



MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

Rajarajeswari College of Engineering

(An Autonomous Institution under Visvesvaraya Technological University, Belagavi)
#14, Ramohalli Cross, Kumbalgodu, Mysore Road, Bengaluru – 560074



AUTONOMOUS REGULATIONS

B.E, B.Sc (Hons), BBA(Hons), BCA(Hons), M.Tech, MBA and MCA

Effective from the Academic Year 2024-25



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Vision

To empower young minds through Technology, Research, and Innovation, to produce technically competent and socially responsible professionals in higher education.

Mission

1. To deliver excellence in education through innovative teaching, impactful research, and continuous skill development, preparing students to meet global challenges with technical expertise and ethical responsibility."
2. To foster a transformative learning environment that integrates technology, research, and practical experience, empowering students to become skilled professionals and socially conscious leaders."
3. To cultivate a culture of lifelong learning and professional excellence by encouraging creativity, research, and community engagement, equipping students with the skills to thrive in a dynamic world."
4. To provide a holistic educational experience that combines advanced technology, hands-on research, and community-focused learning, shaping students into competent, ethical professionals who contribute positively to society.



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Quality Policy

RRCE is committed to achieving Academic Excellence by imparting Quality Technical Education and Skill Development and Organizing various Technical and Non-Technical programs, thereby Enhancing the students' Intrinsic Abilities, Capabilities, Thinking Abilities and Technical Skills. We always strive to comply with the requirements, adapt to the changing challenges and update the Faculty on the latest Technologies, thereby continually improving the quality standards of the institution.

Core Values

Professionalism, Commitment, Integrity, Team Work and Innovation



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1. PREAMBLE:

The higher education systems need to change to meet the standards and the demands of the 21st century. In the rapidly changing 21st century, our institution role to prepare students for the professional world and society in general. In an era characterized by rapid technological advancements and evolving global challenges, **Rajarajeswari College of Engineering, Bengaluru** status as an autonomous institution, affiliated with Visvesvaraya Technological University (VTU) and recognized by the University Grants Commission (UGC), positions us at the forefront of technical education.

The autonomy empowers us to address the dynamic demands of the 21st century, fostering an academic environment that prioritizes innovation, flexibility, and excellence in learning. And also addressing the 21st century challenges faced by the technical education system in the country, like ever increasing influence of science and technology and their impact on human society, shrinking time scale of new developments and the high rate of obsolescence in the older practices, Penetration of Information Technology in all sectors of human activity and economic development, Service sector becoming a major avenue for employment of technical professionals and also for economic gains, and Emergence of **knowledge** as a key driver for the progress of nation and for increasing their influence on the world scenario.

The academic autonomy of the Institution offering technical education attempts to convert these challenges into opportunities, and it's expected that the 21st century engineers will be required to have strong foundation in the basics of mathematics, science and engineering discipline, command over the chosen area of technical specialization, capacity to apply the professional knowledge and skills acquired, good competence to learn a subject on one's own without major external help, expertise in analysis, design, modeling and



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simulation of complex systems, scaling up, mass production, system operation and maintenance, estimation of costs and time factors in an assignment, ability for rational, logical, orderly and objective thinking, skills in personnel management and human relations and leadership qualities including spirit of tolerance, patience and team work.

The **academic freedom** granted to the Institution by the University will be engaged with utmost responsibility and accountability to provide graduates with the knowledge and skill sets to effectively utilize opportunity, demonstrate their capabilities and innovative skills, and become prominent in the higher education system.

The institution aims constantly to ensure highest standards of excellence in all of its academic processes through transparency in every procedure being followed to gain the confidence, gratitude and respect of all its stakeholders, especially students, alumni, parents and the leaders in the global economy of this century.

Hence, it becomes particularly important for the Institution as well as the University to be able to maintain standards and enhance their reputation, image and visibility in the technical education system.



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2. SHORT TITLE AND COMMENCEMENT

The regulations are subject to amendments as may be made by the Academic Council of the institution from time to time, after approval by the Governing body. Any or all such amendments will be effective from such date and so such batches of candidates including those already undergoing the programme, as may be decided by the Academic Council.

3. DEFINITIONS & ABBREVIATIONS:

3.1 DEFINITIONS

- (a) **“University”** means Visvesvaraya Technological University(VTU)
- (b) **“Institution”** means Rajarajeswari College of Engineering (RRCE)
- (c) **“Commission”** means University Grants Commission (UGC)
- (d) **“Council”** means All India Council for Technical Education(AICTE)
- (e) **“Academic Autonomy”** means freedom granted by the University to the Institution in all aspects of conducting its academic programmes for promoting academic excellence.
- (f) **“Autonomous College”** means a college notified as an autonomous college as per the UGC (Conferment of Autonomous Status upon colleges and Measures for Standards in Maintenance of Standards in Autonomous Colleges) Regulations, 2023 and VTU Autonomous College Statute, 2006.
- (g) **“Regular Students”** means students who are admitted to the first year of the respective programme.
- (h) **“Lateral Entry”** means students who are admitted to the third semester of the respective programme (Undergraduate Engineering Programme based on the qualification at the time of entry).
- (i) **“Program”** means set of courses a student if required to successfully complete to become eligible for the award of a specific degree / certificate.



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- (j) **“Course”** means a **subject either theory**, practical or project work identified by its title and code number. For example,
B24MAEE101 is a course introduced during 2024, offered by Mathematics Department, during 1st semester of type **Basic Science**, with title **‘Mathematics-1 for EEE’**.
BECE303 is a course introduced during 2024, for the department of ECE of type **Professional Core** course with title **‘Network Analysis’**.
P24MCA101 is a course introduced during 2024, for the department of **MCA** of type **Professional Elective**, with title **‘Name of the course’**
- (k) **“Credit”** means a unit by which the coursework is measured. It represents the number of hours of instruction prescribed per week over the entire duration of a semester
- (l) **“Integrated Course”** means the course having clearly defined course objectives, outcomes and credits, which has a cohesive approach of delivery of course contents through lectures blended with hands-on experience/reflection through lab work/field work / case studies etc., to connect the learned knowledge to real world situations.
- (m) **“Non-Integrated Course”** means the course having clearly defined course objectives, outcomes and specific credit, in which the delivery of course contents are mainly through formal instructions and has no laboratory component.
- (n) **“Laboratory Course”** means the course having clearly defined course objectives, outcomes and specific credit which involves students in hands-on learning through conduction of experiments connected with scientific / technical principles.
- (o) **“Faculty Advisor”** means He / She shall be member of the faculty, assigned with the responsibility of assisting 20 – 25 students allotted to him / her, towards all round development with necessary guidance to enhance their academic progression in the institution, during the period of study.



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3.2 ABBREVIATIONS

AICTE	: All India Council for Technical Education
UGC	: University Grants Commission
VTU	: Visvesvaraya Technological University
RRCE	: Rajarajeswari College of Engineering
NBA	: National Board of Accreditation
NAAC	: National Assessment & Accreditation Council
SGPA	: Semester Grade Point Average
CGPA	: Cumulative Grade Point Average
UG	: Undergraduate
PG	: Postgraduate
CIE	: Continuous Internal Evaluation
ABA	: Activity Based Assessment
SEE	: Semester End Examination
BoS	: Board of Studies
AC	: Academic Council
GB	: Governing Body
HEC	: Higher Education Council
CoE	: Controller of Examination
ACE	: Academic Calendar of Events
GoI	: Government of India
GoK	: Government of Karnataka
DTE	: Director of Technical Education
USN	: University Seat Number
MP	: Malpractice



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4. ACADEMIC PROGRAMMES

4.1 General:

- i. The Academic Autonomy is applicable for all programmes offered by the college: B.E, B.Sc (Hons), BBA(Hons), BCA(Hons) Degree programmes at Undergraduate (UG) level, M. Tech., M.B.A and M.C.A programmes at Postgraduate (PG) level, M.Sc. (Engineering by research) and the Ph.D programme. The programmes fulfill the minimum academic quality and standards for the award of Degrees prescribed by the University, the Council and the Commission.
- ii. The academic Autonomy provides an opportunity to the institution to make schemes of instruction, syllabi, scheme of examinations and other aspects, with approval of its Academic Council, while fulfilling the minimum academic standards of the University for the Award of Degrees.
- iii. The Institution has the freedom to start Diploma (post- polytechnic Diploma, post-UG and post-PG levels) and/or Certificate programmes with the approval of its Academic Council. The issuance of certificates/diplomas on completion of such programmes shall be made under the seal of the concerned institution only.
- iv. The institution has the freedom to evolve methods for assessing the students' performance, notifying the results, issuing the grade cards/transcripts, migration and other certificates except the Degree Certificates.
- v. In order to get the various benefits of academic autonomy, the Institution to structures its various academic programmes based on the Semester Scheme by introducing Credits for academic activities, bring in Examination Reforms for better achievement testing, award Letter Grades and Numerical Grade Points/ Averages for students' performance and set appropriate Passing Standards as covered later in these Regulations.



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- vi. Following the guidelines recommended by the University, with regard to Semester Scheme, Credit System, Examinations, Letter Grades and Numerical Grade Points/Averages, enables the students to avail of horizontal/ vertical mobility and transfer of credits from one Autonomous Institution to another and related benefits of academic autonomy.

4.2 NOMENCLATURE OF PROGRAMMES:

4.2.1 Approved Programmes:

- i. The Institution uses the nomenclature for their Degree programmes as specified by the Commission, and the Degree Certificates issued by the University to their awardees bears the name of the Institution as well. This helps in maintaining the identity of each programme conducted at the Institution and also ensuring its accountability.
- ii. Therefore, the nomenclatures and their abbreviations given below, shall continue to be used for the Degree programmes offered by the Institution under the University:

I	UG Level:	a) Bachelor of Engineering (B.E) b) Bachelor of Science - B. Sc(Hons.) c) Bachelor of Business Administration- BBA(Hons) d) Bachelor of Computer Application - BCA(Hons) e) BE (CSE) for working Professionals f) BE (EEE) for working Professionals
II	PG Level:	Master of Technology (M. Tech) Master of Business Administration(MBA) Master of Computer Applications (MCA)
	Research Level	M.Sc. (Engineering) by Research M. Sc (Engg.) Doctor of Philosophy (Ph. D).



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Besides, the branch, the subject of specialization, if any, shall be indicated in brackets after the abbreviation; e.g., B.E. (Electronics and Communication Engineering), M.Tech (Computer Science and Engineering).

4.2.2 Value Added Courses

The institution will conduct proficiency courses from time to time depending on industry and skill requirements. A schedule of such courses shall be announced well in advance.

4.2.2.1 B.E Honors:

To encourage and groom engineering students during their engineering program to become a self-motivated independent investigators, critical thinkers and problem solvers, good communicators, effective managers and lifelong learners, AICTE has introduced a scheme wherein a student has to earn 18 or more additional credits through Massive Open Online Courses (MOOCs) to become eligible for the award of B.E (Honors).

The objectives of decorating the students with superior academic ability with honors are to:

- i. Encourage the advanced levels of study and multidisciplinary learning.
- ii. Learn new skills and methodologies pertaining to your areas of interests
- iii. Cultivate a sustaining interest in advanced education and research
- iv. Gain recognition at the time the time of graduation for advanced, distinguished work as an undergraduate.



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4.2.2.2 Eligibility Criteria for Registration

- i. Registration to 'BE Honors' shall start from V semester onwards.
- ii. The students shall have obtained a grade \geq D in all the courses in the first attempt only from I – IV semesters.
- iii. The students should have obtained a CGPA \geq 7.50 at the end of the IV semester.

4.2.2.3 Additional Coursework

- i. In addition to the courses prescribed by the Institution to be completed successfully in the remaining semesters, that is, V to VIII semester for the relevant Degree award, each student registered for the Honors qualification shall have to take up the coursework as notified by the university from **NPTEL/VTU Online** and complete each coursework successfully.
- ii. Students shall be permitted to drop the registered course works and select alternative coursework(s) in case they cannot appear for proctored examination(s) or complete the examination
- iii. The University shall announce the BOS approved list of MOOCs (chosen from VTU Online) corresponding to each engineering programme. The University shall have the freedom to review and approve additional online platforms from time to time.
- iv. Students shall choose, online courses totaling to 18 more credits from the approved online courses.
- v. Students shall select the courses, in consultation with the concerned Faculty Advisor / Mentor, such that the content/syllabus of the MOOCs are not similar to that of the programme's Core/Electives courses that the student has taken or chooses at later semesters of the programme.
- vi. The students shall earn the required credits by only appearing in person to the proctored examination conducted by NPTEL / VTU Online.



