KLS GOGTE INSTITUTE OF TECHNOLOGY

(Autonomous Institution and Permanently Affiliated to Visvesvaraya Technological
University, Belagavi)
Gnana Ganga, Udyambag,
Belagavi- 590008
www.git.edu

**Academic Rules, Regulations and Guidelines for
Students of B.E. Program of
2018 SCHEME**

(WITH EFFECT FROM 2018 - 2019)

VISION

Gogte Institute of Technology shall stand out as an institution of excellence in technical education and in training individuals for outstanding caliber, character coupled with creativity and entrepreneurial skills.

MISSION

To train the students to become Quality Engineers with High Standards of Professionalism and Ethics who have Positive Attitude, a Perfect blend of Techno-Managerial Skills and Problem solving ability with an analytical and innovative mindset.

QUALITY POLICY

- Imparting value added technical education with state-of-the-art technology in a congenial, disciplined and a research oriented environment.
- Fostering cultural, ethical, moral and social values in the human resources of the institution.
- Reinforcing our bonds with the Parents, Industry, Alumni, and to seek their suggestions for innovating and excelling in every sphere of quality education.

KLS GOGTE INSTITUTE OF TECHNOLOGY,
Udyambag, Belagavi-590008, Karnataka
An Autonomous College under VTU

ACADEMIC REGULATIONS for B.E.
(Applicable from 2018-19 for all Autonomous batches)

1. SHORT TITLE AND COMMENCEMENT

These **Guidelines** shall be called **"KLS Gogte Institute of Technology Guidelines for Implementation of Academic Autonomy and applicable from 2018-19"** and are based on **"Visvesvaraya Technological University Guidelines for Implementation of Academic Autonomy (2007) amended-2018".**

The regulations listed under this head are common for all degree level undergraduate programmes (B.E.) offered by the college.

The regulations hereunder are subject to amendments as may be made by the Academic Council of the college from time to time, keeping the recommendations of the Board of Studies in view. Any or all such amendments will be effective from such date and to such batches of candidates including those already undergoing the programme, as may be decided by the Academic Council.

2. DEFINITIONS AND ABBREVIATIONS

University	Visvesvaraya Technological University (VTU)
Council	All India Council for Technical Education(AICTE)
Commission	University Grants Commission(UGC)
Autonomous College	College designated as an autonomous college by the university, as per VTU Autonomous College Statute- 2006.
College	KLS Gogte Institute of Technology, Belagavi
Academic Autonomy	Freedom given to a College in all aspects of conducting its academic programmes, granted by the University for promoting excellence (within the guide lines of VTU)
Academic Year	Two consecutive (one odd + one even) semesters followed by Fast track semester constitute one academic year.
Programme	An educational programme leading to award of a Degree or certificate.
Branch	Specialization or discipline of Degree Programme, like Civil Engineering, Mechanical Engineering, etc.
Semester	Each semester will consist of 15-20 weeks of academic work equivalent to 90 actual teaching days. The odd semester may be scheduled from August to December and even semester from January to May.
Course	Usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weightage. The courses should define learning objectives and learning outcomes. A course may be designed to comprise lectures/ tutorials/laboratory work/ field work/ outreach activities/ project work/ internship/ seminars/ term papers/assignments/ presentations/ self-study etc. or a combination of some of these.
Regular Student	Such students who have joined the programme in the first year of four-year programme
Lateral Entry students	Students who are admitted to the third semester Engineering (second year)

	programme after completing Diploma Course in the respective discipline.
Letter Grade	It is an index of the performance of students in a said course. Grades are denoted by letters S, A, B, C, D, E and F.
Grade Point	It is a numerical weightage allotted to each letter grade on a 10-point scale
Credit	A unit by which the course work is measured. It determines the number of hours of instructions required per week.
Credit Point	It is the product of grade point and number of credits for a course.
SGPA	**Semester Grade Point Average:** It is a measure of academic performance of student in a semester. It shall be expressed up to two decimal places.
CGPA	**Cumulative Grade Point Average:** It is a measure of overall cumulative performance of a student over all semesters. It is expressed up to two decimal places.
First attempt	If a student has completed all academic formalities and become eligible to attend the examinations and has attended at least one head of passing, such attempt (first sitting) shall be considered as first attempt.
Grade Card	Based on the grades earned, a grade certificate shall be issued to all the registered students after every semester. The grade certificate will display the course details (code, title, number of credits, grade secured) along with SGPA of that semester and CGPA earned till that semester.
CIE	Continuous Internal Evaluation
SEE	Semester End Examination
UG	Undergraduate Programme
B.E.	Bachelor of Engineering
Engg.	Engineering

3. PROFILE OF THE INSTITUTION

KLS Gogte Institute of Technology (GIT), the flagship institute of Karnatak Law Society was incepted in 1979. Spread across a sprawling mango meadow of over 20 Acres. GIT, houses 08 undergraduate and 09 postgraduate disciplines including MBA and MCA programs. GIT has the honour of sheltering over 4500 students and about 280 highly qualified and motivated workforce.

KLSGIT, **a permanent affiliate and Autonomous institution under Visvesvaraya Technological University is accredited with grade A+ by NAAC. Five UG programs and 3 PG programs have been accredited by NBA.**

Research and innovation has been key strength of GIT. A band of research scholars pursue for Ph.D. and M.Sc. (Engineering) by Research through approved research centers in the departments of Civil Engg., Mechanical Engg., Electronics and Communication Engg., Electrical and Electronics Engg., Computer Science and Engg., Physics, Chemistry, Mathematics and Management Studies.

All the departments have well equipped laboratories with facilities for experiments and studies in areas like Flexible Manufacturing Systems, Additive manufacturing and reverse engineering, Biomass Gasification, Fluidized Bed Combustion Chamber, Material testing, Digital Signal Processing, High Voltage Engineering, VLSI and Advanced surveying Instruments like Total Station. The campus has a

full-fledged 10/100 Mbps internet with OFC backbone and 50 Mbps leased line Internet link. The network is supported by various state of the art servers, such as Web, Mail, DNS etc.

Seminars, Contests, Short-term courses and continuous Education Programs are conducted regularly for students and staff. It offers a thorough living and learning experience through its, spacious class rooms, scintillating air conditioned computer labs, latest pedagogy, wi-fi ambience, learned staff, voluminous library, soft skills lab, separate hostels for girls and boys, hygienic canteens, banking facility etc. undoubtedly every single stakeholder appears to be proud and contented here.

