



BAPATLA ENGINEERING COLLEGE :: BAPATLA (Autonomous)

Academic Rules & Regulations (R20 Regulations)

Regulations for Four Year Bachelor of Technology (B.Tech) Degree Program for the Batches admitted from the academic year 2020-21 (Academic Regulations as amended in November 2021)

1. Award of B.Tech. Degree

A student will be declared eligible for the award of the B.Tech. degree if he/she fulfils the following academic regulations:

- i. Pursues a course of study for not less than four academic years and in not more than eight academic years. However, for the students availing Gap year facility, this period shall be extended by two years at the most and these two years would not be counted in the maximum time permitted for graduation. A lateral entry student pursues a course of study for not less than three academic years and in not more than six academic years
 - ii. Registers for 160 credits and secures all 160 credits. However, a lateral entry student registers for 121 credits and secures all the 121 credits from III semester to VIII semester of Regular B. Tech. program.
 - iii. The student will be eligible to get Under graduate degree with Honors or additional minor engineering if he/she completes an additional 20 credits
 - iv. A student will be permitted to register either for Honors degree or additional minor engineering but not both.
2. Students, who fail to fulfil all the academic requirements for the award of the degree within eight academic years from the year of their admission, shall forfeit their seat in B.Tech. course and their admission stands cancelled. A lateral entry student should complete the course within six academic years from the year of their admission, failing which his/her admission in B.Tech course stands cancelled

3. Courses of study

The following courses of study are offered at present as specializations for the B. Tech. course

| S.No. | Title of the UG Programme | Abbreviation |
|--------------|---|---------------------|
| 1. | Civil Engineering | CE |
| 2. | Computer Science & Engineering | CS |
| 3. | Electrical & Electronics Engineering | EE |
| 4. | Electronics & Communication Engineering | EC |
| 5. | Electronics & Instrumentation Engineering | EI |
| 6. | Information Technology | IT |
| 7. | Mechanical Engineering | ME |



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|-----|--|----|
| 8. | Cyber Security | CB |
| 9. | Data Science | DS |
| 10. | CSE (Artificial Intelligence & Machine Learning) | CM |

4. Credits:

- Credit:** A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (Lecture) or two hours of practical work/field work per week.
- Academic Year:** Two consecutive (one odd + one even) semesters constitute one academic year.
- Choice Based Credit System (CBCS):** The CBCS provides choice for students to select from the prescribed courses.
- Each course in a semester is assigned certain number of credits based on following

| Description | Hours/Week | Credits |
|---|------------|---------|
| Theory | 03 | 03 |
| Tutorial | 01 | 01 |
| Practical | 03 | 1.5 |
| Internship (At the end of IV & VI evaluated in V & VII resp.) | - | 1.5/3.0 |
| Project Work | 24 | 12 |

5. Course Structure

Every course of the B.Tech program will be placed in one of the 8 categories with suggested credits as listed below.

| S.No. | Category | Category Description | Abbreviated Category | Credits |
|-------|-------------------------------|--|----------------------|---------|
| 1 | Humanities and social science | Humanities and social science including Management courses | HS | 10.5 |
| 2 | Basic Sciences | Basic Science courses | BS | 21 |
| 3 | Engineering Science courses | Engineering Science Courses including workshop, drawing, basics of electrical / mechanical / computer etc. | ES | 24 |
| 4 | Professional core | Professional core Courses | PC | 51 |
| 5 | Job Oriented /Open Electives | Emerging and job oriented/ Open Elective Courses- from other technical | JO/OE | 12 |



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| | | | | |
|----------------------|---------------------------|--|--------|------|
| 6 | Professional Courses | Professional Elective Courses relevant to chosen specialization/ branch | PE | 18 |
| 7 | Project Work & Internship | Project Work, Seminar, Internship in industry elsewhere | PW/INT | 16.5 |
| 8 | Mandatory courses | Environmental Studies, Induction training, Universal human Values, Ethics, Indian Constitution, Essence of Indian Traditional Knowledge (Non-Credit) | MC | 0 |
| 9 | Skill Oriented Courses | Skill Oriented Courses relevant to domain, interdisciplinary, communication skill, industry | SO | 10 |
| Total Credits | | | | 160 |

6. Weightage for course evaluation

6.1 Course Pattern

- ❖ The entire course of study is for four academic years. Semester pattern shall be followed in all years.
- ❖ A student eligible to appear for the end examination in a subject, but absent or has failed in the end examination may appear for that subject at the next supplementary examination when offered.
- ❖ When a student is detained due to lack of credits/shortage of attendance he/she may be re-admitted when the semester is offered after fulfilment of academic regulations. In such case, he/she shall be in the academic regulations into which he/she is readmitted.