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4.2.2.4 Award of Honors Degree

All the students who successfully completed the online courses as prescribed by the University, and submit their certificates to the University through the Controller of Examinations (COE) against the notification issued by the Registrar (Evaluation) in time before closure of VIII semester as per calendar shall be eligible for the 'Honors' qualification.

4.2.3 BE Minor Degree:

To enhance employability skills and impart deep knowledge in emerging areas that is usually not covered in the Undergraduate Degree credit framework, AICTE has come up with the concept of a '**Minor Degree**' in emerging areas. The concept of a Minor Degree is discussed in the Approval Process Handbook (APH) for the academic session 2022-23-page no. xxiv issued by AICTE. A minor Degree will carry 18 to 20 credits in addition to the credits essential for obtaining the Under Graduate Degree in Major Discipline (160 credits for regular students and 120 credits for lateral entry students).

The Bachelor of Engineering (B.E) with a Minor program focuses on the fundamental principles of multiple Engineering disciplines, critical and analytical thinking and the ability to develop a distinctive approach to interdisciplinary problems.

4.2.3.1 Eligibility Criteria for Registration:

- i. Registration for a Minor degree shall start from the IV semester of the B.E program. A student can opt for only one minor program along with the major (degree) program. No student shall be permitted to register for both **honors as well as minors**.



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- ii. A student may choose to pursue a B.E degree with a minor program if, at the time of registration, student has permissible backlogs up to the third semester under the regulations governing the B.E degree and provided that the student's Cumulative Grade Point Average (CGPA) after the third semester does not fall below 5.0 (according to clause 22OB6.4.1 (a)).
- iii. Before receiving a major degree, students who enroll in a minor degree program must successfully pass all prerequisite courses. Even if the student fails in the courses chosen for minor degree programs, they must be passed before a major degree is granted. The students have to complete the major degree program within a minimum duration of 04 years. (For lateral entry students 03years).The minimum CGPA required to maintain up to the III semester at the time of registration and at the time of completion of the major degree program is ≥ 5.0 .
- iv. Students are governed by the regulations governing the B.E degree program, however, she/he shall complete all the required minor degree program courses and earn credits ≥ 18 before the completion of the major degree program as per the Major degree regulations. A student cannot earn the Minor after he/she has already earned a bachelor's degree by earning 160 credits.

4.2.3.2 Award of Minor Degree:

All the students who complete the course as prescribed under Section 22UGMINOR5.0 and submit their certificates in time before the closure of the UG (VIII Semester) as per the academic calendar shall be eligible for the “**Minors**” qualification. The CGPA and/or Class awarded to the students shall be only based on students’ performance in the various



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semester-level examinations conducted proctored manner.

4.2.4 Professional Societies

Every student is advised to become a member of at least one of the professional societies which are active in the institution. They are required to actively participate in the Professional Society activities which will enhance their overall skills, Organizational capabilities and leadership qualities apart from opportunity to network with experts from industries and R&D organizations.

4.3 PROGRAMMES OFFERED:

4.3.1 Undergraduate degree programmes offered by the Institution are listed below:

Table1: Under Graduate Programmes offered by the Institution

S. No	Title of the UG Programme	Abbreviation	Established year
1)	Computer Science and Engineering	CS	2006
2)	Electronics and Communication Engineering	EC	2006
3)	Electrical and Electronics Engineering	EE	2006
4)	Information Science and Engineering	IS	2008
5)	Civil Engineering	CV	2009
6)	Artificial Intelligence and Machine Learning	AI	2020
7)	Bachelor of Science (Honors)	BS	2020
8)	Robotics and Automation	RA	2021
9)	Computer Science and Engineering(IOT, Cyber security including, Block chain Technology)	IC	2022
10)	Computer Science and Design	CD	2023
11)	Bachelor of Computer Applications	BC	2024
12)	Bachelor of Business Administration	BM	2024
13)	BE (CSE) for working Professionals	BECS	2024
14)	BE (EEE) for working Professionals	BEEE	2024



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4.3.2 Post graduate degree programmes offered by the Institution are listed in Table2:

Table2: Post Graduate Programmes offered by the Institution

S.No	Title of the PG programme	Abbreviation	Established
1	Master of Computer Applications	MC	2008
2	Master of Business Administration	BA	2009
3	M. Tech in Computer Science and Engineering	SCS	2013

4.3.3 Research Level programmes offered by the Institution: The Institution offers the following Research programmes

- (i) M.Sc.(Engineering)by Research
- (ii) Doctor of Philosophy(Ph.D.)

The research centers recognized by the University are listed inTable3.

Table3: Research Centers recognized by the University

S. No	Research Center	Abbreviation
1	Mechanical Engineering	ME
2	Electronics and Communication Engineering	EC
3	Computer Science and Engineering	CS
4	Civil Engineering	CV
5	Electrical and Electronics Engineering	EE
6	MBA	MBA
7	Mathematics	MAT
8	Physics	PHY
9	Chemistry	CHE

4.4 PROGRAMME DURATION:

4.4.1 Duration:

The normal duration of fulltime academic programme is the same as that is prescribed by the VTU regulations and notifications received by the



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University from time to time.

The maximum period which a student can take to complete a fulltime academic programme shall be the same as that prescribed by the University from time to time; e.g., double the normal duration of the programme, i.e., eight years for B.E, BBA, BCA and B.Sc (Hons), four years for M.Tech., M.B.A., M.C.A., four years for M.Sc (Engineering by Research), six years for Ph.D.

Sl. No	Programme	Duration in Years	
		Minimum	Maximum
1.	B.E (Lateral Entry)	3	6
2.	B.E (Regular)	4	8
3.	B. Sc (Hons)	4	8
4.	BCA (Hons)	4	8
5.	BBA (Hons)	4	8
6.	M.Tech / MBA / MCA	2	4
7.	MS (Engg. by Research)	As notified in University Regulations	
8	Ph. D		

4.4.2 Prescribed Credits:

As a flexible credit system is followed for coursework, it is to be noted that the programme duration in the case of UG and PG shall also be dictated by the period in which a student earns the prescribed credits for the award of Degree. Hence, it is possible for an outstanding student to earn the required credits in a shorter time than that ordinarily prescribed



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for the relevant programme in the above.

4.4.3 Add-on courses:

In such cases, the Institution provides opportunity for such a student to register for Add-On courses being conducted at the Institution or to take up suitable internship until completion of the prescribed programme duration.

4.4.4 Minimum Academic Performance

Besides, the maximum period for a programme is also dictated by the fact that a student has to demonstrate the specified minimum academic performance by registering for the prescribed minimum number of credits in every semester for continuing with the programme.

4.5 ADMISSION OF STUDENTS:

4.5.1 Codes of Admission:

The admission of students to various UG, PG and Research Degree programmes listed under Section 4.3, is governed by the State Government and/or the University Policies/Practices in this regard. In particular, the admission of students for Research Degree programmes at the Institution shall be made by the University by associating the Institution concerned in the process as per the provisions in the VTU regulations governing the Degree of Ph.D. in the 2023. However, the admission of students to P G Diploma and Certificate programmes shall be made by the Institution on its own, by following the Regulations approved by its Academic Council. In all the cases, it is necessary to follow the statutory provisions of reservation of seats to different categories of candidates specified by the authorities from time to time.



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4.5.2 Lateral Entry Admissions:

There is provision for candidates with a polytechnic Diploma or any other qualification approved by the Council and the Commission to join UG Degree programmes at the beginning of the second year (3rd Semester) of the 4-year programme as per the prevailing practice in the University.

4.5.3 Working Professional Admissions:

There is provision for candidates with a Qualification same as candidates eligible for Lateral Entry to Second Year.

4.5.4 Eligibility Criteria:

The eligibility criteria for admission of students to UG, PG and Research Degree programmes at the Institution shall be the same as those prescribed by the UGC, All India Council for Technical Education (AICTE), the University and the State Government. But, the minimum requirements for admission to PG Diploma programmes shall be B.E or equivalent Degree. The equivalence or its method of determination shall be as notified by the University from time to time.

Autonomous Institution is free to prescribe appropriate criteria for admission to Certificate programmes after receiving approval from its Academic Council time to time.

The eligibility for admission of students for **Working professionals** is Minimum of **ONE** Year Full time / Regular working Experience Professionals working in Registered Industry / Organization (Central / State) / Private/Public Limited Company/ MSMEs located within 50 KM radial distance from the Institute.



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4.5.5 Eligibility Criteria (Affiliated college to an Autonomous Institution)

The eligibility criteria for admission of students from a non-Autonomous Institution to an Autonomous Institution, from one Autonomous Institution to another Autonomous Institution and from University scheme at an Autonomous Institution to its Autonomous scheme, shall be fixed by the Academic Councils of the respective Autonomous Institutions, who shall frame suitable Rules for this purpose consistent with the objectives of academic autonomy. A copy of the rules so adopted shall be sent to the University within a fortnight of such adoption.

4.5.6 Eligibility Criteria (Other Universities to an Autonomous Institution)

The eligibility criteria for the admission of students from other Universities to an Autonomous Institution shall be fixed by the Academic Council of the Institution by getting the individual cases examined by the concerned Board(s) of Studies and also by following the same criteria and recommending the names of such candidates qualifying for admission to the University for its approval. However, the autonomous institutions provide syllabus equivalence for such candidates with the approval of its academic council.

4.5.7 Eligibility Criteria (Other Universities (India / Abroad to an Autonomous)

The eligibility criteria for the admission of students from other universities (India/Abroad) to an autonomous institution shall be as per university norms. However the autonomous institutions are free to provide syllabus equivalence with the approval of its academic council.



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4.5.8 Migration of students:

The students can opt to migrate from one UG Programme to another UG programme or specialization at the same Institution or at another Autonomous/ Affiliated/ Constituent Institution under the University at the beginning of the second year. In these cases, the Institution follows the Rules and Regulations of the University/Council.

There shall not be any transfer or migration from program to programme or institution to institution for all PG programmes.

4.6 SEMESTER SCHEME:

4.6.1 Codes of Scheme

The Semester Scheme provides several benefits to technical education programmes in contrast to the Annual Scheme. Hence, the Institution follows the Semester Scheme for all the programs offered, which is prevailing in the University. An academic year consists of two regular semesters (Odd & Even) and a make-up examination.

4.6.2 Academic Calendar:

There is uniformity in the functioning of the Semester Scheme for all academic programmes across the Institution, as this can provide good academic flexibility to their stake holders, particularly the students and the faculty members. For this purpose, each academic year is divided into semesters, with the calendar, durations and academic activities being fixed in advance by the Institution while maintaining a common opening / reopening date for the odd semester.

4.6.3 Strategy of Academic Year

The breakdown of an academic year for implementing the Semester



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Scheme is given in Table 4 as a typical example, consisting of two regular semesters and a Supplementary/make-up semester in an academic year.

Table4: Typical Schedule of Academic Year

SNo	Activity	Description	
1.	Number of semesters in an academic year	Two regular semesters (Odd & Even) & Make-up examination First semester BE programme : 3 Weeks Induction Programme	
2.	Duration of Regular Semesters	19 weeks	
3.	Make-up examination	08 weeks	
4.	Semester Academic Activities	Regular Semester(s) (weeks)	Make-up examination (weeks)
	Course Registration	0.5	0.1
	Course Work	15.5	7.0
	Examination preparation	1.0	0.2
	Examination (SEE)	1.0	0.2
	Declaration of Results	1.0	0.5
5.	Evaluation	Continuous Internal Evaluation (CIE) and Semester End Examination(SEE),both have equal weightage in the student's performance in Course/Laboratory Work and other activities.	
6.	Other Items	Total number of academic days in an academic year shall be >= 180 days per year.	
		Academic schedules prescribed by the Institution shall be strictly adhered to by all the concerned	
		Students having satisfactory CIE and Attendance but failed in SEE, need not register for course/s and can appear for SEE as and when conducted.	
7.	Supplementary / Make-up Semester	Make-up examination is useful for the students to clear their failed courses. Autonomous institutions may use this semester to arrange add-on courses or Internship for other students.	