GIT has carved a niche for itself through consistently good results and placements. Further ignition and fostering of entrepreneurial initiatives have led to the flourishment of several leading business managers of National and international repute. The entrepreneurship development Cell, Incubation Centre, Center for foreign /studies and the Open-arm mentoring of the learned faculty has fostered self employment as an important goal amongst several GITians.

GIT also has a vibrant Industry Institute Interaction Cell, and a full fledged Training and Placement Cell. Regular, mock interviews, training programs, group discussion with special emphasis on soft skills is provided to the students. Our alumni are found in several blue chip organizations in India and abroad. Students picked, polished and placed by us are accepted hand in hand by leading organizations. Many reputed companies have been visiting the institution for Campus Recruitment. We have consistently outperformed the average market placements.

4. ACADEMIC PROGRAMMES

4.1 General

The Academic Autonomy is applicable for all programmes offered by the college: B.E. Degree programmes at Undergraduate (UG), M. Tech., M.B.A and M.C.A programmes at Postgraduate (PG), M.Sc. (Engineering by research) and the Ph.D.

The programmes fulfill the minimum academic quality and standards for the award of Degrees prescribed by the University, the Council and the Commission.

The academic Autonomy provides an opportunity to the college 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.

The College 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.

In order to get the various benefits of academic autonomy, the College can structure 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.

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

4.2 Nomenclatures of Programmes:

KLSGIT offers the following Undergraduate, Post-graduate & Doctoral study programmes. KLSGIT also offers a wide range of proficiency courses. The College uses the nomenclature for the UG Degree programmes as specified by the council and the Commission. The nomenclature and the abbreviation given below, shall continue to be used for the degree programmes by the college under the University:

(i) Bachelor of Engineering (B.E.)

Besides, the branch / subject of specialization, if any, shall be indicated in brackets after the abbreviation for example B.E. degree in Mechanical Engineering programme is abbreviated as B.E. (Mechanical Engineering).

4.3 Programmes Offered

Undergraduate degree programmes offered by the institute are listed in Table1.

Table 1: Undergraduate Programmes offered by the College

S. No.	Title of the UG Programme	Abbreviation	Year of Starting
1	B.E. in Civil Engineering	CV	1979
2	B.E. in Mechanical Engineering	ME	1979
3	B.E. in Electrical & Electronics Engineering	EE	1979
4	B.E. in Electronics & Communication Engineering	EC	1979
5	B.E. in Computer Science & Engineering	CS	1985
6	B.E. in Information Science & Engineering	IS	2000
7	B.E. in Aeronautical Engineering	AE	2017

4.4 Program Duration

a. Ordinarily, the duration of fulltime academic programme shall be the same as that followed by the University, i.e., four academic years for B.E for regular student and three academic years for lateral entry student from date of first admission.

b. As a flexible credit system is to be followed for coursework, it is to be noted that the programme duration in the case of B.E. shall also be dictated by the period in which a student earns the prescribed credits for the Degree. Hence, it is possible for an outstanding student to earn the required credits in a shorter time than that ordinarily prescribed for the relevant programme in (a) above.

c. In such cases, College will prescribe additional credits to be earned by a UG student in prior consultation with the University so as to qualify for the concerned Degree award with Honours/Minors. As an alternative, the College could provide opportunity for such a student to register for Diploma/Certificate/Add-On courses being conducted at the College or to take up suitable internship until completion of the prescribed programme duration.

d. 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 nominal duration of the programme, i.e., eight years for B.E. for regular student and six academic years for lateral entry student from date of first admission failing which he/she has to discontinue the course.

e. Besides, the maximum period for a programme, 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. And, this period can be equal to or smaller than the maximum period indicated as in (d) above.

4.5. Admission of Students

(a)The admission of students to various B.E programs listed under Section 4.3, is governed by the State Government and/or the University Policies/Practices in this regard. However, the admission of students to Diploma and Certificate programmes shall be made by the College 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 from time to time.

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

(c) The students can opt to migrate from one branch or specialization to another branch or specialization at the same College or at another Autonomous/ Affiliated/ Constituent College under the University at the beginning of the second year. In these cases, the College will follow the Rules and Regulations of the University/Council.

4.6 Eligibility Criteria:

The eligibility criteria for admission of students to B.E. Degree programmes at the College shall be the same as those prescribed by the State Government and/or University. However, the College is free to prescribe appropriate criteria for admission to Certificate programmes after receiving approval from its Academic Council.

The eligibility criteria for admission of students from a non-Autonomous College to an Autonomous College, from one Autonomous College to another Autonomous College and from University scheme at an Autonomous College to its Autonomous scheme, shall be fixed by the Academic Council of the College, 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.

The eligibility criteria for the admission of students from other Universities to the College shall be fixed by the Academic Council of the College by getting the individual cases examined by the concerned Board(s) of Studies and also by following the same criteria as in (e) above and recommending the names of such candidates qualifying for admission to the University for its approval.

4.7 Semester Scheme

(a) As the Semester Scheme provides several benefits to technical education programmes in contrast to the Annual Scheme college is adopting the Semester Scheme for the UG programmes.

(b) Academic Calendar: Each academic year is be divided into semesters, with the calendar, durations and academic activities being fixed in advance by the college while maintaining a common opening/reopening date for the odd semester. A copy of the calendar shall be forwarded to the University at least two weeks before the commencement of the academic year.

(c) The breakdown of an academic year for implementing the Semester Scheme at Colleges is given in Table 2 as a typical example.

Table 2. Details of Academic Calendar

SNo.	Activity	Description
1.	Number of Semesters in a Year	Three Semesters: Two semester are regular (Odd & Even) and a Fast Track Semester

2.	Semester duration in weeks	Regular Semester: 19 weeks each including the examinations
		Fast Track Semester: 8 weeks including the examinations (Note: In each Semester, there shall be various provisions for students like, Registration of Courses at the beginning, Dropping of Courses in the middle and Withdrawal from Courses towards the end, all being under the Faculty Members' advice. These facilities are required to ensure proper monitoring of students by Faculty Advisors, leading to their improved learning capabilities and minimizing their chances of failure in the Courses registered.)
3.	Evaluation	Continuous Internal Evaluation (CIE) and Semester End Examination (SEE), both have equal weightage in the students' performance in Course/Laboratory Work and other activities. (Note: The CIE shall be conducted by the Course Instructor throughout a Semester on dates to be announced in advance and the results made known to the students from time to time. This will be of help to the students to decide on Dropping of Courses or Withdrawal from Courses based on their performance and in consultation with their Faculty Advisors.)
4.	Other Items	The total number of working days in an academic year shall be >=180;
		Academic schedules prescribed by the College shall be strictly adhered to by all the concerned;
		Fast Track Semester is conducted for benefit of the students to clear their failed Courses, if any.
		Students failing in any Course(s) shall register for the same again (re-register) and shall secure CIE and SEE afresh in each course(s) This shall continue until a pass grade is obtained in the said course(s).