6.2 Evaluation Process

The performance of the students in each semester shall be assessed course wise. All assessments will be done on absolute mark basis. However, for the purpose of reporting the performance of a candidate, letter grades and grade points will be awarded.

The performance of a student in each course is assessed with alternate assessment methods, term examinations on a continuous basis during the semester called Continuous Internal Evaluation (CIE) and a Semester End Examination (SEE) conducted at the end of the semester. For each theory, design and/or drawing course, there shall be a comprehensive Semester End Examination (SEE) of three hours duration at the end of each Semester, except where stated otherwise in the detailed Scheme of Instruction.

The performance of a student in each semester shall be evaluated subject wise with a maximum of 100 marks for theory and 100 marks for practical subject. In addition, Internships carried out after IV Semester & VI Semester shall be evaluated for 100 marks each and the Internship along with Project Work carried out in VIII Semester shall be evaluated for 100 marks. For theory subjects, the distribution shall be 30 marks for Internal Evaluation and 70 marks for the End-Examination. For practical subjects, the distribution shall be 30 marks for Internal Evaluation and 70 marks for the



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End- Examination. For project work, the distribution shall be 30 marks for Internal Evaluation and 70 marks for the End-Examination / Viva-Voce. The distribution of marks between Continuous Internal Evaluation (CIE) and Semester End Examination (SEE) to be conducted at the end of the semester will be as follows:

| Nature of the Course | CIE | SEE |
|---|-----|-----|
| Theory subjects | 30 | 70 |
| Practical | 30 | 70 |
| Summer / Industrial / Research Internship | - | 100 |
| Project Work | 30 | 70 |

6.3 Continuous Internal Evaluation (CIE) in Theory subjects:

6.3.1 In each Semester there shall be two Term examinations and some **Alternate Assessment Tools (AAT)** like Home Assignment, Class Test, Problem Solving, Group Discussion, Quiz, Seminar and Field Study in every theory course. The Alternate Assessment Tools with detailed modality of evaluation for each course shall be finalized by the teacher concerned before beginning of the course. It will be reviewed and approved by the Department Committee.

The Term Examination is conducted in the regular mode according to a schedule which will be common for a particular year of study. The maximum weightage for Term Examinations, AATs and the calculation of marks for CIE in a theory course is given in the following Table.

| Particulars | Term Exams | AAT |
|-----------------------|-----------------------|--|
| | (Max. 20 marks) | (Max. 10 marks) |
| Better Performed exam | 75% of marks obtained | Continuous assessment by teacher as per the predetermined course delivery & assessment plan. (Minimum two & maximum four assessments). |
| Other exam | 25% of marks obtained | AAT marks shall be considered based on average of all tests conducted. |

A minimum of 15 (50%) marks are to be secured exclusively in the Continuous Internal Evaluation (CIE) in order to be declared as qualified in that course and eligible to write the Semester End Examination (SEE) of that course. If a student fails to obtain 15 marks in CIE, he can register for the course repetition as per the guidelines mentioned in 6.5.



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Make up Test:

- a) A student can appear for a Make-up Test for **maximum two theory subjects** of a semester to improve marks in the Continuous Internal Evaluation (CIE).
- b) A student is eligible for **Make-up test** which is conducted after the second Mid Term examination and before SEE examination if he/she satisfies the following conditions.
 - i) Unable to secure 50% internal marks (CIE) and has more than or equal to 50% attendance in a particular theory subject (After finalizing the internal marks).
 - ii) Attendance in Remedial classes is more than or equal to 65% (if Remedial classes are conducted) or greater than 50% marks in the I Mid Term Examination and AAT 1 together.
 - iii) Attended 50% of CIE tests (at least one AAT & one Mid Term Examinations).
- c) The make-up test will be conducted for 30 marks (6 X 1M, 2X 12M) in Mid Examination format covering the entire syllabus and the marks obtained in this test are final. However, the maximum marks awarded will be 15 only.

6.3.2 Semester End Examination (SEE) in Theory and Design Course:

- a) For each theory, design and/or drawing course, there shall be a comprehensive Semester End Examination (SEE) of three hours duration at the end of each Semester for 70 marks, except where stated otherwise in the detailed Scheme of Instruction. Question paper setting shall be set by the teacher or teachers together in a multi section courses and to be verified as described in policy document.
- b) A minimum of 25 marks are to be secured exclusively in the Semester End Examination (SEE) of theory, design and/or drawing course. However a minimum 40 marks are to be secured in CIE & SEE together for the award of the grade and securing the credits in that course.