4.6.4 Course Registration:

A student shall register for courses (core or elective) to earn credits for meeting the requirements of a Degree/ Diploma/Certificate programme. Such courses together with their grades and the credits earned shall be included in the Grade Card issued by the Institution at the end of each



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semester like Odd/Even/Supplementary and it forms the basis for determining the student's academic performance in that semester.

4.6.5 Academic Schedules:

The calendar includes important academic activities to assist the students and the faculty. These include, *dates assigned for registration of courses, dropping of courses and withdrawal from courses*. This enables the students to be well prepared, minimize their chances of failure in CIE and/or SEE and take full advantage of the flexibility provided by the credit system.

4.6.6 Induction programme as per AICTE guidelines

There is a 3-week long induction programme for the UG students entering in to the institution, right at the start. Normal classes start only after the induction programme is over.

The purpose of the Student Induction Programme is to help new students adjust and feel comfortable in the new environment, inculcate in them the ethos and culture of the institution, help them build bonds with other students and faculty members, and expose them to a sense of larger purpose and self-exploration. At the start of the induction, the *students learn about the institutional policies, processes, practices, culture and values, and their mentor groups* are formed. Its purpose is to make the students feel comfortable in their new environment, open them up, set a healthy daily routine, create bonding in the batch as well as between faculty and students, develop awareness, sensitivity and understanding of the self, people around them and the society at large.



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4.6.7 Registration of Courses:

Each student registers for coursework at the beginning of the semester. The permissible Course load to be either average number of credits of the Semester of the programme (for first year) or to be within the limits of minimum and maximum credits prescribed in each later Semester. A period of 2-3 days is specifically assigned for this event in the Academic Calendar for the students to seek proctor advice, discuss with the course instructors and complete the formalities.

4.6.8 Dropping of Courses:

A specific time period is fixed, e.g., in the middle of a semester for this purpose to be based on their view to be conducted of students' performance in CIE by the concerned mentor. Their view to mainly assist the students having poor performance to be facilitated to drop the identified course(s) (up to the minimum credits specified for the semester) without being mentioned in the Grade Card. Such Courses to be re-registered by these students and taken up for study at a later semester in the programme.

4.6.9 Withdrawal from Courses:

A specific time period shall be identified by the Institution towards the end of a semester to help review the students' performance in CIE by the proctor, followed by the students having poor performance to withdraw from identified course(s) (upto the minimum credits specified for the semester) with mention in the Grade Card (Grade 'W'). Such Courses to be re-registered by these students and taken up for study at a later semester in the programme.



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5. CREDIT SYSTEM

5.1 General:

The institution follows a Choice Based Credit System (CBCS) from the academic year 2015-16. The students have an option of choosing from a wide range of electives (Professional and institutional open Electives) and complete the programme at their own pace. Value added courses are also offered as a part of extended learning in inter-disciplinary and multi-disciplinary domains. Thus the CBCS facilitates continuous learning and assessment. The CBCS for the various programmes provides a great opportunity to the students in their preparation to meet the challenging opportunities ahead.

5.1.1 Major Benefits:

Major benefits accruing by adopting the Credit System are listed below:

- Quantification and uniformity in the listing of courses for all programmes at an Institution, like core (hard/soft), electives and project work.
- Ease of allocation of courses under different heads by using their credits to meet national/international practices in technical education.
- Convenience to specify the minimum/ maximum limits of course load and its average per semester in the form of credits to be earned by a student.
- Flexibility in programme duration for students by enabling them to pace their course load within minimum/maximum limits based on their preparation and capabilities.
- Improved facility for students to optimize their learning by availing of transfer of credits earned by them from one Institution to another.



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5.1.2 Credit - Course Work

In the Credit System, the course work of students is unitized and one credit is assigned to each unit after a student completes the teaching-learning process as prescribed for that unit (credit) and is successful in its assessment.

5.1.3 Credit Definition

One unit of coursework is assigned **one credit** in the regular semester (Odd/Even semester) for:

- a) Theory Course conducted for one hour/week/semester - **1 credit**
- b) Tutorials conducted for Two hours/Week/Semester – **1 credit**
- c) Practical conducted for Two hours/Week/ Semester – **1 credit**
- d) Four credit theory courses shall be designed for **50-55** hours of the teaching learning process
- e) Three credit theory courses shall be designed for **40-45** hours of the teaching learning process
- f) Two credit theory courses shall be designed for **25-30** hours of the teaching learning process
- g) One credit theory course shall be designed for **15-17** hours of the teaching learning process

However, in case of **Make-up examination, the course load is multiplied by two**. These regulations form the basis to fix semester course load & weekly contact hours in the regular/Make-up examinations.

5.1.4 Audit Course:

In addition, a student can register for courses for audit only with a view to supplement his/her knowledge and/or skills. Here also, the student's



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grades will have to be reflected in the grade card. But, these shall not be taken in to account in determining the students' academic performance in the semester. In view of this, it may not be necessary for the autonomous institution to issue any separate transcript covering the audit courses to the registrants at these courses.

5.2 Credit Structure:

A typical Credit Structure for coursework based on the above definition is given in Table5. This shall be applicable for the course work of students registered for all programmes offered by the institution.

Table5: Typical Credit Structure for Courses

Lectures(L) (Hours/Week/Sem)	Tutorials(T) (Hours/Week/Sem)	Laboratory Work (P) (Hours/Week/Sem)	Credits (L:T:P)	Credits (Total)
4	0	0	4:0:0	4
3	0	2	3:0:1	4
2	2	2	2:1:1	4
3	0	0	3:0:0	3
2	2	0	2:1:0	3
2	0	2	2:0:1	3
0	0	6	0:0:3	3
2	0	0	2:0:0	2
1	0	0	1:0:0	1
0	2	0	0:1:0	1
0	0	2	0:0:1	1

Thus, it is more appropriate to specify the eligibility requirements for award of Degree based on coursework (like UG, PG) by prescribing the total number of credits to be earned, as an alternative to specifying the Programme Duration. This will be of great help in providing the well-needed flexibility to the students in planning their academic programmes and their



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careers.

5.3 Credits to be earned for award of degree:

The total number of credits to be earned by a student to qualify for the Award of Degree from each Autonomous Institution is given in Table 6.

Table6: Total Credits to be earned for Award of the Degree

Programme		Normal Duration		Total number of Credits to be Earned
		Years	Semesters	
UG Degree	B.E	4	8	160
	B.E(Lateral entry)	3	6	120
	BSc (Hons)	4	8	160
	BCA(Hons)	4	8	160
	BBA (Hons)	4	8	170
PG Degree	M. Tech.	2	4	80
	M.B.A.	2	4	100
	M.C.A.	2	4	80

5.4 COURSE LOAD IN A REGULAR SEMESTER:

The ODD and EVEN semesters are known as regular semesters. The course load for a student per semester as well as its minimum and maximum limits, are based on the guidelines by the University, which is based on the AICTE Model Curriculum for UG/PG Programmes and considering the academic strength and capability of an average student.

5.4.1 In the first two semesters, the prescribed course load per semester is fixed and is mandated (20 credits / semester for the BE programme, 22 credits / semester for the M.Tech, MCA programmes, 25 credits/semester for the MBA programme). **Withdrawal/dropping of courses in the first and second semester are not allowed.**



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5.4.2 In higher semesters, the average load is 22credits/semester, with its minimum and maximum limits being set at 16 and 28 credits. The variation in credits depends on CGPA. This flexibility enables students **(from 3rdsemester onwards)** to cope-up with the course work and helps in improving their academic performance and optimizes the learning outcome.

5.4.3 Contact Hours:

Considering the expectations from engineering professionals with UG, PG and Research Degrees in the 21stcentury, the number of contact hours for students is fixed 28-34 hours/week. This will help students in getting enough time and opportunity to do better preparation for the courses prescribed for credit, to take up self-study, to develop their creative talents and abilities and benefitting from the Add-On courses and those taken for audit. This can also enable them to get ready for challenging and exciting careers ahead. A typical example showing the calculation of contact hours based on course credits is given in Table 7:

Table 7: Contact hours/week (Typical course load per semester)

Courses	L:T:P	Credits	Contact Hrs
TheoryCourse-1	3:0:0	3	3
TheoryCourse-2	3:0:0	3	3
TheoryCourse-3	3:0:0	3	3
TheorywithTutorial-1	3:2:0	4	5
TheorywithTutorial-2	3:2:0	4	5
TheorywithLaboratory-1	3:0:2	4	5
TheorywithLaboratory-2	3:0:2	4	5
One Lecture, Laboratory cum Tutorial Course	1:2:2	3	4



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Non-Credit Mandatory Course	2:0:0	-	-
Total		28	33

A student shall be permitted to **re-register** for additional credits (courses awarded with W-Grade/F-Grade), limiting to a maximum of **28 credits**, from **third semester** onwards.

This is subject to the following conditions:

- The student has secured a $CGPA \geq 7.0$
- The student doesn't have more than two backlogs from the previous semesters
- The student shall ensure that there is no overlapping in time-table for the period and obtain concurrence from the course coordinator, subject to the course being offered during the semester.
- The student shall submit a copy of documentary evidence in respect of the above (a, b, c) while seeking approval from the concerned HOD.
- It is mandatory and responsibility of the student to ensure all the above conditions (a to d) are met for registering additional courses over and above the prescribed credits in a semester, otherwise the registrations for the additional courses shall deemed to be cancelled.

5.4.4 A student shall be permitted to **register** for additional credits (limiting to a maximum of 28 credits), from V **semester** on wards .This is to enable fast learners take few courses of higher semesters. This is subject to the following conditions:

- The student has secured a $CGPA \geq 8.5$
- The pre-requisite (if any) for the said course is completed.
- The student doesn't have any pending courses (courses with Transitional Grades/Dropped Courses) from the previous semesters



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- d) The student shall ensure that there is no overlapping in time-table for the period and obtain concurrence from the Proctor, subject to the desired course being offered during the semester.
- e) The student shall submit a copy of documentary evidence in respect of the above (a, b, c, d) while seeking approval from the concerned HOD.
- f) It is mandatory and responsibility of the student to ensure all the above conditions (a to e) are met for registering additional courses over and above the prescribed credits in a semester, otherwise the registrations for the additional courses shall deemed to be cancelled.

5.5 Course load in Make-up Examination:

The make-up examination is provided for helping students who have failed in their examinations. The make-up examination is provided to help the student to avoid losing an academic year.

The department / Institution may offer some courses based on the availability of resources in hand. It is the discretion of the department / Institution whether to offer the make-up examination or not. make-up examination is a special semester and the student cannot demand it as a matter of right.

During the make-up examination, a student is permitted to re-register for course(s) where he/she has secured F-Grade/ W-Grade. A student is permitted to re-register for the maximum of **16 credits**. All courses are not offered. A student has to opt from those offered by the department in a given Make-up examination.

The student has to pay a special fee prescribed by the Institution to register for a course in the Make-up examination.



