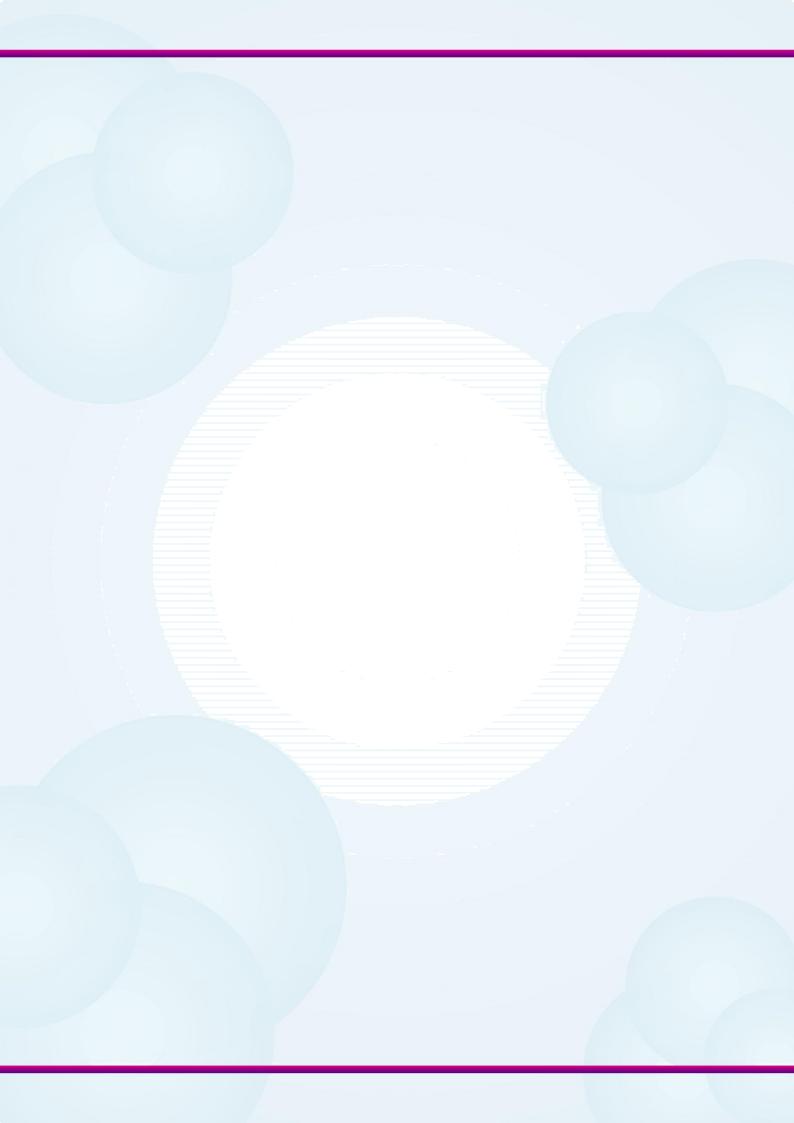# BMS COLLEGE OF ENGINEERING, BENGALURU

Autonomous Institute Affiliated to VTU

Academic Rules and Regulations

Applicable to all Autonomous UG Programmes
(Amended in August 2017)

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ACADEMIC RULES & REGULATIONS

Applicable for all autonomous UG programmes
Amended in August 2017

1. SHORT TITLE AND COMMENCEMENT

1.1 The regulations listed under this head are common for all degree level undergraduate B.E. programmes offered.

1.2 The regulations 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

(a) "University" means Visvesvaraya Technological University (VTU)

(b) "College" means BMS College of Engineering (BMSCE)

(c) "Commission" means University Grants Commission (UGC)

(d) "Council" means All India Council for Technical Education (AICTE)

(e) "Statute" means VTU Autonomous College Statute, 2006

(f) "Academic Autonomy" means freedom granted by the University to the College in all aspects of conducting its academic programmes for promoting academic excellence

(g) "Autonomous College" means a college notified as an autonomous college as per the VTU Autonomous College Statute, 2006

(h) "Regular Students" means students who are admitted to B.E. Programmes after PUC (10+2) or equivalent

(i) "Lateral Entry" means students who are admitted to the third semester Engineering (second year) programme after completing Diploma Course in the respective discipline

(j) "Branch" means specialization in a programme like B.E. degree programme in Civil Engineering or B.E. degree programme in Computer Science and Engineering etc.

(i) "Course" means a subject either theory or practical identified by its title and code number. For example, Engineering Mathematics-I is a course offered in the first semester & its code is 14MA1ICMAT.

3. NOMENCLATURE OF ACADEMIC PROGRAMMES

3.1 The nomenclature and the corresponding abbreviations shown below, shall continue to be used for the degree programmes under the University, as required by the Commission and Council:

Bachelor of Engineering (B.E.)