6.3.3 Continuous Internal Evaluation (CIE) in laboratory courses:

The evaluation for Laboratory course is based on CIE and SEE. The CIE for 30 marks comprises of 15 marks for day to day laboratory work, 5 marks for record submission and 10 marks for a laboratory examination at the end of the semester. In any semester, a minimum of 90% of prescribed number of experiments / exercises specified in the syllabi for laboratory course shall be taken up by the students. They shall complete these experiments / exercises in all respects and get the record certified by the internal lab teacher concerned and the Head of the Department concerned to be eligible to appear for the Final Examination in that laboratory course.

A minimum of 15 (50%) marks are to be secured exclusively in the Continuous Internal Evaluation (CIE) in order to be declared as qualified in that lab course and eligible to write the SEE of that lab course. If a student fails to obtain 15 marks in CIE, he can register for the course repetition as per the guidelines mentioned in 6.5.



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6.3.4 Semester End Examination (SEE) in laboratory courses:

- a) For each laboratory course, the Semester End Examination (SEE) shall be conducted by one internal and one external examiner appointed by the Principal and the duration of the exam shall be for three hours. The SEE is for 70 marks which include 15 marks for write up, 35 marks for lab experiment/exercise, 15 marks for Viva-voce and 5 marks for general impression.
- b) A minimum of 25 marks are to be secured exclusively in the Semester End Examination (SEE) of laboratory course. However a minimum 40 marks are to be secured in CIE & SEE together for the award of the grade and securing the credits in that course.

6.3.5 Evaluation of Summer Internship and Industrial/Research Internship:

- a) Summer Internship at the end of IV semester and Industrial/Research Internship at the end of VI carried out in industry are to be evaluated in V & VII semesters respectively based report and certificate provided by the industry. The report and certificate will be evaluated by the department committee for 100 marks. 50 marks shall be for the report and certificate and 50 marks based on seminars/presentation to the department committee by the student.
- b) A minimum of 40 (40%) marks are to be secured exclusively to be declared as passed and securing the credits in the internships.

6.3.6 Evaluation of the Project

- a) The evaluation shall be based on CIE and SEE. The CIE is for 30 marks which consists of reviews at the end of each month as per the Process Document in the form of seminars/presentations for 15 marks and the project report submitted at the end of the semester which is evaluated for 15 marks. A minimum of 15 (50%) marks and 50% attendance are to be secured by the student exclusively in CIE in order to be declared as qualified in the project work and eligible to write the SEE in the project work.
- b) SEE shall be evaluated in the form of a Viva-Voce and demonstration of the thesis work for 70 marks. Viva-voce Examination in project work shall be conducted by one internal examiner (Member of PWC) and one external examiner to be appointed by the principal. A minimum of 25 marks shall be obtained exclusively in SEE in order to be declared as passed in the Project work.
- c) Completion of internships along with Project work in VIII Semester is mandatory, if any student fails to complete internship, he/she will not be eligible for the award of degree. In such cases, the student has to repeat and complete the internship.

6.4 There shall be mandatory courses with zero credits. There shall be no external examination. However, attendance in the mandatory course shall be considered while calculating aggregate attendance and student shall be declared to have passed the mandatory course only when he/she secures 50% or more in the internal examinations. In case, the student fails, a re-examination shall be conducted for failed candidates every six months/semester at a mutually convenient date of college/student satisfying the conditions mentioned in item 1 & 2 of the regulations.



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6.5 Course Repetition (Repeater course)

The students not qualified to write SEE in a course may register for the repeater courses through course repetition and summer semester. The students have to apply to the Principal through the respective HOD by paying prescribed fees.

Course repetition: A student can take up a maximum of two theory courses in a semester immediately after the semester end examinations of that particular semester in accordance with the guidelines recommended by the Academic Council. The students who are not taking regular semester courses may additionally register for one more theory course.

The documents for monitoring the candidates registered for course repetition are available with the Heads of the Departments and Exam Section.

6.6 There shall be five Professional Elective Courses from V Semester to VII and for each elective there shall be choices such that the student shall choose a course from the list of choice courses offered by the department for that particular elective.

6.7 There shall be three Job Oriented elective Courses in all programs from V to VII semester.

One Open Elective course in VII semester will be offered by various departments. The student shall register for open elective in the VII semester offered by other departments in such a manner that he/she has not studied the same course in any form during the Program.

The students shall be permitted to pursue up to a maximum of two elective courses (either Professional Elective Courses in clause 6.6 or Open Electives/ Job Oriented Courses in clause 6.7) under MOOCs (Massive Open Online Courses) offered by NPTEL and other reputed organizations as notified by the Department during the semester. Each of the Courses must be of minimum 8/12 weeks in duration. The student has to acquire a certificate for the concerned course from the agency during the semester only in order to earn the credits for that course. For further details and guidelines, the students can visit the college website.