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5.6 Mentor /Faculty Advisor System

The institution has a Mentor system (Faculty Advisory System) is to help the students to complete their studies successfully & comfortably. A faculty is called as mentor and the student as mentee. Each Faculty Advisor/mentor is assigned a group of 20 students. The functions of the Mentor are to:

- i. Advise the students in the group on all academic matters (like registration of courses, dropping of courses and/or withdrawing from courses)
- ii. Monitor the students in the group for their individual academic performance
- iii. Identify students in the group who are Slow, Average or Advanced Learners to help them pace their studies /learning at the Institution based on their individual abilities
- iv. Serve as a friend, philosopher and guide to all of them in the group during their studentship at the Institution. With the mentor in place, a student to be normally permitted to register for the average course load in the first semester. And, based on the performance in the semester and faculty advice, he/she to continue with this load (for average and fast learners) or to reduce it to the minimum permissible (for slow learners) by dropping of/withdrawing from some course(s)/credits before the dates prescribed for these. This facility to assist the student to pace the course work, minimize the chances of failure in the course(s) and optimize the learning process.
- v. The student's performance in the first year forms the basis for faculty advice on the number of credits to be registered from the third semester onwards (within the minimum/maximum limits of 16 to 28 credits). Further faculty advice and close monitoring to help a slow learner to pace the coursework properly by reducing the course load, if required



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- and to minimize the chances of failure in the semester.
- vi. The above experience to enable any student to properly plan his/her course load in each succeeding semester, by fixing it to be more than or equal 16 credits and less than or equal to 28 credits based on faculty advice and his/her academic performance in the previous semester. Faculty advice to be also useful to the student in identifying appropriate elective courses.
 - vii. This experience is to also help advanced learners to accelerate their programmes by registering and maintaining upto the maximum (equal to 28 credits) course load in each succeeding semester based on their performance in the preceding and the current semesters. Such students to be able to complete the credit requirements of the programme in a shorter time, like VII semester in the case of B.E. as example, and use the time towards Value Added Courses or for internship.
 - viii. Similarly, slow learners to register only for the minimum (equal to 16) number of credits in each succeeding semester and strive to maintain good performance in all the courses registered and complete the total requirements for the programme at a slower pace, say 9 to 10 semesters in all, in the case of B.E.
 - ix. The number of credits earned by a student during the semester/year and Semester Grade Point Average (SGPA) as well as the Cumulative Grade Point Averages (CGPA) shall serve as performance indices to determine the standards as given in the Regulations later.



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6. CURRICULUM FRAMEWORK

6.1 General Issues:

- (i) Curriculum Framework is important in setting the right direction for a Degree/ Diploma/Certificate programme by the Institution, as it takes into account the type and quantum of knowledge necessary to be acquired by a student to qualify for a particular award in his/her chosen branch or specialization area. Besides, this also helps in assigning the credits for each course, sequencing the courses semester-wise and finally arriving at the total number of courses to be studied and the total number of credits to be earned by a student to fulfill the requirements for the conferment. The Institution takes into account the AICTE Model Curricula notified from time to time and follow them so as to be abreast of the national trends in this connection.
- (ii) At the time of graduation, the minimum expected skills in every graduating engineer, for global acceptance is defined by NBA, through the Programme Outcomes (POs). The POs are primarily developed through the curriculum, the Course Outcomes (COs) of various courses of the curriculum. Hence, the expected skills to be developed through the Pos forms an important factor during curriculum design.
- (iii) Another guiding factor for curriculum design is to ensure it meets global standards, which are defined through the expectations and the competencies that need to be addressed for every engineering discipline through the Programme Specific Criteria (PSC) recommendations by Accreditation Board for Engineering and Technology (ABET). This has to be addressed through the Core Courses of the curriculum as every graduating engineer shall possess the expected core competency.



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6.2 Curricular Components:

The curriculum includes various curricular components as listed below, with recommended credits (minimum and maximum) for each component, and is dependent on the degree to be awarded:

- Humanities and Social Sciences including Management Courses(**HSMC**)
- Basic Sciences Courses(**BSC**)(Mathematics, Physics, Chemistry, Biology);
- Engineering Sciences Courses(**ESC**)(Materials, Drawing, Computers);
- Professional Core Courses (**PCC**), relevant to the chosen specialization/branch;
- Professional Electives Courses(**PEC**), relevant to the specialization/branch
- Open Electives Courses(**OEC**), from other technical and/or emerging subject areas, including Sciences and Management;
- Integrated Professional Core Courses (**IPCC**)
- Ability Enhancement Courses (**AEC**)
- Mini and Major Project(s)(**PW**) and Seminar(**SR**)
- Internship(**INT**) in Industry, Academic Institution or elsewhere.
- Non-credit Mandatory Courses(**NCM**)

Curriculum includes few elective courses offered through MOOCs under the guidance of the faculty in-charge, who shall be responsible for conducting the required CIE and SEE.

6.3 B.E Degree Programme:

The Curriculum Framework for a B.E Degree programme includes various curricular components as listed Section 6.2, and complies with recommended ranges by AICTE and VTU. The B.E programme includes



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courses from Basic Sciences (BSC), Engineering Sciences (ESC), Professional Core (PCC), Integrated Professional Core Course (IPCC), Professional Elective (PEC), Humanities, Social Sciences and Management course (HSMC), Open Electives (OEC), Project work(s) (PW), Seminar (SR), Internship (INT) and Non-Credit Mandatory Courses (NCCM). In addition, the B.E programme, includes the following:

6.3.1 Induction Programme:

As per the requirements of AICTE in its Model UG Curriculum (February 2018), a three-week Induction Programme for the first-year B.E./B. Tech. students at the beginning of their First Semester is included.

6.3.2 Internship:

The scheme also includes Internships that needs to be taken up during summer/winter semester breaks, and are assessed through seminar and report submitted during the Odd/Even semester.

6.3.3 Allocation of Credits for B.E Degree Programme:

Looking at the UG Engineering Degree programmes practiced at leading institutions in India and abroad and the need for Indian engineering professionals to be able to meet the 21st century challenges, the breakdown of coursework as given in Table 8. It is expected that this breakdown leads to a highly useful and respectable B.E. Degree programme under the University.



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Table8: Typical Credits distribution for the B.E programme

Course Category (Abbreviation)	AICTE Breakup of Credits (160)	Typical credits (160)
Humanities, Social Science including Management Courses	12	10
Basic Science Courses(BSC)	25	23
Engineering Science Courses(ESC) including workshop and Drawing	24	20
Professional Core Courses(PCC)	48	43
Professional Elective Courses (PEC) relevant to chosen specialization/branch/AEC	18	14
Open Elective Courses (OEC)	18	14
Mini and major Project Work(s)(PW)/Seminar (SR)/Internship(IN)	15	32
Mandatory Credit Audit Courses (Environmental studies, Indian Constitution, Universal Human Values, Kannada).	00	04
Non-Credit audit courses (NSS, Yoga, PE)	0	0
Total	160	160

6.3.4 AICTE Activity Points

It is essential for students to earn Activity Points for award of Degree. Regular UG students shall earn 100 Activity Points during the program. Similarly, lateral entry students shall earn 75 Activity Points during the program. The Activity Points are reflected in the Grade Card of the VIII semester. Hence, students shall plan to continuously earn the AICTE Activity Points (based on the guidance of the Proctor) as indicated in Table-9.



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Table-9: AICTE Activity

Sl. No	AICTE Activity Head
1.	Support to School
2.	Business Proposal for village
3.	Sustainable water
4.	Tourism promotion
5.	Promotion of technologies
6.	Reduction in Energy consumption
7.	Skill rural population
8.	Digitized money transaction
9.	Women–Social /Economic
10.	Efficient garbage disposal
11.	Marketing of rural produce
12.	Food Preservation/Packaging
13.	Automation of local activities
14.	Rural outreach programs
15.	Contribution to National initiatives-Digital India/Skill India/ Swachh Bharat Internship etc
16.	Contribution to activities in the institution (department / Institution Level)



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Mandatory Earning of Points:

Sl. No	Student Category	Activity points prescribed
1	Regular students admitted to the 4-year degree programme	100
2	Students entering 4year degree programme through lateral entry	75
3	Students transferred from other universities to the 5 th semester	50

6.3.5 Non-credit Mandatory Courses:

The UG Degree programmes also require the inclusion of certain courses for overall personality development. Such courses shall not carry any credit for the award of the Degree. But, a pass in each such course during the programme shall be a necessary requirement for the student to qualify for the Degree. Hence, the UG programme includes Mandatory Courses as suggested by the respective BoS, and to include the student's performance (like, Pass or No-Pass) in such course(s) in his/her transcript. These courses are evaluated based on the performance in the CIE (and do not have the SEE component). Sample non-credit mandatory courses are listed below in Table 10 offered at the Institution level, inclusion of non-credit mandatory Courses is decided by the respective BOS.

Table10: Sample Non-Credit Mandatory Courses for B.E programme

S. No.	Non- credit Mandatory Courses (Both regular and lateral entry students) for a maximum of two hours/week
1.	NSS / Yoga/ Physical Education
2.	Placement training
3.	Skill Laboratory

6.3.6 Mandatory courses and other requirements



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The UG degree programme also requires the inclusion of certain courses necessary for familiarity of subjects. A pass in each course during the programme shall be necessary requirement for the student qualifies for the degree. Hence each Autonomous institution under the university shall take suitable steps to organize the mandatory courses as required and to include the student's performance (Pass or Not – Pass) in such course(s) in his / her transcript.

These mandatory courses shall be as notified by university from time to time.

Table11: Sample Credit Mandatory Courses for B.E programme

S.No.	Credit Mandatory Courses for both regular and lateral entry students for a maximum of two hours/ week
1.	Environmental Studies
2.	Constitution of India
3.	Communication English
4.	Kannada
5.	Universal Human Values

6.4 PG Degree Programmes

6.4.1 M. Tech Programmes:

Autonomous institution under the university may conduct a variety of PG programmes like M.Tech, MBA and MCA. Typical allocation of credits for each the programme is given in Table 13. Here, hard core includes all compulsory Courses, whereas soft core covers a choice to be made from among the suggested compulsory Courses. The credit range for each category is based on the guidelines from the University and the AICTE model curriculum.



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While it is desirable for all the Autonomous institutions under the university to follow the percentage range of total no. of credits allocated under each category, the institution shall be free to fix the actual number of credits under each category.

Table13: Typical Credits distribution for the M.Tech Programme

Course Category	Typical Credits
Programme Core Courses (PC)	22
Programme Electives(PE)	30
Project Work (PW)	20
Seminar(SR), Industrial Internship(INT)	08
Total	80

In view of the enhanced focus on Research for M.Tech, programmes, it is recommended that the Project work leads to a Research publication in a reputed Journal/Conference or the filing of patent/design with the patent office, or, the start-up initiative with a sustainable and viable business model accepted by the incubation center of the institution together with the formal registration of the startup.

6.4.2 M.B.A Programme:

The Institution offers the PG programme in Master of Business Administration (M.B.A) with credit distribution among various curricular components as given in Table 14. The MBA programme includes courses from Professional Core (PC), Functional Electives (FE), Cross Functional Electives (XE), Humanities and Social Sciences (HS), Project (PJ), Seminar (SR) and non-credit mandatory courses (NC).



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Table14: Typical Credits distribution for the MBA programme

Course Category	Typical credits
Programme Core Courses (Hard/Soft)(PC)	50
Functional Electives (Specialization)(FE)	36
Seminar(SR)	04
Project Work(PW), Internship/Field Work (INT)	10
Total	100

It is recommended that the Project work of the M.B.A. programme, leads to a Research publication in a reputed Journal/ Conference, or, the start-up initiative with a sustainable and viable business model accepted by the incubation center of the institution together with the formal registration of the startup.

6.4.3 M.C.A Programme:

The Institution offers the PG programme in Master of Computer Applications (M.C.A), with credit distribution among various curricular components as given in Table 15.

Table15: Typical Credits distribution for the M.C.A programme

Course Category	Typical credits
Programme Core Courses(Hard/Soft)(PC)	54
Functional Electives(Specialization)(FE)	12
Internship (INT)	04
Project Work (PW)	10
Total	80

It is recommended that the Project work of the M.C.A. programme, leads to a Research publication in a reputed Journal/ Conference or the filing of patent with the patent office, or, the start-up initiative with a sustainable and viable business model accepted by the incubation center of the institution together with the formal registration of the startup.



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7. ASSESSMENT

7.1 Achievement Testing through CIE and SEE:

7.1.1 The assessment of students' performance in course work during and/or at the conclusion of a programme has to be done using examinations. In general, an examination addresses different objectives, like achievement-testing, prediction-testing, endurance-testing, creativity-testing and testing for ranking.