Besides, the branch / programme of specialization, if any, shall be indicated in brackets after the abbreviation.

For example, engineering degree in Mechanical Engineering programme is abbreviated as B.E. (Mechanical Engineering).

3.2 Undergraduate degree programmes offered by the College:

S. No.	Title of the UG Programme	Abbreviation
1	Civil Engineering	CV
2	Mechanical Engineering	ME
3	Electrical and Electronics Engineering	EE
4	Electronics and Communication Engineering	EC
5	Industrial Engineering and Management	IM
6	Computer Science and Engineering	CS
7	Telecommunication Engineering	TE
8	Information Science and Engineering	IS
9	Electronics & Instrumentation Engineering (*Earlier titled and offered as Instrumentation Technology*)	EI
10	Medical Electronics	ML
11	Chemical Engineering	CH
12	Biotechnology	BT

3. DURATION OF THE ACADEMIC PROGRAMMES

As a flexible credit system is followed, it is to be noted that the programme duration shall 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 qualify for the award of degree in a shorter time than that of the duration specified for the concerned programme.

4.1 Normal Duration

4.1.1 The duration of an academic programme shall be four years for B.E. programme

4.1.2 The duration of an academic programme shall be three years for B.E. lateral entry programme

4.2. Maximum Duration

4.2.1. The maximum period which a student can take to complete a full time academic programme shall be twice the normal duration of the programme, i.e., eight years for B.E., and six years for lateral entry (diploma students).

4.2.2 The maximum period for a programme shall also be dictated by the fact that a student has to demonstrate the prescribed minimum academic performance by registering for the prescribed minimum number of credits in every semester, for continuing with the programme. This period can be equal to or lesser than the maximum period indicated as in 4.2.1.

4.3 Admission of Students

4.3.1 The admission of students to various UG degree programmes listed under Section 3.1 and 3.2 shall be made by following the State Government and/or University and Policies/Practices

4.3.2 The candidates with a diploma or any other equivalent qualification approved by the Council and the Commission are eligible to join the degree programmes at the beginning of the second year (third semester), as per the prevailing practice in the University (Lateral Entry).

4.3.3 The students can migrate from one branch or specialization to another branch or specialization in the same College or at another Autonomous/ Affiliated College under the University at the beginning of the second year (third semester) following the AICTE/VTU/State Government norms in vogue and as amended from time to time.

4.3.4 The eligibility criteria for admission of students to UG degree programmes shall be the same as those prescribed by the University from time to time.

4.3.5 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 as fixed by the Academic Council. The eligibility criteria for admission of students from other Universities to an Autonomous College shall be fixed by the Academic Council by getting the individual cases examined through the concerned Board(s) of Studies, after which, the names of eligible candidates (qualifying for admission as per norms laid down by the University from time to time) are recommended to the University for its approval.

4.4 Semester Scheme

The semester scheme is being adopted since it provides several benefits to technical education programmes in contrast to the annual scheme of learning.

4.5 Academic Calendar

An academic year consists of two regular semesters and a fast track semester; the details of which are shown in Table 1.

Table 1: A TYPICAL SCHEDULE OF ACADEMIC YEAR

S.No.	Activity	Description	
1	Number of semesters in an academic year	Two regular semesters (Odd & Even) and a Fast Track Semester	
2	Duration of Regular Semester	19 weeks	
3	Duration of Fast Track Semester	08 weeks	
4	Academic activities (duration in weeks)	Regular Semester(s)	Fast Track Semester
	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	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	
		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).	
7	Fast Track Semester	Fast Track Semester conducted for the benefit of the students to clear their failed courses, if any. (refer Regulation-12.8)	

5. PROCTOR SYSTEM

5.1 Introduction

The faculty advisory system (Proctoring system) is to help the students to complete their studies successfully & comfortably. A faculty is called as proctor and the student as proctee.

5.2. Objective(s):

5.2.1. To advice the students in their academic requirements

5.2.2 To guide/mentor the students appropriately from time to time

5.2.3 To provide supportive care to the students from time to time

5.3   Roles & Responsibilities:

5.3.1 The proctor shall pay complete attention in respect of the student who fails to satisfy minimum attendance (85%) in all courses & internal marks (50%) in each of the laboratories, drawings and workshops etc as per the regulations.

5.3.2 The proctor shall get their copy of proctor diary updated and ensure that student proctor diary is also completed in all respects from time to time.

5.3.3 The proctor shall arrange for a meeting with the students at least twice in a month and submit the proceedings to the concerned HOD.

5.3.4 The proctor shall invite the parent for discussion at least once in every semester to update the academic progress of their ward.

5.3.5 The Proctor should arrange to send the progress reports to the parent furnishing the details of attendance, class marks, examination results, etc. These reports shall be sent twice in a semester (preferably after the conduction of Test1 & Test2) to the parents/guardians of all the concerned students.