6.8 There shall be a mandatory **induction program** for three weeks before the commencement of first semester.

6.9 Minor in a discipline (Minor degree/program) concept is introduced in the curriculum for all conventional B. Tech programs in which it offers a major. The main objective of Minor in a discipline is to provide additional learning opportunities for academically motivated students and it is an optional feature of the B. Tech. program.

- a. i) Students who are desirous of pursuing their special interest areas other than the chosen discipline of Engineering may opt for additional courses in minor specialization groups offered by a department other than their parent department. For example, If Mechanical Engineering student selects subjects from Civil Engineering under this scheme, he/she will get Major degree of Mechanical Engineering with minor degree of Civil Engineering
- ii) Student can also opt for Industry relevant tracks of any branch to obtain the Minor Degree, for example, a B.Tech Mechanical student can opt for the industry relevant tracks like Data Mining track, IOT track, Machine learning track etc.
- b. The BOS concerned shall identify as many tracks as possible in the areas of emerging technologies and industrial relevance / demand. For example, the minor tracks can be the fundamental courses in CSE, ECE, EEE,CE,ME etc or industry tracks such as Artificial Intelligence (AI), Machine Learning (ML), Data Science (DS), Robotics, Electric vehicles, Robotics, VLSI etc.
- c. The list of disciplines/branches eligible to opt for a particular industry relevant minor



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- specialization shall be clearly mentioned by the respective BOS.
- d. There shall be no limit on the number of programs offered under Minor. The University/Institution can offer minor programs in emerging technologies based on expertise in the respective departments or can explore the possibility of collaborating with the relevant industries/agencies in offering the program.
 - e. The concerned BOS shall decide on the minimum enrolments for offering Minor program by the department. If a minimum enrolments criterion is not met, then the students may be permitted to register for the equivalent MOOC courses as approved by the concerned Head of the department in consultation with BOS.
 - f. A student shall be permitted to register for Minor program at the beginning of 4th semester provided that the student must have acquired a minimum of **8.0 SGPA** in each semester up to the end of 2nd semester without any backlogs. In case of the declaration of the 3rd semester results after the commencement of the 4th semester and if a student fails to score the required minimum of 8 SGPA, his/her registration for Minor Program stands cancelled and he/she shall continue with the regular Program. An SGPA of 8 has to be maintained in the subsequent semesters without any backlog in order to keep the Minor registration active
 - g. A student shall earn additional 20 credits in the specified area to be eligible for the award of B. Tech degree with Minor. This is in addition to the credits essential for obtaining the Under Graduate Degree in Major Discipline (i.e. 160 credits).
 - h. Out of the 20 Credits, 16 credits shall be earned by undergoing specified courses listed by the concerned BOS along with prerequisites. It is the responsibility of the student to acquire/complete prerequisite before taking the respective course. If a course comes with a lab component, that component has to be cleared separately. A student shall be permitted to choose only those courses that he/she has not studied in any form during the Program.
 - i. In addition to the 16 credits, students must pursue at least 2 courses through MOOCs. The courses must be of minimum 8 weeks in duration. Attendance will not be monitored for MOOC courses. Student has to acquire a certificate from the agencies approved by the BOS with grading or marks or pass/fail in order to earn 4 credits. If the MOOC course is a pass/fail course without any grades, the grade to be assigned as decided by the university/academic council.
 - j. Student can opt for the Industry relevant minor specialization as approved by the concerned departmental BOS. Student can opt the courses from Skill Development Corporation (APSSDC) or can opt the courses from an external agency recommended and approved by concerned BOS and should produce course completion certificate. The Board of studies of the concerned discipline of Engineering shall review such courses being offered by eligible external agencies and prepare a fresh list every year incorporating latest skills based on industrial demand.
 - k. A committee should be formed at the level of College/Universities/department to evaluate the grades/marks given by external agencies to a student which are approved by concerned BOS. Upon completion of courses the departmental committee should convert the obtained grades/marks to the maximum marks assigned to that course. The controller of examinations can take a decision on such conversions and may give appropriate grades.
 - l. If a student drops (or terminated) from the Minor program, they cannot convert the



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earned credits into free or core electives; they will remain extra. These additional courses will find mention in the transcript (but not in the degree certificate). In such cases, the student may choose between the actual grade or a “pass (P)” grade and also choose to omit the mention of the course as for the following: All the courses done under the dropped Minors will be shown in the transcript. None of the courses done under the dropped Minor will be shown in the transcript.