7.1.2 In technical education, the assessment has to be preferably of the achievement-testing type, so that a student's knowledge, understanding and competence in the courses studied are properly assessed and certified. The Regulations given below enable the Autonomous Institutions to achieve this goal and gain the confidence and respect of their stake holders, particularly students. Typically, achievement- testing is done in two parts as follows, both of them being important in assessing a student's achievement:

- **Continuous Internal Evaluation (CIE)** to be conducted by the course instructor all through the semester. This includes mid-term tests, weekly/ fortnightly class tests, home work assignments, problem solving, group discussions, quiz, seminar, mini-project and other means.
- **Semester End Examinations (SEE)**, to be conducted by the course instructor jointly with an external examiner at the end of a semester, on dates to be fixed at the Institution level. This includes a written examination for theory courses and practical/design examination with built-in oral part for laboratory/design courses.

7.1.3 Both CIE and SEE being equally important in judging the coursework performance of students, they need to be conducted with equal rigour and equal seriousness in the credit system. This makes it necessary that both



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of them are assigned equal (50:50) weightage. And, a student's performance in coursework shall be judged by taking into account the results of both CIE and SEE individually and also together by giving equal weightage for them. This practice is followed for all courses offered and for all programmes.

7.1.4 Two or Three Tests are Compulsory and sum of the two tests (best of three), along with the scores obtained in the quizzes/AAT shall be considered for computing the final CIE of a student in a given course. The TESTs/quizzes/ AAT shall be conducted by the course faculty with due approval from the HOD. Advance notification for the conduction of Quiz/AAT is mandatory and the responsibility lies with the concerned course faculty.

7.1.5 Compensatory Test: A Compensatory Test will be provided to those students who are having satisfactory attendance, course-wise but remained absent for the TEST due to a valid/unavoidable circumstance with prior permission OR aim for improvement in the CIE component of the course.

The purpose of conducting internal assessments is to ensure continuous evaluation and measure continuous learning. Hence, the Compensatory Test is conducted purely to address genuine student cases. Hence, only **ONE Compensatory Test** will be conducted by the course faculty which includes the portion of both internal tests (portion of Test-1 and Test-2) during the period indicated in the Academic Calendar.

7.2 QUESTION PAPERS GUIDELINES

7.2.1 Question Paper Pattern:

For an effective achievement testing of students in a course, a good question paper needs to be used as the principle tool. This makes it



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necessary for the question papers used at CIE and SEE to;

- Cover all sections of the course syllabus uniformly.
- Be unambiguous and free from any defects/errors.
- Emphasize knowledge testing, problem solving and quantitative methods.
- Contain adequate data/other information on the problems assigned
- Have clear and complete instructions to the candidates.

7.2.2 Question Paper Planning:

The above requirements make it necessary for a Question Paper to cover the entire syllabus, with a provision for the students to answer questions from the whole syllabus. As students need to be given some choice in the questions included in the Paper, it is necessary for the Question Papers at SEE, in particular, to have built in choice under each module of the syllabus. This factor shall be taken note of and strictly followed by each Autonomous Institution, while planning of the Question Papers.

Besides, it is also necessary for the Course syllabi to be drafted properly, be defect-free and also properly given in modular form to enable the setting of good question papers covering the whole syllabus. These aspects have to be taken into account, in particular, by the Boards of Studies.

7.2.3 Typical Question Paper:

The questions to be included in the Question Papers at CIE and SEE can be of two types as follows and the course instructors as well as the external examiners shall have to be well trained/experienced to set them.

- **Multiple Choice Question**, having each question to be answered by tick marking the correct answer from the choices (commonly four) given



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against it. Such a question paper to be useful in the testing of knowledge, skills, comprehension, application, analysis, synthesis, evaluation and understanding of the students. CIE to include questions of this type through quiz or other assessments.

- **Comprehensive Questions**, having all questions of the regular type to be answered in detail. Such a Question Paper to be useful in the testing of overall achievement and maturity of the students in a course through long questions relating to theoretical/practical knowledge, derivations, problem solving, modeling, simulation, design, application and quantitative evaluation. Questions of this type are included in both CIE and SEE.
- **CIE:** The CIE shall be conducted exclusively by the course instructor. The instructor to spell out the components of CIE to the students in advance, maintain transparency in its operation, declare the evaluation results in time and then return the answer scripts and assignment sheets to them as soon as possible. The instructor to also solve the questions from these test papers during tutorial sessions for the benefit of all the students concerned, especially slow learners.

7.2.4 Review committee for CIE

- i. Review of assessment is an organized procedure that ensures the use of valid assessment methods and consistent application of criteria, to provide fair academic judgment and reliable outcomes in the form of marks or grades. It assures appropriate designing and implementation of assessment activities along with the generation of valid and reliable results.
- ii. After each test, the Principal/ Dean shall ensure that the evaluation is fair in each of the courses, scheme of valuation is uniformly followed and that the award of marks in the courses follow a normal distribution



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- curve. If there are any lapses or the marks distribution is either left skewed or right skewed, corrective measures shall be taken and the Report to be submitted to the University.
- iii. There shall be a Review Committee for Internal Assessments in every Department, which shall be chaired by the Head of Department and two senior faculty members nominated by the Principal/Dean. This Committee shall be responsible for the entire process of Internal Assessment in the Department, including redressal of grievances, if any.
- iv. **Guideline for the Review Committee:** Review may be conducted after each test or after the tests in case there is a large number of failures or high marks, or when large numbers of students have received the same marks, or when there are wide discrepancies between marks allocated to individual students in different courses,
- Split-up of marks used for each of the different types of assessment in the course may be checked.
 - Checking of the questions to find whether it maps to course outcomes.
 - Checking the difficulty level of questions paper i.e is the difficulty level on the high extreme, very easy or otherwise.
 - Whether the assessment modes are used to cover the entire syllabus or not
 - Checking the manner of awarding the marks, i.e has correction been at the extremes, liberal or tough?
 - Moderation should not be restricted to just assessment but also includes the assessment design (scheme of evaluation).

7.3 ASSESSMENT PATTERNS FOR CIE

The CIE shall be conducted by the faculty handling the Course. It is the responsibility of the faculty handling a course to spell out the teaching/assessment pattern of the CIE such as test, quiz, assignment,



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seminar, open ended experiments, mini-projects, MOOCs etc. and also the necessary rubrics to students well in advance. The faculty shall maintain transparency, announce the CIE results well in time.

7.3.1 Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members have been encouraged to use the Alternative Assessment Tool (AAT). Thus, AAT enables faculty to employ innovative methods and design own assessment patterns during the CIE. However, the usage of AAT is completely optional. The AAT enhances the autonomy of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning space.

Some possible AAT are: seminar/ assignments/ open ended experiments/ mini-projects/ concept videos/ partial reproduction of research work/ oral presentation of research work/ group activity/ developing a generic tool-box for problemsolving/reportbasedonparticipationincreate-a-thon/make-a-thon/code-a-thon/ hack-a-thon conducted by reputed organizations/ any other.

However, it is mandated for a faculty to announce the AAT in the respective class before the commencement of a course.

7.3.2 ASSESSMENT PATTERNS FOR UG AND PG COURSES INCLUDING AAT ASSESSMENT DETAILS BOTH (CIE AND SEE)

The weightage of continuous Internal Evaluation (CIE) is 50% and for the Semester End Examination (SEE) is 50%. The minimum passing mark for the CIE is 40% of maximum marks (20 marks out of 50). The minimum



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passing mark for SEE is 35% of maximum marks (18 marks out of 50). A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each course. Student has to secure a minimum 40% (40 marks out of 100) in the total of the CIE and SEE together.

SEMESTER END EXAMINATION (SEE):

Theory SEE will be conducted by the institution as per the scheduled timetable, with common question papers for the subject.

1. The question paper shall be set for 100 marks. The medium of the question paper shall be in English. The duration of SEE is 3 hours.
2. The question paper will have 10 questions. Two questions per module. Each question is set for 20 marks. The students have to answer 5 full questions, selecting one full question from each module.
3. Students have to answer for 100 marks and marks scored out of 100 shall be proportionally reduced to 50 marks.
4. There will be two questions from each module. Each of the two questions under a module (with a maximum of 3 sub-questions), should have a mix of topics under that module.

7.3.2.1 Assessment pattern for Integrated Courses:

The weightage of continuous Internal Evaluation (CIE) is 50% and for the Semester End Examination (SEE) is 50%. The minimum passing mark for the CIE is 40% of maximum marks (20 marks out of 50). The minimum passing mark for SEE is 35% of maximum marks (18 marks out of 50). A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each course. Student has to secure a minimum 40% (40 marks out of 100) in the total of the CIE and SEE



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together.

The CIE marks for the theory component of the **Integrated Course (IC)** shall be 25 marks and for the laboratory component 25 marks

CONTINUOUS INTERNAL EVALUATION FOR THE THEORY COMPONENT OF IC:

1. Three tests each of 50 marks, after the completion of the syllabus 40%, 70% and 100% respectively.
2. Average of best two internal assessment tests each of 50 marks, scale down to 20 marks.
3. Any two assessment methods as per regulations i.e. Two assignments / Two Quizzes/ Weekly test / project work for 10 marks, scaled down to 5 marks.
4. Total marks scored (20+5 = 25 marks).

CONTINUOUS INTERNAL EVALUATION: Practical component of IC

1. On completion of every experiment / program in the laboratory, the students shall be evaluated and marks shall be awarded on the same day.
2. The **10 marks** for conducting the experiment and record writing, the other **15 marks** shall be for the test to be conducted at the end of the semester.
3. Laboratory test at the end of the 15th week of the semester / after completion of all the experiments shall be conducted for **50 marks** and scaled down to **15 marks**.
4. The minimum marks to be secured in CIE to appear for SEE shall be 10(40% of maximum marks 25) in the theory and 10(40% of Maximum marks 25) in the practical.



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- The laboratory component of the **integrated course** shall be CIE only. However, in SEE, the questions from the practical component shall be included.
- The maximum of 05 questions is to be set from the practical component and the total marks of all questions should not be more than 25 marks.

Table-17: Typical distribution of weightage for CIE & SEE for Integrated Courses

Component		Exam Conduction for	Scaled down to	Total Marks	
CIE	Theory	Internal-I	50	20	Average of Best Two Tests + AAT: 20+5 = 25
		Internal-II	50	20	
		Internal - III	50	20	
		AAT (Assignment, Quiz, Seminar etc.,)	10	5	
	LAB	Continuous Performance and Record writing		10	10+15=25
		Test + Viva Voce		15	
		Total			
SEE	Semester End Exam		50	50	
Total Marks				100	

If AAT is employed, the concerned teacher shall prescribe the pattern of assessment prior to commencement of the classes

SEMESTER END EXAMINATION (SEE):

Theory SEE will be conducted by the institution as per the scheduled timetable, with common question papers for the subject.

- The question paper shall be set for 100 marks. The medium of the question paper shall be in English. The duration of SEE is 3 hours.



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2. The question paper will have 10 questions. Two questions per module. Each question is set for 20 marks. The students have to answer 5 full questions, selecting one full question from each module.
3. Students has to answer for 100 marks and marks scored out of 100 shall be proportionally reduced to 50 marks.
4. There will be two questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.

Note: Students shall secure a minimum of 40% in CIE and should have 85% attendance.

In case of integrated courses, a student must secure a minimum of 40% marks and 85% attendance in both theory and practical components. In addition, the overall CIE marks including theory and practical components shall not be less than 40%.

7.3.2.2 Assessment Patterns for PG Programmes M.Tech and MCA

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/course if the student secures not less than 50% (50 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.

CONTINUOUS INTERNAL EVALUATION (CIE):

1. Three Unit Tests each of 20 Marks
2. Two assignments each of 20 Marks or one Skill Development Activity of 40 marks to attain the COs and POs The sum of three tests, two assignments/skill



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Development Activities, will be scaled down to 50 marks CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the Outcome defined for the course.

SEMESTER END EXAMINATION (SEE):

1. The SEE question paper will be set for 100 marks and the marks scored will be proportionately reduced to 50.
2. The question paper will have ten full questions carrying equal marks.
3. Each full question is for 20 marks. There will be two full questions (with a maximum of four sub-questions) from each module.
4. Each full question will have a sub-question covering all the topics under a module. 5. The students will have to answer five full questions, selecting one full question from each module.