5.3.6 Proctor shall ensure that the students should not partake in any sort of ragging activity in & outside of the campus/hostel and they shall not indulge in any anti-social activities and acts unbecoming of a student.

5.4   Expected Outcome:

Reduce the failure rate, motivate the students & improve the overall performance and quality of the student.

6.   CREDIT SYSTEM

6.1 General

6.1.1 The institution follows a Choice Based Credit System (CBCS) from the academic year 2008-09 onwards. The students have an option of choosing from a wide range of electives (department, cluster and institutional) 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.

Credit System has many advantages over the conventional system of organizing academic programmes; in particular the CBCS for the various programmes will provide a great opportunity to the students in their preparation to meet the challenging opportunities ahead.

6.1.2 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.

6.1.3 Credit Definition

One unit of course work is assigned one credit in the regular semester (odd/even) for:

a) Theory Course conducted for one hour/week/semester

b) Tutorials and Practical classes (Laboratory Courses) conducted for Two hours/Week/Semester

c) Self-Study in a Course, for four hours/week/semester

However, in case of fast track semester, the course load is multiplied by two. These guidelines form the basis to fix semester course load & weekly contact hours in the regular/fast track semesters.

Note: Other student activities like study tours, industrial visits, guest lectures shall not carry any credits.

6.1.4 Course Registration

A student shall register for the courses to earn credits for meeting the requirements of the degree programme. Such courses together with their grades and the credits earned will be included in the Grade Card issued by the College at the end of each semester and it forms the basis for determining the student's academic performance in that semester.

6.1.5 Audit/Value Added 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 students' academic performance in the semester.

6.2 Credit Structure

6.2.1 A typical Credit Structure for course work (hrs/wk/sem) in B.E. Programme is shown in Table 2:

Table- 2

Course	Credits				
	L	T	P	S	Total
ABC	3	1	0	0	**4**
EFG	3	0	0	0	**3**
PQR	3	0	1	2	**6**
XYZ	3	0	1	0	**4**

7. Course Load in regular semester(s):

7.1 The course load is fixed at 25 credits per semester

7.2 In the first two semesters, the prescribed course load per semester is mandated. Withdrawal/dropping of courses in the first year (first two semesters) is not allowed.

7.3 In higher semesters, the applicable course load per semester may vary from a minimum of 20 credits to a maximum of 30 credits. The variation in credits depends on CGPA. This flexibility enables students (from 3rd semester onwards) to cope-up with the course work and helps in improving their academic performance and optimizes the learning outcome.

7.4 A student may be permitted to register for additional courses (limiting to 30 credits), from third semester onwards. This is subject to the following conditions:

a) The student has secured a CGPA ≥8.5

b) The student doesn't have more than two backlogs from the previous semesters

c) The student shall ensure that there is no overlapping in time-table for the period and obtain concurrence from the Proctor.

d) The student shall submit a copy of documentary evidence in respect of the above (a,b,c) while seeking approval from the concerned HOD.

e) 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.

7.5 The total number of credits required to be earned by a student to qualify for the award of the degree in respect of Engineering (both regular and lateral entry) is as shown in Table 3

Table-3

Programme	Normal Duration		Total number of credits to be earned
	Years	Semester	
B.E.	4	8	200
B.E. (Lateral Entry)	3	6	150

8. Course load in Fast Track Semester:

The Fast Track semester is provided for helping students who have failed in their examinations. The Fast Track semester is provided to help the student to avoid losing an academic year.

It is the discretion of the department/College whether to offer the fast track semester or not. Fast Track semester is a special semester and the student cannot demand it as a matter of right.

During the Fast track semester, a student is permitted to re-register for course(s) where he/she has secured F-Grade (no new courses are allowed for registration). A student is permitted to register for a maximum of **12 credits** (excluding credits due to self-study component, as the marks earned in the self-study component in the regular semester is carried forward in the Fast Track semester).

The student has to pay a special fee prescribed by the College to register for a course in the Fast Track semester. All courses may not be offered and the student has to opt from those courses offered by the department in a given Fast Track Semester.

The department/college may offer some courses based on the availability of resources in hand.

9. Curriculum Framework

9.1. The maximum number of contact hours for the students will be around 26 hrs/week. This will be of help to students in getting enough time and opportunity to develop their creative skills and abilities, benefitting from Add-On courses and also those taken for audit, in addition to the ones prescribed for credit under a Programme and preparing them for challenging and exciting careers ahead.

9.2 Curriculum framework is important in setting the right direction for a degree programme, as it takes into account the type and quantum of knowledge necessary to be acquired by a student to qualify for award of a particular degree in his/her chosen branch or subject area.

9.3 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 a particular conferment.