- m. In case a student fails to meet the CGPA requirement for B.Tech degree with Minor at any point after registration, he/she will be dropped from the list of students eligible for degree with Minors and they will receive B. Tech degree only. However, such students will receive a separate grade sheet mentioning the additional courses completed by them.
- n. Minor must be completed simultaneously with a major degree program. A student cannot earn the Minor after he/she has already earned bachelor's degree.
- o. Minimum enrollment for a Minor course to be offered is 12

6.10 Honors degree in a discipline:

Students of a Department/Discipline are eligible to opt for Honors Program offered by the same Department/Discipline.

- a. A student shall be permitted to register for Honors program at the beginning of 4th semester provided that the student must have acquired a minimum of **8.0 SGPA** in each semester up to the end of 2nd semester without any backlogs. In case of the declaration of the 3rd semester results after the commencement of the 4th semester and if a student fails to score the required minimum of 8 SGPA, his/her registration for Honors Program stands cancelled and he/she shall continue with the regular Program. An SGPA of 8 has to be maintained in the subsequent semesters without any backlog in order to keep the Honors registration active
- b. Students can select the additional and advanced courses from their respective branch in which they are pursuing the degree and get an honors degree in the same. e.g. If a Mechanical Engineering student completes the selected advanced courses from same branch under this scheme, he/she will be awarded B.Tech. (Honors) in Mechanical Engineering.
- c. In addition to fulfilling all the requisites of a Regular B.Tech Program, a student shall earn 20 additional credits to be eligible for the award of B. Tech (Honors) degree. This is in addition to the credits essential for obtaining the Under Graduate Degree in Major Discipline (i.e. 160 credits).
- d. Of the 20 additional Credits to be acquired, 16 credits shall be earned by undergoing specified courses listed as pools, with four courses, each carrying 4 credits. The remaining 4 credits must be acquired through two MOOCs, which shall be domain specific, each with 2 credits and with a minimum duration of 8/12weeks as recommended by the Board of studies.
- e. It is the responsibility of the student to acquire/complete prerequisite before taking the respective course. The courses offered in each pool shall be domain specific courses and advanced courses.
- f. The concerned BOS shall decide on the minimum enrolments for offering Honors program by the department. If minimum enrolments criteria are not met then the students shall be permitted to register for the equivalent MOOC courses as



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approved by the concerned Head of the department in consultation with BOS.

- g. Each pool can have theory as well as laboratory courses. If a course comes with a lab component, that component has to be cleared separately. The concerned BOS shall explore the possibility of introducing virtual labs for such courses with lab component. (Model pool list is enclosed in the Annexure-2).
- h. MOOC courses must be of minimum 8 weeks in duration. Attendance will not be monitored for MOOC courses. Students have to acquire a certificate from the agencies approved by the BOS with grading or marks or pass/fail in order to earn credits. If the MOOC course is a pass/fail course without any grades, the grade to be assigned will be as decided by the BOS/academic council.
- i. The concerned BOS shall also consider courses listed under professional electives of the respective B. Tech programs for the requirements of B. Tech (Honors). However, a student shall be permitted to choose only those courses that he/she has not studied in any form during the Program.
- j. If a student drops or is terminated from the Honors program, the additional credits so far earned cannot be converted into free or core electives; they will remain extra. These additional courses will find mention in the transcript (but not in the degree certificate). In such cases, the student may choose between the actual grade or a “pass (P)” grade and also choose to omit the mention of the course as for the following: All the courses done under the dropped Minors will be shown in the transcript. None of the courses done under the dropped Minor will be shown in the transcript.
- k. In case a student fails to meet the CGPA requirement for Degree with Honors at any point after registration, he/she will be dropped from the list of students eligible for Degree with Honors and they will receive regular B.Tech degree only. However, such students will receive a separate grade sheet mentioning the additional courses completed by them.
- l. Honors must be completed simultaneously with a major degree program. A student cannot earn Honors after he/she has already earned bachelor’s degree.

6.11 National Service Scheme (NSS)/Yoga is compulsory for all the Undergraduate students. The student participation shall be for a minimum period of 45 hours during the first year. Grades will be awarded as Very Good, Good, Satisfactory in the mark sheet on the basis of participation, attendance, performance and behaviour. If a student gets Un-satisfactory grade, he/she has to repeat the above activity in the subsequent years along with the next year students.

6.12 Students shall undergo two summer internships each for a minimum of six weeks duration at the end of second and third years of the program for 1.5 credits & 3 credits respectively. The organization in which the student wishes to carry out Internship need to be approved by Internal Department Committee comprising Head of Department and two senior faculty members. The student shall submit a detailed technical report along with internship certificate from the Internship organization in order to obtain the prescribed credits. The student shall submit the Internship Report along with Certificate of Internship. The evaluation of the first and second summer internships shall be conducted at the end of the V Semester & VII semester respectively.