5. CREDIT SYSTEM

5.1 General
(a) As the Credit System has many advantages over the conventional system of organizing academic programmes, Choice Based Credit System (CBCS) is introduced. This will be of great benefit to the students in their preparations to meet the challenging opportunities ahead.

(b) In the Credit System, the course work of students is unitized and each unit is assigned one credit after a student completes the teaching-learning process as prescribed for that unit and is successful in its assessment.
(c) Credit Definition: Credit is defined as per the guidelines of the university. Here, **one unit of course work** and its corresponding **one credit** (while referring to a Main Semester) shall be equal to:
(i) Theory course conducted for 1 hour/week/ semester;
(ii) Laboratory course or Tutorial, conducted for 2 hours/week/semester.
The following additional factors may also be noted in this connection:

- The above figures shall be multiplied by a factor of 2 in the case of the Fast track Semester, and
- Other student activities which are not demanding intellectually or which do not lend to effective assessment, like practical training, study tours, attending guest lectures shall not carry any credit.

(d) 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 College at the end of each semester, like odd, even, supplementary and it forms the basis for determining the student's academic performance in that semester. A student shall register in person at the beginning of each semester on the prescribed dates, by filling out the Registration Form and paying all stipulated fees. The student shall consult the concerned Faculty Advisor in choosing the courses to be registered.

(e) Audit Courses: 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 grades will be reflected in the Grade Card. But, these shall not be taken into account in determining the student's academic performance in the semester. In view of this, it may not be necessary to issue any separate transcript covering the audit courses to the registrants at these courses.

(f) Dropping of Courses: A specific time period is fixed, between 1st and 2nd IA test of a semester for this purpose to be based on the review to be conducted of students' performance in CIE by the concerned mentor. The review is 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 can be re-registered by these students and taken up for study at a later semester in the programme.

(g) Withdrawal from Courses: A specific time period shall be identified by the College, between 2nd and 3rd IA test, to help review the students' performance in CIE by the mentor, followed by the students having poor performance to withdraw from identified course(s) (up to the minimum credits specified for the semester) with mention in the Grade Card (Grade 'W'). Such Courses could be re-registered by these students and taken up for study at a later semester in the programme.

5.2 Credit Structure:

(a) A typical Credit Structure for coursework based on the above definition is given in Table 3.

Table 3. Credit Structure for coursework

Lectures (hrs/week /Sem) L	Tutorial (hrs/week/ Sem) T	Lab. Work (hrs/week/Sem) P	Hours (L:T:P)	Total contact (hrs/week/Sem)	Credits (Total)
4	0	0	4:0:0	4	4
3	2	0	3:1:0	5	4
0	0	2	0:0:2	2	1
3	0	2	3:0:2	5	4

(b) Major Benefits: Major benefits of adopting the Credit System are listed below:

- Quantification and uniformity in the listing of courses for all programmes at a College, 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.
- Wider choice of courses available from any department of the same College or even from other similar Colleges, either for credit or for audit.
- Improved facility for students to optimize their learning by availing of transfer of credits earned by them from one College to another.

Thus, it is more appropriate to specify the eligibility requirements for a Degree award based on course work by prescribing the total number of credits to be earned, as an alternative to specifying the Programme Duration (as indicated in Section 4.3(a)).This will be of great help in providing the well-needed flexibility to the students in planning their academic programmes and their careers.

(c)Mentor System: The college has a Mentor system/ Faculty Advisory System (comprising its regular faculty members) with each Mentor (Faculty Advisor) being assigned a group of students. The functions of Mentor shall be to:
- Advise the students in the group on all academic matters (like registration of courses, dropping of courses and/or withdrawing from courses),
- Monitor the students' in the group for their individual academic performance,
- Identify students in the group who are slow, average or fast learners to help them pace their studies /learning at the College based on their individual abilities, and Serve as a friend, philosopher and guide to all of them in the group during their studentship at the College.
- Expected Outcome of the mentor system : Reduce the failure rate, motivate the students and improve the overall performance and quality of the student.

5.3 Course Load
(a)The total number of credits to be earned by a student to qualify for the Degree award is given in Table 4.

Table 4. Total number of credits to be earned

Program	Normal Duration Years (semesters)	Total No. of credits to be earned (Average/Semester=22)
B.E. Regular student	4.0 (8)	175
B.E.(Lateral Entry Students)	3.0 (6)	135

(b)In the planning of Coursework for an academic programme, it is necessary to specify the average Course load for a student per semester as well as its minimum and maximum limits. As per the guidelines of the University and considering the academic strength and capability of an average student, the course load at all is be fixed at 22 credits/semester (average level) with its minimum and maximum limits being set at 16 and 28 credits respectively. This pattern shall be followed by making a provision in its time table for the students to register for 22 credits on an average in each semester. However, in the first two semesters, the prescribed course load per semester is fixed and is mandated. The total load in the 1st year is 40 credits.

(c) Fast Track Semester
- The Fast Track semester is provided for facilitating slow learners and failed students. It is provided to help the student to avoid losing an academic year.
- During this semester, a student is permitted to re-register for course(s) where he/she has secured F-Grade/ W-Grade (new courses/courses dropped during the regular semester are NOT allowed for registration during this semester).All courses may not be offered in the Fast Track semester.

It is the discretion of the Department/college to offer the courses based on the availability of resources in hand.

- The student has to pay a special fee prescribed by the College to register for a course in the Fast Track semester.
- The Fast Track Semester is optional; it is for the student to make best use of the opportunity. Fast Track semester is a special semester and the student cannot demand it as a matter of right.
- A student is permitted to register for 6 courses (including the labs) or 28 credits. A student has to choose those courses which are offered by the college in a given Fast Track Semester. The CIE and the SEE norms of the regular semester are applicable to this semester also.