9.4 B.E. Degree Programme

Table-4 shows a typical Curriculum framework for B.E. degree programme:

Table-4

S.No.	Subject Area	Average No. of Credits
1	Basic Science Core courses	30
2	Engineering Science	30
3	Humanities & Social Science courses	10
4	Professional Core courses	80
5	Professional Elective courses	30
6	Major Project / Seminar, etc.	20
	Total	**200**

10 Mandatory Courses for B.E. programme

The UG degree programmes also require the inclusion of certain courses like proficiency in a language, Constitution of India, bridge courses and additional courses suggested by respective BOS for the completion of programme as mandatory courses. Mandatory courses will not carry any credits; but, a pass in each such course after attaining required CIE or SEE requirements during the programme shall be a necessary requirement for the student to qualify for the award of Degree

10.1 Mandatory Courses for the students admitted under lateral entry

10.1.1   The student shall compulsorily pass two bridge courses in Mathematics (one in 3rd and one in 4th semester);

10.1.2   The student must clear the bridge courses before advancing to the 7th semester of the programme.

10.1.3   The student shall pass the following non-credit mandatory/HSS courses for the award of the degree.

Table-6: Mandatory Courses for lateral entry

S.No.	Mandatory Courses
1	Functional English
2	Kannada Language
3	Constitution of India and Professional Ethics
4	Environmental Studies
5	Personality Development and Communication

11   ASSESSMENT

The College has effective examination and assessment system for each activity.

11.1   Achievement Testing

11.1.1   The assessment of student's performance 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, testing of creativity and testing for ranking.

11.1.2   Typically achievement testing is done in two parts as follows:

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

b) **Terminal:** Covering **Semester End Examination (SEE),** to be conducted by the course instructor/faculty jointly with an external examiner at the end of a semester, on dates to be fixed at the College level; and to 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 have equal (50:50) weightage. Student's performance in a course shall be judged by taking into account the results of CIE and SEE individually and also together.

11.2 Question Papers

11.2.1 **Achievement Testing:** For an effective achievement testing of the students in a course, a good question paper needs to be used as the principle 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 & quantitative methods;

- Contain adequate data / other information on the problems assigned;

- Have clear and complete instructions to the candidates.

11.2.2 **Question Paper Planning:** Question Paper to cover the entire syllabus, with a provision for the students to answer questions from the full syllabus. As students need to be given some choice in the questions included in the Paper, it is preferred for the Question Papers at SEE, in particular, to have built in choice. This factor shall be taken note of by the Board of Examiners (BOE), while planning for the Question Papers.

11.2.3 Besides, it is also necessary for the course syllabi to be well drafted, be defect-free and be properly unitized (or modularized) to enable the setting of good question papers covering the whole syllabus. These aspects have to be taken into account, in particular, by the Board of Studies (BOS).

11.2.4 **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 instructor/faculty as well as the external examiners shall have to be well trained to set them:

(i) Multiple Choice questions, 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, application, analysis, evaluation and understanding of the students; however, Question Papers for CIE and SEE to include no more than 15-20% of the questions of this type.

(ii) Comprehensive questions that have 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 subject, through long questions relating to theoretical / practical knowledge, derivations, problem solving, application and quantitative evaluation.

11.3 Examinations/Assessment

11.3.1 **Continuous Internal Evaluation (CIE):** The CIE shall be conducted by the faculty/teacher 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, seminar, term paper, open ended experiments, mini-projects, two minute videos, MOOCs etc. and also the necessary rubrics to students well in advance. The faculty shall maintain transparency, announce the CIE results well in time.

11.3.2 **Components in a course:**

Each course consists of three components namely, Theory (Lecture and tutorial), Practical and Self-study. A given course will be classified based on the combination of one or more of these components.

11.3.3 **Types of Courses:**

There are three types of courses – Regular/normal, integrated and Comprehensive

1. **Regular/normal Course** is a course which has only one component i.e., theory or practical

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

3. **Comprehensive Course** is a course which has all the three components namely theory, practical and self-study

11.3.4 **Alternative Assessment:**

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 (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning space. The AAT includes seminar, assignments, term paper, open ended experiments, mini-projects, two minute videos, MOOCs etc.

The weightage of AAT may vary from 20% to 40% of the CIE as approved in the 9th ACM (Academic Council Meeting) in order to encourage faculty for effective teaching-learning practices.

However, it is mandated for a faculty to obtain prior permission from the concerned HOD for implementing AAT and announce the same in the respective class before the commencement of a course (Refer to 11.3.6).