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There shall be internal evaluation for 100 marks and there shall not be external evaluation. The Internal Evaluation shall be made by the departmental committee (Head of the Department and two senior faculty of the department) on the basis of the internship report submitted by the student.

Completion of the internship is mandatory, if any student fails to complete internship, he/she will not be eligible for the award of degree. In such a case, the student shall repeat the internship in the subsequent summer provided that the student doesn't pursue two summer internships in the same summer.

Community Service Project focussing on specific local issues shall be an alternative to the six weeks of summer Internship, whenever there is any emergency and when students cannot pursue their summer internships. The Community Service Project shall be for 6 weeks in duration which includes preliminary survey for 1 week, community awareness programs for one week, community immersion program in consonance with Government agencies for 3 weeks and a community exit report (a detailed report) for one week. The community service project shall be evaluated for 100 marks by the internal departmental committee comprising Head of the Department and two senior faculty of the department. **However, the first priority shall be given to the internship.**

- 6.13** There shall also be a mandatory full internship in the final semester (VIII Semester) of the Program along with the project work. The organization in which the student wishes to carry out the Internship need to be approved by Internal Department Committee comprising Head of the Department and two senior faculty. The faculty of the respective department monitors the student internship program along with project work. At the end of the semester, the candidate shall submit a certificate of internship and a project report. The project report and presentation shall be internally evaluated for 30 marks by the departmental project work committee. The Viva-Voce shall be conducted for 70 marks by a Project work committee and an External Examiner.

Completion of internship is mandatory, if any student fails to complete internship, he/she will not be eligible for the award of degree. In such a case, the student shall repeat the internship along with project work for next six months.

- 6.14** There shall be five skill-oriented courses offered during III semester to VII semester. Out of the five skill courses, two shall be skill-oriented programs related to the domain and these two shall be completed in second year. Of the remaining three skill courses, one shall necessarily be a soft skill course and the remaining 2 shall be skill-advanced courses either from the same domain or Job oriented skill courses, which can be of inter disciplinary nature.

The student can choose between a skill advanced course being offered by the college or to choose a certificate course being offered by industries/Professional bodies/APSSDC or any other accredited bodies which are duly approved by the Internal Department Committee. The credits assigned to the skill advanced course shall be awarded to the student upon producing the Course Completion Certificate from the agencies / professional bodies. The Internal Department Committee comprising Head of Department and two senior faculty shall evaluate the grades / marks awarded for a course by external agencies and convert to the equivalent marks / grades.



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7. Attendance Requirements:

- ❖ A student shall be eligible to appear for semester end examinations (SEE), if he/she acquires a minimum of 75% of attendance in aggregate of all the subjects in a semester.
- ❖ Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester may be granted on medical ground duly approved by the Principal.
- ❖ Shortage of Attendance below 65% in aggregate shall in NO case be condoned.
- ❖ Further the student must obtain a minimum of 50% attendance in each subject failing which; the student shall not be permitted to write the SEE of that subject. Student has to register this subject through course repetition and satisfy the CIE qualification criteria of attendance and marks in the subsequent semesters.
- ❖ Students whose shortage of attendance is not condoned in any semester are not eligible to take their end examination of that class and their registration shall stand cancelled.
- ❖ A student will not be promoted to the next semester unless he satisfies the attendance requirements of the present semester. They may seek readmission for that semester when offered next.
- ❖ A stipulated fee shall be payable towards condonation of shortage of attendance to the college.

8. Minimum Academic Requirements:

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in item no.7.

- 8.1 A student shall be deemed to have satisfied the minimum academic requirements and earned the credits allotted to each theory, practical, design, drawing subject or project, if he/she secures not less than 15 marks in CIE and 25 marks in SEE. In case of, internships, project work viva – voce, he/she should secure 40% of the total marks. For mandatory courses minimum 15 marks in CIE are to be secured.
- 8.2 B.Tech students: A student shall be promoted from II to III year only if he/she fulfils the academic requirement of securing 40% of the credits in the subjects that have been studied up to III Semester from the following examinations.
- One regular and two supplementary examinations of I Semester.
 - One regular and one supplementary examination of II Semester.
 - One regular examination of III semester.

Lateral Entry students: A student shall be promoted from II to III year only if he/she fulfils the academic requirement of securing 40% of the credits in the subjects that have been studied up to III Semester from the following examinations.

- One regular examination of III semester.

- 8.3 B.Tech students: A student shall be promoted from III year to IV year only if he/she fulfils the academic requirements of securing 40% of the credits in the subjects that have been studied up to V semester from the following examinations, irrespective of whether the candidate takes the end examination or not as per the normal course of study.