(d) Course Flexibility: College has the following practices for providing flexibility to its students in their academic programmes and to meet their varied needs:

(i) 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 mentor's 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 is to assist the student to pace the course work, minimize the chances of failure in the course(s) and optimize the learning process.

(ii) The student's performance in the first semester forms the basis for faculty advice on the number of credits to be registered in the second (or subsequent) semester, (to be within the minimum/maximum limits of 16/ 28 credits). Further faculty advice and close monitoring will help a slow learner to pace the course work properly by reducing the course load, if required and to minimize the chances of failure in the semester.

(iii) The above experience enables any student to properly plan his/her course load in each succeeding semester, by fixing it to be between$\geq$ 16 and $\leq$ 28 credit limits based on faculty advice and his/her academic performance in the previous semester. Faculty advice is also useful to the student in identifying appropriate elective courses.

(iv) This experience to also help fast learners (or outstanding students i.e., CGPA $\geq$ 8.5 and doesn't have pending courses from the previous semesters) to accelerate their programmes by registering and maintaining up to 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 could complete the credit requirements of the programme in a shorter time, like 7 semesters. It is the responsibility of the student to submit the respective class time-table indicating that there is no overlap and the student shall submit a copy of documentary evidence in respect of the above while seeking approval from the concerned HOD.

(v) Similarly, slow learners could register only for the minimum (equal to16) 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.

(vi) 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 **Guidelines** later for enabling the vertical progression of students from one academic year to the next.

(e) Honor and Minor Scheme:

As per the AICTE and VTU guidelines, students can acquire additional 20 credits and obtain Honors/Minor in a specialization. The regulations regarding providing the Honors/Minor from 3rd sem are as given below:

(i) Students have to register for 5 additional courses (4 credits each) and acquire additional 20 credits.

(ii) Honors Scheme for vertical / specialization in the parent branch; Minor in any other branch for improving knowledge and employability.

For Honor Scheme :

- Scheme would begin from 3rd Sem of B.E. program.
- Applicant should have CGPA score of 7.0 and above during registration.
- Diploma students should have CGPA score of 7.0 or 75% marks and above during registration.
- Application should not have any backlogs of 1st & 2nd year at the time of registration.
- Student should not have backlogs in any semester during the entire scheme.
- Student from Host department to undertake the Honors Scheme for their own branch.
- Department will offer three regular courses and 2 MOOC courses.
- The courses from the main curriculum should not be in the list for Honors.
- Professional electives and Open electives to be studied in the main program should also be related to Honors program.
- To have practical exposure, Project based courses are permitted for Honor Scheme in 5th, 6th & 7th Sem.
- MOOCs having 8 weeks to 12 weeks duration from NPTEL/ SWAYAM with certification is only considered. These courses could be taken during 5th to 8th Sem.
- No CIE and SEE examination will be conducted for MOOC courses.
- List of MOOCs will be given by the department.
- Department can announce different verticals for Honors.

Minor Scheme :

- Scheme would begin from 3rd Sem of BE Program.
- Applicant should have CGPA score of 7.0 and during registration.
- Diploma students should have CGPA Score of 7.0 or 75% marks and above during registration
- Applicant should not have any backlogs of 1st & 2nd year at the time of registration.
- Student should not have backlogs in any semester during the entire scheme.
- A student from any department is eligible to apply for Minor from any other department.
- Department will offer three regular courses and 2 MOOC courses.
- The courses from main curriculum should not be in the list of the courses for minor.
- Professional electives and Open electives to be studied in the main program should also be related to Minors program.
- To have practical exposure project based courses is permitted in 5th, 6th & 7th Sem.
- MOOCs having 8 weeks to 12 weeks duration from NPTEL/ SWAYAM with certification is only considered. These courses could be taken during 5th to 8th Sem.
- No CIE and SEE exam will be conducted for MOOCs courses.
- List of MOOCs will be given by the department.

(iii) Implementation :

- A student opting for Honors will not be entitled for Minor.
- Allotment of time slot for classes/lab in the time table.
- The remedial assessment such as Make-Up Exam and Fast Tracks Exam will not be applicable for Honor and Minor Schemes.

- **Student failing in any of the Honor or Minor Scheme courses at any stage will be discontinued from the scheme.**
- **Student having backlogs in any of regular semester courses at any stage will be discontinued from the scheme.**

(f) Contact Hours: Considering the expectations from engineering professionals with B.E. Degree in the 21st century, the number of contact hours for students is limited to 30-35/week. This will be of help to 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 5:

Table 5. Calculation of contact hour and course load per semester

No. of courses	Hours/course L:T:P	Total contact hours	Credits
Three Lecture Courses	4:0:0	12	12
One lecture cum tutorial course	3:2:0	5	4
Three laboratory courses	0:0:2	6	3
Total		**23**	**19**

6. CURRICULUM FRAMEWORK
6.1 General:

(a) Curriculum Framework is important in setting the right direction for a Degree /Certificate programme by the College, 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.

(b) 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 College takes into account the AICTE Model Curricula/University model notified from time to time and follow them so as to be abreast of the national trends in this connection.

(c) 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.

(d) 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. This has to be addressed through the Core Courses of the curriculum as every graduating engineer shall possess the expected core competency.

6.2 Curricular Components:
The Curriculum Framework for a B.E./B. Tech. Degree programme is given below as an example. Theprogramme shall include the following Courses.

(a) Recommended Courses: These include coursework under the following categories:

- Humanities and Social Sciences including Management Courses (**HS**);
- Basic Sciences Courses (**BS**) (Mathematics, Physics, Chemistry, Biology);
- Engineering Sciences Courses (**ES**) (Basic Engg. courses, Workshop, Drawing, Computers);
- Professional Core Courses (**PC**), relevant to the chosen specialization/ branch;
- Professional Electives Courses (**PE**), relevant to the chosen specialization/ branch;
- Open Electives Courses (**OE**), from other technical and/or emerging subject areas, including Sciences and Management;
- Project(s) (**PR**);
- Seminar (**SR**);
- Self Study course (**SS**);
- Professional Certifications (**CC**);
- Mandatory Non-Credit Courses (**MNC**)
- Audit Courses (**AC**);
- Internship (**INT**) in Industry, Academic Institution or elsewhere

(b) Mandatory Non- Credit Courses (MNC) and Other Requirements: The UG Degree programmes also require the inclusion of certain courses necessary for familiarity of subjects, like Environmental Studies, Constitution of India, Professional Ethics, Communication Skills, Chosen Language Knowledge/ Proficiency as Mandatory Courses. 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, college takes suitable steps to organize the Mandatory Courses as required and these are included in the student's performance (like, pass or fail) in such course(s) in the transcript.