11.3.5 **ASSESSMENT PATTERNS WITH 20% WEIGHTAGE FOR AAT.**

11.3.5.1 **Assessment pattern for Regular/Normal courses:**

The weightages of various components of CIE for **regular/normal courses** considering weightage of **20% to Quiz/AAT** i.e. 10 out of 50 marks are shown in the table below:

Table-7: Assessment pattern for Regular/Normal courses

COMPONENT	THEORY		TOTAL
Type of Assessment	Test*	Quiz# or AAT	MARKS
Max. CIE Marks	40	10	**50**

Note:

* Three tests will be conducted; best two tests will be considered for final assessment.

Two quizzes will be conducted and both will be considered for final assessment.

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

11.3.5.2 Assessment pattern for Integrated Courses:

The weightages of various components of CIE for integrated courses considering weightage of **20% to Quiz/AAT** i.e. 10 out of 50 marks are shown in the table below:

Table-8: Assessment pattern for Integrated Courses

COMPONENT	THEORY		PRACTICAL			TOTAL MARKS
Type of Assessment	Test*	Quiz#/AAT	Records & Performance	Lab Test	Viva-voce/AAT	
Max. CIE Marks	20	05	10	10	05	**50**

Note:

* Three tests will be conducted; best two tests will be considered for final assessment.

Only one quiz will be conducted and considered for final assessment.

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

11.3.5.3 Assessment pattern for Comprehensive Courses (Applicable for the batches admitted from 2014-15 onwards):

The weightages of various components of CIE for comprehensive courses considering weightage of **20% to Quiz/AAT** i.e. 10 out of 50 marks are shown in the table below:

Table-9 : Assessment pattern for Comprehensive Courses

Component	Theory (50%)		Practical (30%)		Self-Study (20%)	TOTAL MARKS
Type of Assessment	Test*	Quiz#	Lab Performance/ Record	Lab Test	AAT	
Max. CIE Marks	20	05	10	05	10	**50**

Note:

* Three tests will be conducted; best two tests will be considered for final assessment.

Only one quiz will be conducted and considered for final assessment.

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

11.3.6 ASSESSMENT PATTERNS WITH 40% WEIGHTAGE FOR AAT

CIE assessment pattern using AAT with more than 20% weightage, but limited to, 40%.

A faculty who wishes to design AAT with more than 20% weightage, shall create a new pattern for assessment indicating weightages for all the three components. The assessment pattern shown above (11.3.5.1, 11.3.5.2 and 11.3.5.3) need not be used. It is mandated that a faculty shall submit a detailed assessment pattern and obtain prior approval (preferably one week before the commencement of classes), from the concerned Departmental Academic Committee (DAC).

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

In case of integrated and comprehensive 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, practical and self-study components shall not be less than 40%.

11.4. Semester End Examination (SEE): The SEE shall be conducted jointly by the course instructor/faculty and an external examiner appointed for this purpose by the College. The external examiner is associated with the work of question paper setting/evaluation/moderation/lab examination/project evaluation and others.

11.4.1 SEE Answer Scripts: The answer scripts of SEE are evaluated by the course instructor/faculty and moderated/evaluated by the external examiner. A committee of the College may oversee and ensure the quality and standard of evaluation and of the grades awarded in all the cases.

11.4.2 External Review of SEE: An external review shall be conducted under the aegis of the Board of Examiners (BOE) of the College by appointing a panel of subject experts from outside the College for this purpose and aiming at totality in the review of SEE operation and covering such steps as, question paper review, checking random samples of answer scripts, analysis of results/grades awarded, etc. This step is necessary for gaining the confidence of the University and also of the society at large, on the fairness and transparency in the system.

11.5 Passing Standards: High standards are maintained in all aspects of the examination. The absolute grading method is followed. The minimum standard of passing in respect of CIE and SEE for each course is shown in Table-10.

Table-10: Passing Standards using Absolute Grading

Evaluation Method	Passing Standard
Sessional (CIE)	Score: ≥40%
Terminal (SEE)	Score: ≥40%

11.6 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 /guide, periodically evaluated by him/her together with a Project Evaluation Committee (PEC) constituted for this purpose at the department to ensure uniform evaluation. The projects are evaluated by a well-defined Rubrics (made known to the students well in advance). PEC ensures minimum three evaluations for CIE: one initial, one mid-semester and one towards the end of semester (before last working day). Project demonstration/presentation, seminar, submission of project report and viva-voce conducted with an external examiner shall form the SEE of the project work.

11.7 There shall be **NO RE-EXAMINATION** for any Course in the credit system to take care of such students who have:

    a) Absented themselves from attending CIE or SEE; without valid reasons; or,

    b) Failed (Grade F, as covered in Section 9) to meet the minimum passing standards prescribed for CIE and/or SEE; or,

    c) Been detained for want of attendance; or,

    d) Withdrawn (Grade W, as covered in Section 9.) from a Course;

Such students listed above (a to d), shall be required to re-register for the Course(s) and go through CIE and SEE again and obtain a Grade equal to or better than E (refer Section 9) in each case. While such students shall have to re-register for the same / equivalent Course(s) in case of core courses, they can re-register for alternative Course(s) from among the elective courses, as the case may be. The re-registration shall be possible when the particular course is offered in regular semesters.