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- ✓ One regular and four supplementary examinations of I Semester.
- ✓ One regular and three supplementary examinations of II Semester.
- ✓ One regular and two supplementary examinations of III Semester.
- ✓ One regular and one supplementary examinations of IV Semester.
- ✓ One regular examination of V Semester.

Lateral entry students: A student shall be promoted from III year to IV year only if he/she fulfils the academic requirements of securing 40% of the credits in the subjects that have been studied up to V semester from the following examinations, irrespective of whether the candidate takes the end examination or not as per the normal course of study.

- ✓ One regular and two supplementary examinations of III Semester.
- ✓ One regular and one supplementary examinations of IV Semester.
- ✓ One regular examination of V Semester.

If a student is detained for want of credits for particular academic year by sections 8.2 and 8.3 above, the student may make up the credits through supplementary examinations and only after securing the required credits he/she shall be permitted to join in the V Semester or VII Semester as the case may be.

8.4 A student shall register and put up minimum attendance in all 160 credits and earn all the 160 credits. Marks obtained in all 160 credits shall be considered for the calculation of aggregate percentage of marks obtained. In case of lateral entry students, the number of credits is 121.

8.4.1 Students who fail to earn 160 credits as indicated in the course structure within eight academic years from the year of their admission shall forfeit their seat in B.Tech. course and their admission shall stand cancelled.

Lateral entry students who fail to earn 121 credits as indicated in the course structure within six academic years from the year of their admission shall forfeit their seat in B.Tech. course and their admission shall stand cancelled.

9. Course Pattern:

(i) A student eligible to appear for the end examination in a subject, but absent or has failed in the end examination may appear for that subject at the next supplementary examination when offered.

When a student is detained due to lack of credits/shortage of attendance he/she may be re-admitted when the semester is offered after fulfilment of academic regulations. In such case, he/she shall be in the academic regulations into which he/she is readmitted.

(ii) **With-holding of Results**

If any case of indiscipline or malpractice is pending against candidate, the result of the candidate shall be with held and he/she will not be allowed/promoted into the



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next higher semester. The issue of awarding degree is liable to be withheld in such cases.

(iii) **Grading**

After each subject is evaluated for 100 marks, the marks obtained in each subject will be converted to a corresponding letter grade as given below, depending on the range in which the marks obtained by the student fall.

Table – Conversion into Grades and Grade Points assigned

| Range in which the marks in the subject fall | Grade | Grade Points Assigned |
|--|-------------------|-----------------------|
| ≥ 90 | S (Superior) | 10 |
| 80-89 | A (Excellent) | 9 |
| 70-79 | B (Very Good) | 8 |
| 60-69 | C (Good) | 7 |
| 50-59 | D (Average) | 6 |
| 40-49 | E (Below Average) | 5 |
| < 40 | F (Fail) | 0 |
| Absent | Ab (Absent) | 0 |

A student obtaining Grade F shall be considered failed and will be required to reappear for that subject when the next supplementary examination offered. Same is the case with a student who obtains 'Ab' in end examination.

For **mandatory** courses "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

10. Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)

- (i) The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.,

$$SGPA = \frac{\sum_{i=1}^n C_i \times GP_i}{\sum_{i=1}^n C_i}$$

where, C_i is the number of credits of the i^{th} subject and GP_i is the grade point scored by the student in the i^{th} course.

- (ii) The Cumulative Grade Point Average (CGPA) will be computed in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.,



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$$CGPA = \frac{\sum_{j=1}^m SGPA_j \times TC_j}{\sum_{j=1}^m TC_j}$$

where “SGPA_j” is the SGPA of the jth semester and TC_j is the total number of credits in that semester.

- (iii) Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.
- (iv) While computing the SGPA, the subjects in which the student is awarded Zero grade points will also be included.
- (v) Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale.
- (vi) 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.

11. Award of Class

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of B. Tech. degree, he/she shall be placed in one of the following four classes.

| Class Awarded | CGPA Secured |
|------------------------------|--------------|
| First Class with Distinction | ≥ 7.5 |
| First Class | ≥ 6.5 < 7.5 |
| Second Class | ≥ 5.5 < 6.5 |
| Pass Class | ≥ 5.0 < 5.5 |

12. Gap Year

Gap year concept of Student Entrepreneur in Residence shall be introduced and outstanding students who wish to pursue entrepreneurship are allowed to take a break of one year at any time after II year to pursue entrepreneurship full time. This period may be extended to two years at the most and these two years would not be counted for the time for the maximum time for graduation. An evaluation committee shall be constituted by the College to evaluate the proposal submitted by the student and the committee shall decide whether or not to permit the student(s) to avail the Gap Year.