Table-18: Typical distribution of weightage for CIE & SEE for M.Tech & MCA

Component		Exam Conduction Marks	Total Marks
CIE	Internals-I	20	Scaled down to 50
	Internals-II	20	
	Internals-III	20	
	Assignment – I & II	20	
	Flexible Assessment Component: Design of Experiment/ Implementation of Research Paper/ Literature Review/Oral Seminar/ Mini-Project/ any other	20	
SEE	Semester End Exam	50	50
Total Marks			100

Assessment Patterns for PG Programme: MBA

Assessment Details (both CIE and SEE) The weightage of Continuous Internal



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Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum mark. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/course, if the student secures not less than 50% of the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination).

Continuous Internal Evaluation (CIE): There shall be a maximum of 50 CIE Marks. A candidate shall obtain not less than 50% of the maximum marks prescribed for the CIE.

CIE Marks shall be based on

- a. Two tests for 25Marks
- b. Assignments, Quiz, Simulations, Experimentation, Mini projects, oral examinations, fieldwork etc., (for 25 Marks) conducted in this course. Course instructors are given autonomy in choosing a few of the above based on the subject relevance and should maintain relevant supporting documents for this.

Semester End Examination:

The SEE question paper will be set for 100 marks and the marks scored will be proportionately reduced to 50. The question paper will have 8 full questions carrying equal marks.

1. Each full question is for 20 marks.
2. Each full question will have a sub-question covering all the topics under a Module.
3. The students will have to answer five full questions; selecting four questions from questions
4. One to seven and question eight is compulsory.



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The sum of Three tests, Two assignments, Skill Development Activities will be out of 100 marks and will be scaled down to 50 Marks.

Typical distribution of weightage for CIE & SEE for MBA

Component		Range of Marks	Total Marks
CIE	Internals-I	25	50
	Internals-II	25	
	Internals-III	25	
	Assignment – I & II	10	
	Flexible Assessment Component: Design of Experiment/ Implementation of Research Paper/ Literature Review/Oral Seminar/ Mini-Project/ any other	15	
SEE	Semester End Exam	50	50
Total Marks			100

7.4 SEMESTER END EXAMINATIONS (SEE):

7.4.1 Maintenance of Standards: For ensuring a high standard in both CIE and SEE fully meeting the provisions of the University Statutes and being able to declare the results of students' performance at both these in a time bound manner as per their Academic Calendars, each Autonomous Institution follows the suggestions given below for conducting the examinations:

7.4.1.1 SEE: The SEE shall be conducted jointly by the course instructor and an external examiner appointed for this purpose by the Autonomous Institution. Here, the external examiner to mainly associate with the work of Question Paper setting, because of the difficulties in having him/her for conducting the evaluation of students' answer scripts due to the tight time schedule for the various tasks connected with SEE, as covered



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below.

7.4.1.2 SEE Answer Scripts: The answer scripts of SEE shall be normally evaluated by the course instructor only. But as a healthy step, a Departmental Committee at each Autonomous Institution to preferably oversee this task and ensure the quality and standard of evaluation and also of the grades awarded in all the cases. The next step to be taken before declaring the results, to include an external review of the SEE conducted.

7.4.1.3 External Review of SEE: An external review shall be conducted under the aegis of the Board of Studies/Board of Examiners of the Autonomous Institution by appointing a panel of experts from outside the Institution for this purpose aiming at a complete review of SEE operation in the Institution. This shall include such steps as, question paper review, checking random samples of answer scripts, analysis of results/grades awarded and other related aspects. This step to be also necessary for gaining the confidence of the University and of the society at large, on the fairness, transparency and acceptability of the examination practice among the stakeholders.

7.4.1.4 Attendance Standards: All students of Autonomous Institutions under the University shall maintain a minimum attendance of 85% in each course registered. In case of any short fall in this, the Academic Council of the Institution shall consider the same and shall condone the deficiency in special cases up to 10%. Any student failing to meet the above standard of attendance in any course(s) registered shall not be allowed to appear for SEE of such course(s).

7.4.1.5 Attendance of CIE and SEE: Attendance at all examinations, both CIE and SEE of each course registered shall be compulsory for the students and there shall not be any provision for re-examinations. Any student against whom any disciplinary action by the Institution/University is



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pending shall not be permitted to attend any SEE in that Semester.

7.4.1.6 Passing Standards of CIE & SEE

High standards shall be maintained in all aspects of the examinations at Autonomous Institutions under the University. For this purpose, each Autonomous Institution shall follow the standards of passing at CIE and SEE for each Course, registered, as given in Table 19& 20.

Table19: U G Passing Standards using Absolute Grading

Evaluation Method	Passing Standard
Continuous Internal Evaluation (CIE)	≥40% of the Max. Marks
Semester End Examination (SEE)	≥35% of the Max. Marks
CIE+SEE	≥40% of the Max. Marks

Table20:P G Passing Standards using Absolute Grading

Evaluation Method	Passing Standard
Continuous Internal Evaluation (CIE)	≥50% of the Max. Marks
Semester End Examination(SEE)	≥40% of the Max. Marks
CIE + SEE	≥ 50% of the Max. Marks

Note: Autonomous institutes shall follow any notification issued by the university in this regard from time to time.

7.4.1.7 Project work Evaluation: The evaluation of CIE of the project work shall be based on the progress of the student in the work assigned by the project supervisor periodically evaluated by him/her together with a **Project Review Committee (PRC)** constituted by the department.

PRC comprises two senior faculties of the department/programme-wise and one faculty supervisor/Project guide (as assigned by the department for every student/student group).

Seminar presentation, project report (dissertation) and final oral



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examination conducted by a common Project Review Committee at the Institution level shall form the SEE of the project work. The evaluation of **SEE** of the project works shall be jointly conducted by the Project Guide and an External examiner.

7.4.1.8 Plagiarism index for Project report: PG Programmes

All project reports shall go through the plagiarism check and the plagiarism index has to be less than or equal to 25%.

A proportionate reduction of marks when the plagiarism check and the plagiarism index is between more than 25% and less than 40%. Thesis/Project reports with plagiarism more than 40% and less than 60% shall be asked for resubmission within a stipulated period of six months. Thesis/Project reports with plagiarism more than 60% shall be rejected.

7.4.1.9 Re-examination for any Course

There shall be no re-examination for any Course in the credit system to take care of such students:

- Who have absented themselves from attending CIE or SEE without any valid reason.
- Who have failed (Grade F) to meet the minimum passing, Standard prescribed for CIE and/or SEE.
- Who have been detained for shortage of attendance in any course work.
- Who have withdrawn (Grade W) from a Course.

Such students shall be required to re-register for the Course(s) and go through CIE and SEE again and obtain a Grade P or better in each case. While such students shall have to re-register for the same Course(s) if professional core, they can re-register for alternative Course(s) from among the professional core or Professional Core Elective Courses, as



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applicable. The re-registration shall be possible only when the particular Course is offered again either in a main (Odd/Even) or a make-up examination.

7.4.1.10 Monitoring/Assessment for Research Degrees: Students registered for Research Degrees shall be monitored and assessed at Institution level. For details, refer to the exclusive Academic Rules & Regulations for Research Programmes.

7.5 ATTENDANCE REQUIREMENT

7.5.1 All students shall maintain a minimum attendance of 85% in each course registered. In case of shortfall, the concerned Head of the Department shall consider and shall condone deficiency up to a limit of 10% in special cases and shall submit a list of such candidates to the office of Dean-Academics and COE. However, all the relevant documents pertaining to condonation of attendance shall be maintained by the respective department and produced as and when required by the Institutional authorities.

Any student failing to meet the above standard of attendance in any course(s) registered shall not be allowed to appear for SEE of such course(s).

7.5.2 In the event of condonation, the students are not eligible for make-up examination in that course during that semester.

7.5.3 Attendance at CIE and SEE: Attendance at all examinations, both CIE and SEE of each course registered shall be compulsory for the students and there shall not be any provision for re-examination/consideration.

7.5.4 Any student against whom any disciplinary action by the Institution is pending shall not be permitted to attend any SEE in that Semester.

7.5.5 Each Semester is considered as a unit and the candidate has to put in a minimum attendance of 85% in each course with a provision of



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condonation of 10% attendance for reasons such as medical emergencies and legitimate grounds.

- 7.5.6** The basis for the calculation of the attendance shall be the period prescribed by the Institution by its calendar of events. For the first semester students, the same is reckoned from the date of admission to the programme.
- 7.5.7** The students shall take note of his/ her attendance status periodically from the respective faculty and strive to make up the shortage. However, the departments shall periodically announce the attendance status of the students. Non-receipt of such information from the institution shall not be considered as valid reason for exemption from the attendance requirements.
- 7.5.8** If a student **does not fulfill the attendance requirements** in any course, he/she is not permitted to attend the Semester End Examination (SEE) in that course and is deemed to have been **awarded “F” grade** in that course (option for withdrawal is not available in such cases).

8. GRADING

8.1 General:

In recent years, the grading system has replaced the evaluation of students' performance in a Course based on absolute marks, because of its many advantages. Therefore, Autonomous Institutions under the University shall follow this practice. Here again, it is necessary to maintain uniformity in the grading practices at different Institutions to ensure that the migration of students or transfer of credits among Autonomous Institutions under the University is made easy.



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8.1.1 Letter Grades: A letter grade is basically a qualitative measure (an alphabet/letter) giving the performance of a student, such as, *Outstanding*(O), *Excellent*(A+), *Very Good*(A), *Good* (B+), *Above Average* (B), *Average* (C) *Pass* (P) and *Fail* (F), based on the raw score (marks, as in conventional practice) obtained by the student. This is usually arrived at after the student's performance in a Course, which includes both CIE and SEE, is assessed and raw score (marks) for the total area awarded to begin with, followed by grouping of all the students at a Course under different grading levels, as above.

Additional letter grades used under special circumstances are **DX: Attendance below 75%, AU: Satisfactory in an Audit course, AB: Absent for the course, PP: Passed in Non-Credit course, NP: Not Passed in Non-Credit course, W: Dropped / Withdrawn**

8.1.2 Absolute Grading: The Institution adopts the absolute grading system.

8.2 GRADE POINTS:

a) Depending on the letter grades assigned, a student earns certain grade points. As the grading system can have different scales for grade points (like 5, 8, 10.) with a greater number of points in the scale being desirable for providing higher resolution in the assessment. Moreover, all Autonomous Institutions under the University need to follow the same scale for uniformity in their operations. Hence, the Autonomous Institutions under the University shall follow the 10-point grading system, as given in Table 19 for both the relative grading system and the absolute grading system.



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b)

Table19: Grade Points Scales for both Relative and Absolute Grading

Level	Out-standing	Excellent	Very Good	Good	Above Average	Average	Pass	Fail
Grade	O	A+	A	B+	B	C	P	F
Grade Points	10	09	08	07	06	05	04	0
Marks Range	90-100	80-89	70-79	60-69	55-59	50-54	40-49	0-39

c) The grade points given in Table 19 helps in the evaluation of credit points earned by the student in a Course as the credit points are equal to the number of credits assigned to the Course multiplied by the grade points awarded to the student in that Course. This shall be used in arriving at the credit index of the student for that semester, as it is the sum total of all the credit points earned by the student for all the Courses registered in that semester.

8.2.1 Earning of Credits: A student shall be considered to have completed a Course successfully and earned credits if he/she secures an acceptable letter grade in the range O to P. Letter grade F in any Course implies failure of the student in that Course and no credit shall be earned.

8.2.2 Grade Card: Each student shall be issued a Grade Card (or transcript) at the end of each semester. While this shall have a list of all the Courses registered by a student in the semester together with their credits. And, the Courses taken for audit shall not form part of SGPA and CGPA calculation. The results of mandatory courses, which are of the non-credit type, shall also be reflected in the Grade Card as PP (for Passed) or NP (for Not Passed). It shall be noted that each UG student shall have to obtain the grade PP in each mandatory course to qualify for the Degree award by the University.