12. ATTENDANCE REQUIREMENT

12.1 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 may condone deficiency up to a limit of 10% in special cases and shall submit a list of such candidates to the office of 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).**

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

12.3 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.

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

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

12.6 The basis for the calculation of the attendance shall be the period prescribed by the College by its calendar of events. For the first semester students, the same is reckoned from the date of admission to the programme.

12.7 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 college will not be considered as valid reason for exemption from the attendance requirements.

12.8 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.

12.9 **In respect of Integrated/Comprehensive Courses 85% of attendance shall be maintained both in theory and practical components. Failing to maintain the 85% attendance in any one component, the student will not be permitted to take up SEE in that course.**

13. GRADING

13.1 General

13.1.1 As in recent years, the grading system has replaced the evaluation of student's performance in a Course based on absolute marks. This is to ensure uniformity in the grading practice at different autonomous colleges to facilitate the migration of students or transfer of credits among Autonomous Colleges under the University.

13.1.2 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), Very Good (B), Good (C), Average (D), Poor (E) and Unsatisfactory/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 in a Course under different grading levels, as above.

13.1.3 Absolute Grading: The College has adopted the absolute grading system.

13.2 Grade Points

13.2.1 Depending on the letter grades assigned, a student earns certain grade points. As the grading system can have different grade points, like 5, 8 and 10, more number of points in the scale, will be necessary to provide a better resolution in the performance assessment.

The College follows the 10-point grading system, as given in the Table-11:

Table-11: Grade Points Scale (Absolute Grading)

Level	Out-standing	Excellent	Very Good	Good	Average	Poor	Fail
Grade	S	A	B	C	D	E	F
Grade Points	10	09	08	07	05	04	00
Score (Marks) Range (%)	≥90	≥75 - < 90	≥= 60 - < 75	≥50 - < 60	≥45 - < 50	≥40 - < 45	< 40

13.2.2 The grade points given in Table -11 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.

13.2.3 Earning of Credit: A student shall be considered to have completed a course successfully and earned the 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 credits earned.

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

13.2.4.1 **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:

(i)   Accident or severe illness leading to hospitalization, which disables the student from attending Semester End Examination (SEE);

(ii)   A calamity in the family at the time of SEE, which requires the student to be away from the College;

(iii) In the event of (i) and (ii) above, it is the responsibility of the student/parent/guardian to inform the college authorities (proctor/HOD) immediately. The information may be in the form of either written communication, personal communication by parent/guardian/peer or an e-mail or mobile message. The candidate needs to submit all the relevant evidences (hospital reports, police reports, certificates from competent authorities, etc.). Intimation is mandatory. Any intimation after the conduct of examination will not be entertained.

13.2.4.2 **Grade 'X':** Awarded to a student having attendance ≥85% and CIE rating (≥60%) 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; **however, the grades ('D' to 'S') will be reduced to the next lower grade and grade 'E' will remain unchanged**.

13.2.5   **Grade 'W':** Awarded to a student having satisfactory attendance at classes, but withdrawing from that Course before the prescribed date in a semester under faculty advice; the student shall re-register for the said course in the regular semesters only. 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 regular semesters (Odd/Even, not in fast-track semester) only and fulfill the passing standards.

13.2.6 **Grade Card:** Each student shall be issued a Grade Card at the end of each semester. This will have a list of all courses registered by a student in the semester along with the credits. In addition to the letter grades with grade points, the grade card may also contain transitional grades 'I' and 'X' which do not carry any grade points. Hence, only the courses registered for credit and having grade points shall be included in the computation of student's performance i.e., SGPA and CGPA.

However, the Courses taken for audit will 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 may be noted that each student shall have to obtain the grade 'PP' in each mandatory course to qualify for award of the Degree by the University.

13.2.7 **Make-up Examination:** The Make-up Examination facility shall be made available to students who have secured 'I' or 'X' grade; The standard of the Make-up Examination shall be the same as that of regular SEE for the Courses. The Make-up Examination shall be held as per dates notified in the Academic Calendar. However, it will be possible for the autonomous institution to modify the Academic Calendar with the permission of the Academic Council.

13.2.8 In the event, a student fails in a Laboratory course and/or in CIE of a course in final year, the student shall be given 'I' grade. In such a case, the concerned Chairperson of BOE may grant the student extra time not exceeding 12 weeks for completing the course with due concurrence of the faculty and Head of the Department. If no such extra time is sought / granted, the concerned student shall have to re-register for the course(s) in the succeeding regular semester and fulfill the academic requirements for the award of the degree.

