finance	Demonstrate Knowledge and Understanding of the Engineering and Management Principles and apply these to one's own work, as a Member and leader in a Team, to manage Projects and in Multidisciplinary Environments.		
PO 12	Life-Long Learning	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of Technological change.		

#### **ANNEXURE -III**

#### STANDARD OPERATING PROCEDURE FOR TRANSFER OF CREDITS

As per clause 18 of regulations 2024 of the Faculty of Engineering and Technology, Students are encouraged to take a maximum of 40% of the total number of credits of 160 through SWAYAM NPTEL. Over and above 40 % of the credits, the students if interested can take any number of courses offered through various MOOC platform like NPTEL/SWAYAM and credits earned on successful completion of these courses will not be transferred in mark sheet and will not be used for overall CGPA calculation.

#### **Guidelines for Credit Transfer**

- 1. Students cannot register for the mapped MOOC courses that are being offered in the current semester.
- 2. The student should have successfully completed / passed in the MOOC course. This will be the minimum eligibility Criteria for credit transfer.
- 3. Scores of the MOOC courses completed by the students on permitted platforms are valid till 1 year.

#### PROCEDURE FOR TRANSFER OF CREDITS

- 1. Each department should recommend the MOOC courses with at least 60% mapping with VMRF syllabus. The list of courses should be recommended by the department coordinator and HoD. The list should be submitted to the Transfer of Credit Committee (TOC).
- 2. TOC committee will approve the list of courses recommended by the department.
- 3. The student should enroll for the courses only from the approved list.
- 4. After successful completion of the MOOC course, the student should apply for the credit transfer using **CREDIT TRANSFER APPLICATION FORM** along with the MOOC course completion certificate through proper channel to the Transfer of Credit Committee.
- 5. Transfer of Credit Committee (TOC) will consolidate all the applications received from the departments and validate them. The committee will submit the list to the Controller of Examination, VMRF for further action.
- 6. The Grade for the completed MOOC course will be awarded as per VMRF regulations.

#### **CREDIT TRANSFER APPLICATION FORM**

**COURSE COMPLETION DETAILS** 

Name of the Student Register Number Program/ Branch

:

Department

Year/ Semester

:

Name of the MOOC Course					
MOOC Course Code					
MOOC Course Roll Number					
MOOC Course Duration and Period					
MOOC Course Offered By					
MOOC Course Completed on (Month and Year)					
Marks Secured in MOOC Course (Certificate to be Attached) VMRF Equivalent Course					
Name with Code					
VMRF Equivalent Course Credit					
Transferable Credit					
VMRF Equivalent Grade to be awarded					
	STUDENT DE	<u>CLARATION</u>			
I have read and understood the credit Transfer Procedure as per the regulations					
		SIGNATURE OF THE NAME: REGISTER NUMBER DATE:			
RECOMMENDATIONS FOR TRANSFER OF CREDIT  The MOOC courses completed by the student have been checked and found Eligible/ In-Eligible for transfer of credits in the course as mentioned above.  Recommended/ Not Recommended for the transfer of credits.					
Coordinator, TOC Committee	Vice Principal (Academics)	Vice Principal (Administration)	Principal		