(c) Internship: The scheme includes mandatory requirement of Internship of six to eight weeks duration(Single session or cumulative) to be undertaken by all the students. It needs to be taken up during summer/winter semester breaks, and are assessed through seminar and report submitted during the Odd/Even semester.

Skill Enhancement Courses:
These courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc. This includes:

- The student has to undergo two Professional certification courses. One of the certification courses is related to the communication skills in English/ any foreign language and the other shall be domain specific. The list of domain specific certification programs from NPTEL or will be provided by the department Board of Studies.
- Intellectual Property Right and Cyber law: It is a self study course and intended to provide awareness related to Intellectual Property Right and Cyber laws.

Audit Courses
In addition, a student can register for courses such as value added courses for audit only with a view to supplement his/her knowledge and/or skills. But, these shall not be taken into account in determining the student's academic performance in the semester.

Community Involvement:
It is compulsory for every UG student to participate in any one of the following programmes for a period of not less than two years (Four semesters) and acquire additional credits.

- ⸲ NSS (National Service Scheme)
- ⸲ RISE (Leaders Accelerating Development Program)
- ⸲ Rotaract
- ⸲ NCC(National Cadet Corps)

The above activities shall be conducted outside the regular working hours of the College.

(d) 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.

d) 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 is given in Table 6.

Table 6. Allocation of Credits

S.No.	Category	Actual Credits
1.	Humanities and Social Sciences including Management Courses (HS)	5.5
2.	Basic Sciences (BS)	27
3.	Engineering Science (ES)	19.5
4.	Professional Core Courses (PC)	82
5.	Professional Elective Courses (PE)	15
6.	Open Electives (OE)	9
7.	Seminar (SR)	1
8.	Project Work (PROJ)	11
9.	Internship (INT)	2
10.	Others (Professional certifications (CC) and Self study courses (SS)	3
11.	Mandatory non-credit course (MNC)	----
	Total	175

(e) Sequencing of Courses for B.E. Degree: All the courses are divided into the categories listed above. These courses are sequenced such that the students undergo the courses in progressive manner. Typical breakdown of the courses in given in Table 7.

Table 7. Sequencing of Courses

Semesters	Course category
1st and 2nd	⸲ HS, BS and ES (Common for all Programmes) ⸲ Mandatory Induction Programme (3 weeks)
3rd and 4th	PC and MNC
5th to 7th	PC, PE,OE,SR,INT
8th	CC,SS, PROJ

7. ASSESSMENT
7.1 Achievement Testing:
(a) 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 may have different objectives, like achievement-testing, prediction-testing, endurance-testing, creativity-testing and testing for ranking.

(b) 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. Therefore, Autonomous Colleges under the University are required to introduce proper reforms in the examination system to achieve this goal. The **Guidelines** given below enable the Autonomous Colleges 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:

Sessional: Involving **Continuous Internal Evaluation (CIE),** to be conducted by the course instructor all through the semester and as per the calendar. This may include mid-term tests, weekly/ fortnightly class tests, homework assignments, problem solving, group discussions, quiz, seminar, mini-project and other means.

Terminal, covering **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 College level. This may include a written examination for theory courses and practical/design examination with built-in oral part for laboratory/design courses.

(c) 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 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.

7.2 Question Papers:

(a) Question Paper Pattern: For an effective achievement testing of students in a course, a good question paper needs to be used as the principal tool. This makes it 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, and
- Have clear and complete instructions to the candidates.

(b) 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, the Question Papers at SEE, in particular, have built in choice under each module of the syllabus.

(c) 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 are taken into account, in particular, by the Boards of Studies.

(d) Typical Question Paper: The questions to be included in the Question Papers at CIE and SEE can be of two types as follows:

Multiple Choice Question, having each question to be answered by tick marking the correct answer from the choices (commonly four) given 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 will have this component in the form of quiz or lab test.

Comprehensive Questions, having all questions of the regular type to be answered in detail. Such a Question Paper is 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.

7.3 Examinations:

There are two types of courses – Regular and integrated courses

1. **Regular Course could be a theory course or a laboratory (Practical) course. Theory course** has only theory component and laboratory course has only the practical component.

2. **Integrated Course** is a course which has both theory and practical components.

A student's performance is assessed through continues evaluation and at the end of the semester. Continuous Internal Evaluation (CIE) is done throughout the semester while the Semester End Examination (SEE) is at the end of the semester.

Continuous Internal Evaluation (CIE):

- Theory: The CIE shall be conducted exclusively by the faculty handling the Course. The Course teacher shall announce the components of CIE to the students in advance; declare the evaluation results in time. The Continuous Internal Evaluation (CIE) will consist of IA test, assignment/activity, Seminar, course project, quiz.

- Laboratory: The CIE shall be conducted exclusively by the faculty handling the Course. The CIE will consist of Conduct of the experiments, report writing and lab IA test.

Semester End Examination (SEE):

The SEE (Theory) will be conducted for 100 marks having 3/4 hours duration. It will be reduced to 50 marks for calculation of SGPA and CGPA. Question papers will be invited from the internal examiner (faculty member of the college). However, external examiner is involved in the scrutiny of the question papers.

The duration for Lab exams shall be of 2 hours/3 hours which will be conducted for 50 marks and it will be reduced to 25 marks for calculation of SGPA and CGPA. The Lab exam and viva-voce will be conducted by two examiners.

SEE Answer Scripts: The answer scripts of SEE shall be normally evaluated by the course instructor only. But as a healthy step, Departmental committee preferably oversees this task and ensures the quality and standard of evaluation and also of the grades awarded in all the cases. Also, 10% of the total scripts are moderated by the external examiner.

External Review of SEE: An external review is conducted under the aegis of the Board of Studies/Board of Examiners of the College by appointing a panel of experts from outside the College for this purpose aiming at a complete review of SEE operation in the College. This include question paper review, checking random samples of answer scripts, analysis of results/grades awarded and other related aspects. This step is 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.