13.2.9 All the transitional grades ('I' and 'X') awarded to a student shall have to be converted to an appropriate letter grade after the make-up examination. If a student fails to appear for the make-up examination, the 'I' and 'X' grades shall be automatically converted to 'F' grade, after the last scheduled Make-up Examinations.

13.3 Grade Point Averages

13.3.1 **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 of which are important 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.

The SGPA and CGPA will be computed as shown below:

Semester Grade Point Average (SGPA)

$$\frac{\sum[(\text{Course credits}) \times (\text{Grade points})] \text{ (for all Courses in that semester excluding transitional grades)}}{\sum[(\text{Course credits})] \text{ (for all courses in that semester excluding transitional grades)}}$$

Cumulative Grade Point Average (CGPA)

$$\frac{\sum[(\text{Course credits}) \times (\text{Grade points})] \text{ (for all Courses excluding those with F \& transitional grades until that semester)}}{\sum[(\text{Course credits})] \text{ (for all Courses excluding those with F \& transitional grades until that semester)}}$$

Both SGPA and CGPA facilitate the declaration of academic performance of a student, at the end of a semester and at the end of successive semesters respectively. Both SGPA and CGPA shall be normally calculated up to the second decimal position, so that the CGPA, in particular, can be made use of in ranking the students in a class. 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.

13.3.2 An illustrative example given in Table-12 below indicates the use of the above two equations in calculating SGPA & CGPA:

Table-12: Typical example - Calculation of SGPA/CGPA

Semester (Odd:I) (Even:II)	Course No.	Credits	Grade	Grade Points	Credit Points	SGPA	CGPA
I	AA 101	5 : 0 : 0	B	8	40		
I	AA 102	3 : 2 : 0	W	-	-		
I	AA 103	3 : 0 : 0	A	9	27		
I	AA 104	0 : 1 : 1	F	0	00		
I	AA 105	4 : 1 : 0	D	5	25		
I	AA 106	5 : 0 : 0	E	4	20		
Total		20 (18*)			112	5.60 (112/20)	5.60 (112/20)
II	AA 107	3 : 1 : 1	C	7	35		
II	AA 108	4 : 0 : 0	B	8	32		
II	AA 109	3 : 0 : 0	D	5	15		
II	AA 110	4 : 1 : 0	E	4	20		
II	AA 111	2 : 1 : 1	A	9	36		
II	AA 112	2 : 0 : 0	F	0	00		
II	AA 113	0 : 2 : 0	B	8	16		
Total		25 (23*)			154	6.16 (154/25)	6.48 (266/41)
Fast Track	XX 102	3 : 2 : 0	D	5	25		
Fast Track	XX 104	0 : 1 : 1	C	7	14		
Fast Track	XX 112	2 : 0 : 0	D	5	10		
Total		9			49	5.44 (49/9)	6.30 (315/50)

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

13.3.3 **Vertical Progression:** Minimum standards for SGPA and CGPA together with the minimum number of credits are laid down for the vertical progression of students. This facilitates the mobility of students from one College to another and also avoids confusion among the students. The vertical progression of students is applied between academic years only.

The following are the prescribed standards for vertical progression:

a) Minimum Standard for SGPA =5.0

b) Minimum Standard for CGPA =5.0 (at the end of each academic year)

c) Maximum Number of 'F' Grades that can be carried at the end of any academic year is **four only**

d) The maximum number of withdrawals at any given time shall not exceed **two courses** subject to maintaining the minimum registration requirements

However, failure to secure a minimum CGPA = 5.0 at the end of any semester for the first time, shall **attract a warning** before allowing the student to continue in the next semester.

13.3.4 **Award of Class:** The class will be awarded after students earn a total of 200 credits. The Table-13 shows the conversion of CGPA into percentage of marks and the award of class thereon.

Table-13: Award of Class

Range of Grade Point Average (SGPA or CGPA)	Percentage of Marks	Class
≥5.75 and < 6.75	≥50 and < 60	Second Class
≥6.75 and < 7.75	≥60 and < 70	First Class
≥7.75	≥70	First Class with Distinction

Please Note: The percentage of marks for a given SGPA/CGPA, can be computed using the formula: % MARKS SCORED = [CGPA - 0.75] x 10

14. Other Academic Matters

Time Schedules

14.1 **Academic Schedules:** An Academic Calendar is published before the commencement of every academic year to assist the students and faculty. The calendar includes, dates 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.

14.2 **Registration of Courses:** Each student shall have to register for course work at the beginning of a semester as prescribed in the academic calendar. The student has to compulsorily register for all the stipulated credits in the first year of the programme. In the subsequent years (higher semesters i.e., third semester onwards) the registrations shall be within the limits of minimum (≥20) and maximum (≤30) credits. A period of 2-3 days is assigned for this event to facilitate the students to seek faculty advice and discuss with the proctor/faculty prior to registering for courses.