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8.2.3 Make-up Examination

- i. The students who have satisfied CIE and Attendance requirement for the course/s and obtained **F** grade in SEE are permitted to appear directly in SEE examination/s as backlog paper/s. The students need not re-register for such course/s in the make-up examination. In case student wished to improve CIE he/she re-register for make-up examination and when offered next.
- ii. The student who obtains required attendance and CIE in make-up examination, but obtains F grade in SEE, is permitted to appear for SEE subsequently as backlog course/s. The student need not repeat course for attendance and CIE.
- iii. The course/s for which the student doesn't possess satisfactory attendance/CIE score, shall be marked as NE in the grade card. Such students are not permitted to take up SEE for the courses marked as NE in grade card. The students have to re-register only for course/s marked as NE in Make-up examination / subsequent semester whenever that course is offered and obtain the required CIE and attendance.
- iv. All courses may not be offered in the Make-up examination. It is the discretion of the institution to offer the courses based on the availability of resources. The institutes shall notify time table for Make-up examination well in advance.
- v. Make-up examination is a special examination and the student cannot demand it as a matter of right. A student is permitted to register for a maximum of 16 / 18 credits in the Make-up examination.



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8.2.4 Schedule of Examinations

The controller of Examinations will announce the schedule for the SEE, make-up and supplementary examinations. Examinations in an academic year conducted in the following order:

- i. SEE at the end of ODD / EVEN semester
- ii. Supplementary Examinations
- iii. Make-up examination after EVEN semester

8.2.5 Revaluation / Paper Viewing Process (PVP) applicable to all SEE except Lab Examinations

Revaluation / Paper Viewing Process (PVP) has been implemented for both UG and PG programs. After the provisional results are announced, the candidate can view his/her SEE answer scripts. The candidate shall register for PVP and during PVP he/she can give his/her grievance in writing in the prescribed format. Then the answer scripts evaluated once again based on the grievance of the student by an expert committee. PVP is final and this eliminates issue of Photostat copying of answer scripts, re-valuation and challenge valuation.

PVP involves the following steps:

Step1: Registration for PVP: The registration dates will be announced by the COE office once the provisional results have been announced. For each Course/s for which the student wishes to verify the answer script, the student needs to register for the course in the prescribed format.

Step2: Schedule for PVP: The schedule to view the answer scripts will be announced and the student should be present personally to view the answer scripts. During this time, the student will be provided with a grievance form along with the evaluated answer script with marks awarded, scheme of valuation and solution. The students should provide



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the specific grievance question wise and only those grievances will be addressed.

Step3: Valuation by Expert Team: The grievance forms will be verified and each answer script applied for PVP will be evaluated by an expert team and if any change in the marks awarded is found, then better of the marks shall be considered for final grading. No negative evaluation in PVP.

8.2.6 Rejection of Results

A student is permitted to reject the results of an entire semester (including CIE) only once during the program duration. The student, who desires to reject the performance, shall reject performance in all the courses of the semester, irrespective of whether he/she has passed or failed in the courses. Such a student will have to represent to the principal in writing with the concurrence of the parent. Rejection of the result is not permitted to the students who have grade 'MP' in the respective semester until the compliance of penalty and punishment is cleared.

1. A student is permitted to reject the total performance of a semester (including CIE) or reject only the result of his/her performance in a SEE of a semester. The rejection is permitted only once during the entire programme of study.
2. Students who desire to reject SEE results of a semester shall reject the total performance in all courses of the semester either rejecting or retaining the CIE marks. However, rejection of the performance of the VIII semester project shall not be permitted.
3. Students who desire to reject the total SEE performance of an odd or even semester including CIE marks, have to repeat that odd or even semester of the prevailing scheme by taking the subsequent academic



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years.

- (i) If the rejection of SEE results excluding CIE marks is of the odd semester, students shall be allowed to take admission to the immediate next even semester.
- (ii) If the rejection of SEE results excluding CIE marks is of an even semester, students shall be allowed to take admission to the immediate next odd semester.
- (iii) Readmission to odd/even semesters shall not be considered as fresh admission and therefore students shall continue to have the same USN, which was allotted earlier. The maximum duration of the program shall be counted with reference to the USN.

4. Registration of SEE is compulsory if the student/s has satisfied the attendance and CIE requirement of Odd/Even semester.

In case, the students fail to register for SEE of the odd semester after satisfying the attendance and CIE requirements of the semester, they shall be permitted to move to an even semester of that academic year. However, such students have to register for odd semester examinations conducted at the end of the academic year for all the semesters and registration shall be considered for the first attempt.

In case, students fail to register for the odd semester SEE after completing successfully the even semester, they shall not be permitted to move to the higher odd semester of the subsequent academic year. Irrespective of a student appearing for SEE, he/she has to register for odd and even semester before completing the academic year.

5. Student who opt for rejection of results of the university examination shall be eligible for the award of the degree and Minor degree but not for the award of ranks and Honors Degree.



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8.3 Grade Point Averages:

8.3.1 SGPA and CGPA: The credit index can be used further for calculating the Semester Grade Point Average (SGPA) and the Cumulative Grade Point Average (CGPA), both being important academic performance indices of the student. While SGPA is equal to the credit index for a semester divided by the total number of credits registered by the student in that semester, CGPA gives the sum total of credit indices of all the previous semesters divided by the total number of credits registered in all these semesters. Both the equations together facilitate the declaration of academic performance of a student, at the end of a semester and at the end of successive semesters respectively. Thus,

Semester Grade Point Average (SGPA):

$$\text{SGPA} = \frac{\sum(\text{Course credits} \times \text{Grade Points})}{\sum(\text{Course credits})}$$

$$\sum(\text{Course credits})$$

Considering all the courses registered in that semester (including with F Grades)

Cumulative Grade Point Average (CGPA):

$$\text{CGPA} = \frac{\sum(\text{Course credits} \times \text{SGPA})}{\sum(\text{Course credits})}$$

$$\sum(\text{Course credits})$$

For all courses registered until that semester (excluding those with F Grades)

Illustrative Example: An illustrative example given in Table 20 indicates the use of the two equations in calculating SGPA and CGPA, Both of them shall be normally calculated up to the second decimal position, so that the CGPA, in particular, can be made use of in rank ordering the students' performance in a class at an Autonomous Institution. If two students get the same CGPA, the tie shall be resolved by considering the number of times a student has



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obtained higher SGPA. But, if it is not resolved even at this stage, the number of times a student has obtained higher grades like O, A+, A shall be taken into account in rank ordering of the students in the class.

Table20: SGPA/CGPA Calculations: An Illustrative Example

Semester (Odd:I,Even:II)	Course No.	Credits	Grade	Grade Points	Credit Points	SGPA
I	XX101	3	A	8	24	SGPA 116/20 =5.8
I	XX102	3	F	0	00	
I	XX103	3	A+	9	27	
I	XX104	4	B	6	24	
I	XX105	4	B	6	24	
I	XX106	2	C	5	10	
I	XX107	1	B+	7	7	
Total		20 (17*)	Total		116	
II	XX201	3	O	10	30	SGPA 124/20 =6.2
II	XX202	3	A	8	24	
II	XX203	3	B+	7	21	
II	XX204	4	F	0	0	
II	XX205	4	A	8	32	CGPA 240/33 =7.27
II	XX206	2	B	6	12	
II	XX207	1	C	5	5	
Total		20 (16*)	Total		124	
Supplementary	XX102	3	C	5	15	CGPA 291/40 =7.28
Supplementary	XX204	4	A+	9	36	
Total		7	Total		51	

*Total No. of credits excluding those with 'F' and 'W' grades particularly important to keep track of the number of credits earned by a student up to any semester.



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8.4 Vertical Progression: The criteria for Vertical Progression is based on University guidelines. Hence, to facilitate the mobility of students from one Institution to another and to lay down uniform minimum standards for CGPA together with the minimum number of credits to be earned in an academic year, the standards for vertical progression for **all programs (BE, B.Sc (Hons), BCA(Hons), BBA(Hons), M.Tech, MBA and MCA)** offered by the Institution is as follows:

8.4.1 Students admitted to the first year

- a) Students having 'F' grades for the courses totaling to more than 16 credits in the 1st and 2nd semesters of the first year of the programme shall not be permitted to move to the 3rd semester (II year) of the programme.
- b) The students who fail to satisfy CIE and attendance requirement shall repeat the courses whenever offered next and become eligible for the 2nd year.
- c) A student shall be given admission to the 7th semester (IV year) provided he/she passes all the courses of 1st and 2nd semester.

8.4.2 Obtaining CIE: From the 3rd semester onwards the student who Obtains the required attendance for the courses, but not the required CIE marks is allowed to move forward to the next semester. However, the student shall mandatorily obtain the CIE in the subsequent semester. Obtaining minimum CIE marks for the course is mandatory. It may also be noted that the student shall not be permitted to appear for SEE in such courses until he/she obtains the required CIE.

8.4.3 Completion of Backlog courses: From 3rd semester onwards,

- (i) The student who obtains required attendance, CIE and appearing for SEE obtains F Grade shall be allowed to move forward to the next semester



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(Odd/Even) irrespective of several “F” grades.

- (ii) There shall be no restriction for promotion from an even next odd semester (or odd to next even semester) even if the student has not satisfied the attendance requirement in one or more courses. But he/she shall not be eligible to appear for SEE in those course(s). Such students shall repeat those courses whenever offered next.

8.4.4 A student shall be given admission to the 7th semester (IV year) provided he/she passes all courses of 1st and 2nd semesters.

8.4.5 Successive Failures and alternate course Selection:

- (i) If a student not completing a course, other than the professional core course, even after four attempts, may drop that course and choose an alternate course having the same number of credits from the pool of courses suggested by the concerned Board of studies.
- (ii) The course so selected should not have been studied by the student or to be studied in future at higher semesters. The faculty advisor shall guide / advise the student in this regard.
- (iii) The college shall make arrangements for the registration and conduction of CIE for the alternate course selected.
- (iv) This provision is given only for two courses (one at a time) during the entire maximum duration of the programme.
- (v) This provision is optional; the student can continue registering for the same course without opting for a change.

8.5 AWARD OF CLASS:

Sometimes, it is necessary to provide equivalence of these averages, viz., SGPA and CGPA with the percentages and/or Class awarded as in the conventional system of declaring the results of University examinations.



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This shall be done by Autonomous Institutions under the University only at one stage by prescribing certain specific thresholds in these averages for First Class with Distinction, First Class and Second Class, at the time of Degree Award. This provision given in Table 20 follows the approach of the Council for this purpose as reproduced from the AICTE Approval Process Handbook:

CONVERSION CGPA TO PERCENTAGE

The following Formula for Conversion of CGPA to Percentage of Marks (M) to be used only after a student has successfully completed the programme:

Percentage of Marks secured (M) = CGPA earned \times 10

Example: $6.4 \times 10 = 64\%$

$8.2 \times 10 = 82\%$

- i. First Class with Designation (FCD) if $M \geq 70\%$
- ii. First Class (FC) if $60 \leq M < 70\%$
- iii. Second Class (SC) if $50 \leq M < 60\%$
- iv. Pass Class (P) if $40 \leq M < 50\%$

8.5.1 AWARD OF GOLD MEDALS AND RANKS

A student shall be eligible for the award of Gold medal or Rank if he/she has:

- i. Passed all courses in First Attempt (No W, F, NE Grades, NP in mandatory courses and should not have dropped a course)
- ii. Secured Highest CGPA
- iii. **CGPA is considered from third semester to eighth semester.** The Gold medals and ranks are decided by Rank Awarding Committee based on the approved norms and the committee's decisions are final and binding on all stakeholders.



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8.6 MINIMUM CGPA FOR AWARD OF DEGREE

- a) Students, who have completed all the courses of the program but do not have a CGPA ≥ 5 at the end of the program, shall not be eligible for the award of the degree.
- b) In such cases, students shall be permitted to appear again for SEE in courses (other than Internship, Seminar, Project and laboratories) of any semester/s without the rejection of CIE marks for any number of times, subject to the provision of the maximum duration of the program to makeup the CGPA equal to or greater than 5 for the award of the degree.
- c) In case the student earns improved grades in all the reappeared courses, the CGPA shall be calculated considering the improved grades. If it is ≥ 5 , the students shall become eligible for the award of the degree. If CGPA < 5 , the students shall repeat the procedure.