Evaluation Pattern for regular courses:

Table 8. Evaluation Pattern for regular courses

Particulars		Marks	Total	
Theory				
CIE	Two IA tests each of 15 marks	30	50	
	Average of two Assignments each of 10 marks	10		
	Seminar/Course project	10		
SEE	Final examination shall be conducted for full syllabus for 100 marks	100	50	100 marks reduced to 50 marks
Laboratory				
CIE	Conduct of lab	10	25	
	Journal	10		
	Lab course project	5		
SEE	Final examination shall be conducted for 50 marks	Conduct of experiments	10	25	50 marks reduced to 25 marks
		Report writing	20		
		1-2 line questions	10		
		Viva- voce	10		
Total			150	

Evaluation Pattern for integrated courses:

Table 9. Evaluation Pattern for integrated courses

Scheme of Continuous Internal Evaluation (CIE):

Components	IA test*	Journal and lab test **OR** Project report and intermediate evaluation	Total Marks
Maximum marks :50	30	20	50
*IA test could be two tests each of one hour duration or only one test of 2 hours duration. Submitting Journal/ Project report is compulsory. Minimum marks required to qualify for SEE : 20 out of 50 marks			

Semester End Examination (SEE):

1.	It will be conducted for 50 marks having 3 hours/2 hours duration.		
2.	Initial write up stating the objectives, methodology and the outcome	10 marks	50 marks
	Presentation (PPT) of the project	15 marks	
	Hardware project: Exhibiting and demonstration of working of project. Software project: Demonstration of the programming capabilities by writing flowchart, algorithm and codes related to a section of the project.	25 marks	
3.	Minimum passing marks to be scored in SEE: 20 out of 50 marks		

b) Attendance Standards: All students shall maintain a minimum attendance of 85% in each course registered. In case of any short fall in this, the Principal of the College shall consider the same and may 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).

(c) 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-examinations. Any student against whom any disciplinary action by the College/University is pending may not be permitted to attend any SEE in that Semester.

(d) Passing Standards: High standards shall be maintained in all aspects of the examinations. For this purpose, each College shall follow the standards of passing at CIE and SEE for each Course, registered, as given in Tables 10:

Table 10. **Passing Standards (Theory and Laboratory) using Absolute Grading**

Evaluation method	Passing standard
Continuous Internal Evaluation (CIE)	Score $\geqq$ 40 %
Semester End Examination (SEE)	Score $\geqq$ 40 %

(e) 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 evaluation committee constituted for this purpose by the department. Project evaluation committee comprises of two faculty of the department /programme-wise and Project guide. In case of the project sponsored by the industry, feedback is taken from the industry guide.   Final oral examination, project report evaluation, presentation conducted jointly by internal and external examiner nominated by the examination section at the College level shall form the SEE of the project work.

(f) In the case of other requirements, such as seminar, industrial internship, field work, comprehensive viva voce, if any, the assessment shall be made as laid down by the Academic Council of the College.

(h) 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 coursework;
- 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 E or better in each case. While such students shall have to re-register for the same Course(s) if hard core, they can re-register for alternative Course(s) from among the soft core or elective Courses, as applicable. **The re-registration shall be possible only when the particular Course is offered again either in a main (Odd/Even) or fast track semester**. However, the total credits during that semester cannot exceed the maximum credits as per the University guidelines.

(i) Successive Failures: If a student fails (Grade F, as covered in Section 8) to pass a Course and earn the credits prescribed for the Course **even after five attempts,** the admission of the student to the programme shall be terminated. However, such a student may seek admission to the programme afresh.

8. GRADING

8.1 General:

(a)The college is following the absolute grading system. This also facilitates the migration of students or transfer of credits among Autonomous Colleges under the University. The raw score (marks) in (CIE + SEE) obtained by the students of a Course shall be evaluated first. And then, the range of marks for each letter grade shall be assigned.

(b) Letter Grades: A letter grade is basically a qualitative measure (an alphabet/letter) giving the performance of a student, such as, Outstanding (S), Excellent (A), VeryGood (B), Good(C), Above Average (D), Poor (E) 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 are awarded to begin with, followed by grouping of all the students at a Course under different grading levels, as above.

(c) Absolute Grading: The College has adpoted the absolute grading system.

8.2 Grade Points:

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 more number of points in the scale being desirable for providing higher resolution in the assessment. Moreover, all Autonomous Colleges under the University need to follow the same scale for uniformity in their operations. Hence, the college shall follow the 10-point grading system, as given in Table 11 for the absolute grading system.

Table 11 Grade Points Scales for Absolute Grading

Level	Out standing	Excellent	Very Good	Goo d	Above Average	Average	Fail
Grade	S	A	B	C	D	E	F
Grade Points	10	9	8	7	6	4	0
Score (Marks) Range %	≥ 90	< 90 - $\geq$ 80	< 80 - $\geq$70	< 70 - $\geq$ 60	< 60 - $\geq$ 50	<50 - $\geq$ 40	< 40

The grade points given in Table 11 will help 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.

(c) 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 S to E. Letter grade F in any Course implies failure of the student in that Course and no credit shall be earned.

(d) Transitional Grades: The transitional grades, such as, 'I', 'W' and 'X' shall be awarded to a student in the following cases. These grades need to be converted into one or the other of the letter grades (S-F) after the student completes his/her Course requirements, including the examinations.

(i) **Grade 'I':** Awarded to a student having satisfactory attendance at classes and meeting the passing standard at CIE in a Course, but remained absent from SEE for valid and convincing reasons acceptable to the College, like:

- Illness or accident, which disabled him/her from attending SEE;
- A calamity in the family at the time of SEE, which required the Student to be away from the College;
- Any other verifiable exigency.

In the event of above, it is the responsibility of the student/ parent/ guardian to inform the college authorities (mentor/HOD/CoE) immediately. The information can be in the form of either written communication, personal communication by parent/guardian/peer or an e-mail. The candidate needs to submit all the relevant evidences (hospital reports, police reports, certificates from competent authorities, etc.). **Prior intimation (before the examination) to CoE is mandatory. Any intimation after the conduct of examination shall not be entertained.**

(ii) **Grade 'W':** Awarded to a student having satisfactory attendance at classes**(≥85%)** , but withdrawing from that Course before the prescribed date in a semester under faculty advice. However, the students' needs to maintain the required credit limits for the semester (minimum 16 and maximum 28 credits). All the 'W' grades awarded to the students shall be eligible for conversion to the appropriate letter grades only after the concerned students re- register for these Courses in Odd/Even/ Fast track semester and fulfill the passing standards. A student is not allowed to apply for course withdrawal during the Fast track Semester.