14.3 **Dropping of Courses:** A specific period in the middle of a semester is fixed for this purpose and to help review the student's performance in CIE by the faculty advisors (proctors). The students having poor performance are facilitated to drop the identified course(s) (up to the minimum credits specified for the semester) in the higher semesters only (i.e., third semester onwards) without being mentioned in the Grade Card. Such Courses to be re-registered by these students in the regular semesters at a later time.

14.4 **Withdrawal from Courses:** A specific period is identified towards the end of a semester to help review the students' performance in CIE by the Proctor who shall advise 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 to be re-registered by these students in the main/regular semesters at a later time.

When to withdraw?: A student is allowed to withdraw from a Course(s) after one week from the last date of the second internal test (CIE) or as mentioned in the Academic Calendar.

Separate circular/notification shall not be issued in this regard. It is the responsibility of the student to withdraw from the courses with in the stipulated time failing which student will have to continue with the course and fulfill the academic requirements.

14.5 Temporary withdrawal from programme:

14.5.1 A student may withdraw temporarily from the programme 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:

- The student applies to the College 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.

- 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 programme requirements within the time limits specified by the University.

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

14.5.2 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.**

14.5.3 Normally, a student will be 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 College. Hence, the students shall be advised by the Principal to use this provision only in exceptional cases.

14.6 Termination from the Programme

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

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

14.6.2 Failure to secure a CGPA $\geqslant$ 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 $\geqslant$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).

14.6.3 Absence from classes for **two consecutive semesters** (Odd and Even) at a time without leave of absence being granted by competent authorities.

14.6.4. Failure to meet the **standards of discipline** as prescribed by the College from time to time;

14.6.5. **Successive Failures:** A student who has not been able to obtain eligibility for third semester **even after three academic years** will be terminated from the program. However, such a student can re-join the B.E. Programme in the College as a fresh student to the First Year.

14.7 Student's Feedback

14.7.1 The college obtains feedback from students on their course work and various academic activities conducted. The feedback is obtained on-line from the students at regular intervals maintaining confidentiality.

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

14.8 Graduation Ceremony

14.8.1 The College 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.

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

15. Interpretation

Any question as to the interpretation of these rules and regulations shall be decided by the College, whose decision shall be final and binding on the student in the matter. The College 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.

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:: NOTE ::

These rules and regulations may be altered/changed from time to time by the academic council. Failure to read and understand the rules is not an excuse.

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BMS COLLEGE OF ENGINEERING BENGALURU

Autonomous Institute, Affiliated to VTU

ACADEMIC CALENDAR FOR UG PROGRAMS

(Academic Year 2017-18)

SEM	EVENT	UG First year	UG Second Year onwards
ODD SEMESTER	Inauguration	12.08.2017	
	Orientation program	13.08.2017, 14.08.2017	
	Course Registration	14.08.2017	07.08.2017 to 08.08.2017
	Commencement of Classes	16.08.2017	09.08.2017
	CIE: Quiz#1/AAT	Before Test#1	
	Phase-shift 2017/ Engineers	15.09.2017 and 16.09.2017	
	Teachers Day	During September 2017	
	CIE: Test#1	21.09.2017 to 23.09.2017	
	CIE: Quiz#2/AAT	Before Test#2	
	CIE: Test#2	30.10.2017, 31.10.2017, 02.11.2017	
	CIE: Test#3	20.11.2017 to 22.11.2017	
	CIE: Lab Tests/Self-Study	23.11.2017 to 30.11.2017	
	Last working day	01.12.2017	
	SEE (Semester End Exam)	09.12.2017 to 23.12.2017	
	Make-Up Examination	03.01.2018 to 09.01.2018	
	Vacation for Students	24.12.2017 to 09.01.2018	
EVEN SEMESTER	Course Registration	10.01.2018	
	Commencement of Classes	11.01.2018	
	CIE: Quiz#1/AAT	Before Test#1	
	CIE: Test#1	22.02.2018 to 24.02.2018	
	CIE: Quiz#2/AAT	Before Test#2	
	CIE: Test#2	26.03.2018 to 28.03.2018	
	CIE: Lab Tests/Self-Study	30.04.2018 to 07.05.2018	
	UTSAV	29.03.2018 to 31.03.2018	
	Dr. B. R. Ambedkar Jayanthi	During April 2017	
	CIE: Test#3	26.04.2018 to 28.04.2018	
	Open House/Project Exhibition	05.05.2018	
	Last working day	07.05.2018	
	SEE (Semester End Exam)	16.05.2018 to 30.05.2018	
	Make-Up Examination	11.06.2018 to 16.06.2018	
	Vacation for Students	31.05.2018 to 31.07.2018	
Fast Track Semester		04.06.2018 to 31.07.2018	