8.7 EXAMINATION MALPRACTICES:

Any student appearing for the examination (CIE and SEE) is liable to be charged with committing malpractice in the following cases:

- i. Being in possession portions of a book manuscript, programmable calculator or any other material or matter, which is not permissible to be brought into the examination hall.
- ii. In case found with any written matter on scribbling pad, question paper, admission ticket, calculator, palm, hand, leg, handkerchief, clothes, socks, instrument box, identity card, scales etc.
- iii. Disclosing identity in SEE answer script by writing any peculiar word/symbol or by writing USN on the pages other than the cover sheet
- iv. Copying any matter or answer of another candidate or similar aid or if assistance is rendered to another candidate.
- v. Communicating with any candidate or any other person inside or outside the examination hall or assist in writing answer.



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- vi. Request/represent or offer any threat for inducement of bribery to room superintendent/any other official for favors or to the examiner in the valuation of answer script (s).
- vii. Smuggling out or in or tearing of the answer script, supplementary sheets or inserting papers written outside the examination hall into the answer book or running away along with the answer script from the examination hall or premises.
- viii. Impersonation to answer in his/her place in the examination hall.
- ix. Bringing mobile phone/smart or electronic gadget to the examination hall.
- x. Unruly behavior inside or near the examination hall.
- xi. If a student is found copying or communicating with the others during examinations and later identified in the recording captured through surveillance camera placed in the examination hall, will be referred to MPCC committee.

The students booked under malpractice will be referred to Malpractice Case Consideration Committee (MPCC) for suitable disciplinary action. For any of these malpractices mentioned above the disciplinary/punitive action recommended by the MPCC is final and binding.

The guidelines for recommending penalties and punishments to the students involved in Malpractices during institution examinations shall be as given in the table below.

Sl.No	Nature of Malpractice	Penalty / Punishment to be imposed
1)	<p>a) Misbehavior with officials using obscene or abusing language.</p> <p>b) Writing the subject related matter on the question paper, admission ticket, desk,</p>	<p>i. Fine of not less than Rs.2,500/-.</p> <p>ii. Denial of performance of that Particular Paper in</p>



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Sl.No	Nature of Malpractice	Penalty / Punishment to be imposed
	<p>scribbling pad, Calculator, handkerchiefs, cloths, socks, instrument box, identity card, hall ticket, scales, or any part of the body etc.</p> <p>c) Disclosing identity by writing any words or by making any peculiar marks or by writing USN on the pages other than the facing sheet in the answer scripts.</p> <p>d) Possession of Electronic gadgets like mobile, programmable calculator, pen drive or any other smart gadget in the examination hall.</p> <p>e) Communicating with any student or any other person inside or outside the examination hall with a view to take assistance or aid to write answers in the examination.</p> <p>f) Copying from the material or answer of another student or assistance is rendered to another student within the examination hall.</p> <p>g) Making any request of representation or inducting to bribery to Room Superintendent or and any other official or officer of the institution for favors in the examination hall or to the Examiner in the answer script.</p>	<p>which the student is booked under Malpractice. Denial of benefit of performance of that Particular Examination (all the courses for which the students has registered for the examinations)</p> <p>ii. Debarring the student from appearing for one more subsequent examination.</p> <p>v. Debarring the student from appearing for two more subsequent examinations.</p> <p>v. Debarring the student from appearing for three more subsequent examinations.</p> <p>The MPCC shall recommend the punishments based on the severity of the case and the severity of the case shall be recorded.</p>



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Sl.No	Nature of Malpractice	Penalty / Punishment to be imposed
	<p>h) Approaching directly or indirectly the teachers, officers, officials, or examiners or bring about undue pressure or influence upon them for favor in the examination.</p> <p>i) Smuggling out or smuggling in or tearing off the answer script sheets or supplementary sheets or inserting papers written outside the examination hall into the answer book.</p> <p>j) Receiving material for copying from outside or inside the examination hall</p> <p>k) Bringing into the examination hall or being found in possession of portions of a book, manuscript, or such other material or matter.</p> <p>l) Destroying any evidence of malpractice, tearing, or mutilating the answer script or running away along with the answer script from the examination hall or premises. Committing any other act of omission intending to gain an advantage or favor in the examination by misleading, deceiving, or inducing the examiner or officers or authorities of the institution.</p>	



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Sl.No	Nature of Malpractice	Penalty / Punishment to be imposed
2)	Repeatedly indulging in malpractice	<p>a) Denial of benefit of performance of that examination.(all the courses for which the student has registered for the examinations).</p> <p>b) Debarring the student from appearing for subsequent examinations extending up to three more examinations</p>
3)	<p>a) Impersonating or allowing any other person to impersonate to answer in him/her place in the examination hall.</p> <p>b) Threatening with weapons or any other means to the Room Superintendent, Members of the Flying squad, and officers/officials of the examination centers.</p>	Rusticate the student from institution. In case of impersonation, both the students concerned shall be handed over to the police by the Chief Superintendent

8.8 DISCIPLINE ON CAMPUS:

- i. Use of mobile phones (Cell Phone) is strictly prohibited in the academic areas. If any student is found using mobile phones in the campus, his/her mobile phone will be confiscated, and the student will be penalized.
- ii. The vehicle speed should not exceed 30 km/hr and blowing of horn in the campus is prohibited.



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- iii. Smoking, chewing, and spitting and use of tobacco in any form are strictly prohibited in the campus and within 100 m from the boundary of the campus. If found guilty will attract punishment/Penalty.
- iv. Eve teasing by the students is strictly prohibited and will attract severe punishment.
- v. Misbehaving with faculty/staff will be viewed seriously and will lead to punishment /legal action.
- vi. Sale of tobacco and derived products within 100 m from the boundary of the campus is strictly prohibited.
- vii. Possession, consumption or distribution of alcoholic drinks, narcotic drugs, or any kind of hallucinogenic drugs is punishable as per the prevailing laws.
- viii. Hacking into institution computer systems (such as entering other person's area without prior permission, manipulation and/or damage of computer/hardware and software or any other cybercrime)/Campus Network/Campus Servers is liable for punishment.
- ix. Messaging/sending/possession of objectionable material using IT infrastructure is banned, if found guilty will attract severe punishment.
- x. Noisy and unruly behavior disturbing studies of fellow students is liable for punishment.
- xi. Plagiarism of any nature is prohibited.
- xii. Unauthorized fund raising and promotion of sales of any kind is prohibited.
- xiii. Causing damage to institution and hostel properties for any reason and any form is considered as an offence and will be punished /penalized according to prevailing rules.

Commensurate with the gravity of offence, the punishment may be reprimand, expulsion from the hostel, debarring from the examination, disallowing the use



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of certain facilities of the institution, rustication for a specified period or even out right expulsion from the institution or even handing over the case to appropriate law enforcement authorities or the judiciary as required by the circumstances and decided by the Principal/Committee constituted by Principal

9 OTHER ACADEMIC MATTERS:

9.1 Choice Based Credit System:

- (a) It is necessary to implement a Choice Based Credit System for academic programmes at all the Autonomous Institutions under the University. This shall be of considerable benefit to the students for customizing their programmes of direct interest to them, developing their individual capabilities and talents and preparing them for exciting careers a head in the 21st century.
- (b) This makes it necessary for the Autonomous Institutions to provide for:
 - (i) Easy access to the Schemes of Instruction, Syllabi, Credit Structure of programmes and the Courses being conducted by all students (either in print or in electronic form)so as to assist them in course work planning.
 - (ii) Institutionalizing the conduct of course work by adopting a centralized time table for all the programmes at a Institution, with a view to assist the students in customizing their programmes and also optimizing the use of physical facilities.
 - (iii) Establishing a dynamic Faculty Advisory System at each Institution with 5-10 students assigned to an Advisor, for guiding them in planning/implementing their course work in a flexible and effective manner and also monitoring them.

9.2 TEMPORARY WITHDRAWAL:

- 9.2.1** A student may withdraw temporarily from the programme on grounds like, prolonged illness, grave calamity in the family or any other genuine reason.



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The withdrawal shall be for periods which are integral multiples of a semester, provided that:

- i. The student applies to the institution within 6 weeks of the commencement of the semester or from the date he/she last attended the classes, whichever is later, stating fully the reasons for such a withdrawal, together with supporting documents and endorsement of his/her parent/guardian.
- ii. The institution is satisfied of the genuineness of the case and that, even by taking into account the expected period of withdrawal, the student has the possibility to complete the programme requirements within the time limits specified by the university.
- iii. The student does not have any dues or demands at the institution/university including tuition and other fees as well as library material.

9.2.2 A student availing of temporary withdrawal from the institution under the above provision shall be required to pay such fees and/or charges as fixed by the Institution until such time as his/her name appears on the students' roll list. **However, the fees/charges once paid shall not be refunded.**

9.2.3 Normally, a student is entitled to avail **the temporary withdrawal facility only once during his/her studentship of the programme.** However, any other concession for the concerned student shall have to be approved by the Academic Council of the institution. Hence, the students shall be advised by the Principal to use this provision only in exceptional cases.

9.3 TERMINATION FROM THE PROGRAMME

A student shall be required to withdraw from the programme and leave the Autonomous Institution on the following grounds:

9.3.1 Successive Failures: If a student fails (Grade F) to pass a Course and earn the credits prescribed for the Course **even after five attempts**, the



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admission of the student to the programme shall be terminated. However, such a student can seek admission to the programme afresh.

9.3.2 Failure to secure $CGPA \geq 5.00$ on three consecutive occasions to lead the student being asked to discontinue the programme and leave the Institution. However,

i. Failure to secure a $CGPA \geq 5.00$ at the end of any semester for the first time, to attract warning before approval of the student to continue in the following semester (on probation).

ii. There is a provision for the rejection of total performance of a semester and re- registration for the semester. This shall be done only once in the entire course of studies.

9.3.3 Absence from classes for more than six weeks at a time in a semester without leave of absence being granted by the competent Authority.

9.3.4 Failure to meet the standards of discipline as prescribed by the Autonomous Institution from time to time.

9.4 STUDENTS' FEEDBACK:

The Institution obtains feedback from students on their coursework and various academic activities conducted. The feedback is obtained on-line from the students at regular intervals maintaining confidentiality.

The feedback received from the students is reviewed/discussed by a committee constituted for the purpose and necessary corrective measures are taken.

9.5 RECOMMENDATIONS FOR DEGREE AWARD:

The Institution forwards its recommendations to the University in respect of students qualifying for UG/PG Degree Awards based on their success in the examinations/adjudication of theses as the case shall be after receiving



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approval from the Authorities/ Bodies of the Institution concerned.

The Autonomous Institution ensures that each such student in (a) has fulfilled all the requirements for the Degree Award.

Only those students recommended for the Degree Award shall be titled to receive the relevant Provisional Certificates/Transcripts from the Institution at this stage.

9.6 GRADUATION CEREMONY:

The Institution conducts annual Graduation Day ceremony for the award of Degrees to students completing the prescribed academic requirements. The Graduation Day is conducted after the University Convocation.

The Institution awards Ranks and Medals to the meritorious students during the Graduation Day Ceremony to encourage the students to strive for excellence.

10 OTHER ISSUES

10.1 Quality/Standard:

10.1.1 Benchmarks

The quality/standard of engineering professionals is closely linked with the level of the technical education system. As it is now recognized that these features are essential to develop the intellectual skills and knowledge of the professionals for being able to contribute to the society through productive and satisfying careers as innovators, decision makers and/or leaders in the global economy of the 21st century, it becomes necessary that certain improvements are introduced at different stages of their education system.

These requirements include:



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- (i) Selective admission of students to a programme, so that merit and aptitude for the chosen technical branch or specialization are given due consideration.
- (ii) Faculty recruitment and orientation, so that qualified teachers trained in good teaching methods, technical leadership and students' motivation are available.
- (iii) Instructional/Laboratory facilities and related physical infrastructure, so that they are adequate and at the contemporary level.
- (iv) Access to good library resources and Information and Communication Technology (ICT) facilities, to develop the student's self-learning abilities.
- (v) Adequate opportunities and facilities for the development of the student's aptitudes and attitudes so that the professionals are conscious of social/other responsibilities.

11 Interpretation

Any question as to the interpretation of these rules and regulations shall be decided by the Institution, whose decision shall be final and binding on the student in the matter. The Institution shall also have the power to issue clarifications to remove any doubt, difficulty or anomaly, which may arise in regard to the implementation of these regulations.