(iii) **Grade 'X':** Awarded to a student having having attendance **≥85%** and high **CIE rating (≥ 90%)** in a Course, but SEE performance observed to be poor, which could result in an overall F Grade in the Course. No 'F' Grade is awarded in this case but student's performance record is maintained separately. The student will be provided an opportunity in the make-up examination.

(e) Make-up Examination: The Make-up Examination facility shall be available to the students who may have missed to attend the SEE of one or more Courses in a semester for valid reasons and given the 'I' grade. Students having the 'X' grade shall also be eligible to take advantage of this facility. The Make-up Examination shall be held as per dates notified in the Academic Calendar. However, it will be possible for College to hold this examination at any other time in the semester with the permission of its Academic Council. In all these cases, the standard of the Make-up Examination shall be the same as that of the regular SEE for the Courses.

(f) All the 'I' and 'X' grades awarded to the students shall have to be converted to appropriate letter grades and communicated to the College Authorities within two days of the respective Make- Up Examinations. Any 'I' and 'X' grades still not converted after the last scheduled Make-Up Examinations shall be automatically converted to 'F' grade.

8.3 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, the letter grades with grade points awarded in each case and those with grades 'I', 'W' and 'X', only those Courses registered for credit and having grade points shall be included in the computation of the student's performance, like SGPA and CGPA. And, the Courses taken for audit shall not form part of this computation. 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.

8.4 Grade Point Averages:

(a) 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,

transitional grades $=\Sigma[$] $\times$] h h excluding the
$\Sigma[$] h h _excluding the transitional grades

$= \Sigma[$ $\times$] h
$ \dfrac{w \quad h \qquad h \quad \text{semester}}{\Sigma[\qquad] \qquad h \qquad h \qquad h}$

(b) Illustrative Example: An illustrative example given in Table 12 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 College. If two students get the same CGPA, the tie may be resolved by considering the number of times a student has obtained higher SGPA. But, if it is not resolved even at this stage, the number of times a student has obtained higher grades like S, A, B, maybe taken into account in rank ordering of the students in the class.

Table 12 SGPA/CGPA Calculations: An Illustrative Example

Semester (odd : I, Even : II)	Course No.	Credits	Grade	Grade Points	Credit Points	SGPA, CGPA
I	XX101	5:0:0	B	8	40	
I	XX102	3:2:0	W	--	--	
I	XX103	3:0:0	A	9	27	
I	XX104	0:1:1	F	0	0	**SGPA = 117/20 = 5.85**
I	XX105	4:1:0	D	6	30	
I	XX106	5:0:0	E	4	20	
Total		**20 (18*)**	**Total**		**117**	
II	XX107	3:1:1	C	7	35	**SGPA**

II	XX108	4:0:0	B	8	32	= 157/25 = 6.28
II	XX109	3:0:0	D	6	18	
II	XX110	4:1:0	E	4	20	
II	XX111	2:1:1	A	9	36	SGPA = 274/41 = 6.68
II	XX112	2:0:0	F	0	0	
II	XX113	0:2:0	B	8	16	
Total		**25 (23*)**	**Total**		**157**	
Supplementary	XX102	3:2:0	D	6	30	SGPA = 56/9 =6.22
Supplementary	XX104	0:1:1	C	7	14	
Supplementary	XX112	2:0:0	D	6	12	**CGPA** = 330/50 = 6.60
Total		**9**	**Total**		**56**	
* 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.						

(c) Vertical Progression: It shall also be necessary to lay down uniform minimum standards for CGPA together with the minimum number of credits to be earned in an academic year for the vertical progression of students at all Autonomous Colleges under the University. This shall be used to facilitate the mobility of students from one College to another and also to avoid any confusion among the students. The prescribed standards for vertical progression shall be as follows:

1. At the end of each academic year (inclusive of supplementary semester), the number of heads with "F" of any semester shall not exceed 4.
2. For Eligibility for Seventh semester B.E./B.Arch, the student should have cleared all courses from First and Second semester.
3. For Eligibility for Ninth semester B.Arch, the student should have cleared all courses from Third and Fourth semester as well as the Internship in Eighth semester.
4. A student will be declared successful at the end of program, when he/she has none of the Courses remaining with F grade and shall have CGPA of greater than or equal to 5.00.
5. In case, the CGPA falls below 5.00 at the end of the program, the student shall be permitted to appear again for SEE/Fast track exam in full or part of the previous semester Courses by rejecting the performance for required number of Course/s (other than Internship, Seminar, Project and Practical's), without the rejection of CIE marks for any number of times, subject to the provision of Maximum programme duration, to make up CGPA equal to or greater than 5.0. The student should reject the SEE results of the previous attempt and obtain written permission from the Principal to reappear in the subsequent SEE.
6. The maximum number of dropping or withdrawal at any given time shall not exceed two courses subjected to maintaining the minimum registration requirements.

7. Mandatory Non-credit courses, Audit courses and bridge courses and equivalence courses are not considered for vertical progression.

Note: From II year onwards, the number of maximum credits that a student can register in a semester shall be 28. In any case, the number of credits shall not be less than 16 after dropping/ withdrawal of a course/(s) in that semester.

(d) 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. This shall be done College 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 13 follows the approach of the Council for this purpose as reproduced from the AICTE Approval Process Handbook:

Table 13 Percentage Equivalence of Grade Points (For a 10 – Point Scale)

Grade Point	Percentage of Marks / Class
5.75	50
6.25	55
6.75	60
7.25	65
7.75	70
8.25	75

Note: (1) The following Formula for Conversion of CGPA to percentage of marks to be used only after a student has successfully completed the programme:

Percentage of Marks = (– 0.75)×10

(2) Class designation:
- ≥ 70 % (First Class with Distinction),
- ≥ 60 % and < 70 % (First Class),
- < 60 % (Second Class).

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 Colleges under the University. This will 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 ahead in the 21st century.

(b) This makes it necessary for the Autonomous Colleges to provide for:

(i) Easy access to the Schemes of Instruction, Syllabi, Credit Structure of programmesand 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 College, 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 College 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 Time Schedules:

(a) Academic Schedules: It is necessary to specify various time schedules in the Academic Calendar of each Autonomous College to assist the students and also 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.

(b) Registration of Courses: Each student of the College shall have to register for coursework at the beginning of a semester. The permissible Course load to be either average number of credits in the 1st Semester of a programme or to be within the limits of minimum and maximum credits prescribed in each later Semester. A period of 2-3 days is assigned for this event in the Academic Calendar for the students to seek faculty advice, discuss with the course instructors and complete the formalities.

(c) Dropping of Courses: A specific time period shall be fixed at the College, e.g., in the middle of a semester for this purpose to be based on the review to be conducted of students' performance in CIE by the Faculty Advisors concerned. The review is 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 are to be re-registered by these students and taken up for study at a later semester in the programme.

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

(e) The maximum number of dropping or withdrawal at any given time shall not exceed two courses subject to maintaining the minimum registration requirements.

9.3 Temporary Withdrawal:

A student shall be permitted to withdraw temporarily from the College under the University on grounds like, prolonged illness, grave calamity in the family or any other serious happening. The withdrawal shall be for periods which are integral multiples of a semester, provided that:

(i) The student applies to the College within at least 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 parents / guardians.

(ii) The College 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 prescribed programme requirements within the time limits specified by the University.

(iii) The student does not have any dues or demands at the College/ University including tuition and other fees as well as library material.

(a) A student availing of temporary withdrawal from the College under the above provision shall be required to pay such fees and/or charges as may be fixed by the College until such time as his/her name appears on the Students' Roll List. However, it may be noted that the fees/charges once paid shall not be refunded.

(b) Normally, a student will be entitled to avail of the temporary withdrawal facility only once during his/her studentship of the programme at the College. However, any other concession for the student shall have to be approved by the Academic Council of the College. Hence, the students shall be advised by the Principal of the College to use the above provision only in exceptional cases.

9.4 Termination from the Programme:

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

(i) Failure (Getting F Grade) and not passing a Course to earn credits for the same, in spite of **five** attempts.

(ii) Failure to secure CGPA ≥5.00 on three consecutive occasions to lead the student being asked to discontinue the programme and leave the College. However,

- Failure to secure a CGPA ≥ 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).
- There shall be 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.**

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

(iv) Failure to meet the standards of discipline as prescribed by the College from time to time.

9.5 Students' Feedback:

a. It is necessary for College to obtain feedback from students on their course work and various academic activities conducted under the credit system. For this purpose, suitable feedback forms shall be devised by the College and the feedback obtained from the students in confidence regularly, by administering the feedback form in print or on-line in electronic form.

b. The feedback received from the students shall be discussed at various levels of decision making at the College and the changes/ improvements, if any, suggested shall be given due consideration for implementation at the College.

10. Award of Degree

10.1 Requirements: Bachelor's degree in Engineering shall be awarded to the candidates who have passed all the stipulated examination from 1st to 8th semesters and earned total credits of 175 (135 credits in case of Diploma lateral entry students) as per the prescribed curriculum within a maximum of 8 years (6 years in case of Diploma lateral entry students) from date of registration for the programme. However, declaration of the class of the degree shall be based on the performance of the candidate from 5th to 8th semester examinations taken together.

10.2 Eligibility: A student shall be eligible for the award of the degree if:

a. The student has fulfilled all the requirements of the degree.
b. No dues are payable by the student to the institute, departments, hostel, library, sports and/ or any other centers.
c. No disciplinary proceeding is pending against the student.

10.3 Award of Rank for the Programme:

A candidate shall be eligible for a rank at the time of award of degree in each branch of Engineering, provided he/she has:

- Admitted to college from 1st year B.E.(Regular) or 3rd sem B.E.(lateral entry).
- Passed in all the subjects
  For students admitted in 1st year B.E.: 1st to 8th semester in FIRST attempt only.
  For students admitted in 2nd year B.E.(lateral entry): 3rd   to 8th semester in

FIRST attempt only.
- For award of rank in branch of Engineering the CGPA (normally calculated up to the second decimal position) based on credits for regular student from 1st to 8th sem and for the diploma student secured from 3rd to 8th semester shall be considered.
- If two students get the same CGPA, the tie should be resolved by considering the number of times a student has obtained higher SGPA; but, if it is not resolved even at this stage, the number of times a student has obtained higher grades like S, A, B etc., shall be taken into account in ranking the students in a class.
- Students having transitional grades (X- Grades and W-Grade) and passed in make-up examination will not be considered.
- Students having transitional I-grades and passed in make-up examination will be considered.
- Should not have repeated/rejected any of the lower semesters.
- Should have completed the prescribed course of study within four academic years.

10.4 Award of Rank (Year wise) in the Class:
For award of rank in the class for an academic year, CGPA (normally calculated up to the second decimal position) based on credits for regular student and for the diploma student secured for the academic year shall be considered. Students having transitional grades (X and W- grade) will not be considered. If two students get the same CGPA, the tie should be resolved by considering the number of times a student has obtained higher SGPA; but, if it is not resolved even at this stage, the number of times a student has obtained higher grades like S, A, B etc., shall be taken into account in ranking the students in a class.

10.5 Recommendations for Degree Award:

(a) The College shall forward its recommendations to the University in respect of students qualifying for B.E. degree awards based on their success in the examinations/adjudication of theses as the case may be after receiving approval from the Authorities/ Bodies of the College concerned.
(b) The College shall also ensure that each such student in (a) has fulfilled all the requirements for the Degree award.
(c) Only those students recommended for the Degree Award shall be entitled to receive the relevant Provisional Certificates/Transcripts from the College at this stage.

10.6 Graduation Ceremony:

(a) College shall have its own annual Graduation Ceremony for the award of Degrees (Provisional Certificates) to the students completing the prescribed academic and other requirements in each case as per the lists recommended to the University, in prior consultation with the University and by following the provisions in the University Statutes.
(b) Colleges may institute Prizes and Awards to meritorious students, for being given away annually at the Graduation Ceremony. This will greatly encourage the students to strive for excellence in their academic activities.

11. INTERPRETATION
Any question as to the interpretation of these **Guidelines** shall be decided by the Academic Council and University, whose decision shall be final. The Academic Council 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 **Guidelines.**