13. Transitory Regulations

Discontinued, detained, or failed candidates are eligible for readmission as and when the semester is offered after fulfilment of academic regulations. Candidates who have been detained for want of attendance or not fulfilled academic requirements or who have failed after having undergone the course in earlier regulations or have discontinued and wish to continue the course are eligible for



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admission into the unfinished semester from the date of commencement of class work with the same or equivalent subjects as and when subjects are offered, and they will be in the academic regulations into which they get readmitted.

Candidates who were permitted with Gap Year shall be eligible for rejoining into the succeeding year of their B.Tech from the date of commencement of class work, and they will be in the academic regulations into which the candidate is presently re-joining.

14. Minimum Instruction Days

The minimum instruction days including exams for each semester shall be 90 days.

15. Medium of Instruction

The Medium of Instruction is **English** for all courses, laboratories, internal and external examinations and project reports.

16. Rules of Discipline

- (i) Use of mobile phones with camera, in the campus is strictly prohibited.
- (ii) Students shall behave and conduct themselves in a dignified and courteous manner in the campus/Hostels.
- (iii) Students shall not bring outsiders to the institution or hostels.
- (iv) Students shall not steal, deface, damage or cause any loss to the institution property.
- (v) Students shall not collect money either by request or coercion from others within the campus or hostels.
- (vi) Students shall not resort to plagiarism of any nature/extent. Use of material, ideas, figures, code or data without appropriate acknowledgement or permission of the original source shall be treated as cases of plagiarism. Submission of material, verbatim or paraphrased, that is authored by another person or published earlier by oneself shall also be considered as cases of plagiarism.
- (vii) Use of vehicles by the students inside the campus is prohibited.
- (viii) Any conduct which leads to lowering of the esteem of the organization is prohibited.
- (ix) Any material to be uploaded to social media sites need to be approved by Head of the Department concerned/Dean/Principal.
- (x) Any student exhibiting prohibited behaviour shall be suspended from the institute. The period of suspension and punishment shall be clearly communicated to the student. The student shall lose the attendance for the suspended period
- (xi) Dress Code
Boys : All the boy students should wear formal dresses. Wearing T-shirts and other informal dresses in the campus is strictly prohibited.
Girls : All the girls students shall wear saree / chudidhar with dupatta

17. Punishments for Malpractice cases – Guidelines

The examinations committee may take the following guidelines into consideration while dealing with the suspected cases of malpractice reported by the invigilators/squad members etc; during end examinations. The punishment may be more severe or less severe depending on the merits of the individual cases.



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| S.No. | Nature of Malpractice/Improper conduct | Punishment |
|--------------|--|--|
| 1 | Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cellphones, pager, palm computers or any other form of material concerned with or related to the course of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the student which can be used as an aid in the course of the examination). | Expulsion from the examination hall and cancellation of the performance in that course only. |
| 2 | Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks. | Cancellation of the performance in that course. |
| 3 | Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny. | Cancellation of the performance in that course and all other courses the candidate has appeared including practical examinations and project work of that semester/year examinations. |
| 4 | Gives assistance or guidance or receives it from any other student orally or by any other body language methods or communicates through cell phones with any other student or persons in or outside the exam hall in respect of any matter. | Expulsion from the examination hall and cancellation of the performance in that course only of all the students involved. In case of an outsider, he will be handed over to the police and a case shall be registered against him. |
| 5 | Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the course of the examination (theory or practical) in which the student is appearing. | Expulsion from the examination hall and cancellation of the performance in that course and all other courses including practical examinations and project work of that semester/year. |
| 6 | Comes in a drunken condition to the examination hall. | Expulsion from the examination hall and cancellation of the performance in that course and all other courses including practical examinations and project work of |



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| | | |
|---|--|---|
| | | that semester/year. |
| 7 | Smuggles in the Answer book or takes out or arranges to send out the question paper during the examination or answer book during or after the examination | Expulsion from the examination hall and cancellation of performance in that course and all the other courses including practical examinations and project work of that semester/year. The student is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the student is subject to the academic regulations in connection with forfeit of seat. |
| 8 | Refuses to obey the orders of the Chief Superintendent / any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the officer-in charge or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the officer-in-charge, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the College campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination. | In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that course and all other courses of that semester/year. The students also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case shall be registered against them. |
| 9 | Leaves the exam hall taking away answer script or intentionally tears up the script or any part there of inside or outside the examination hall. | Expulsion from the examination hall and cancellation of performance in that course and all the other courses including practical examinations and project work of that semester/year. The candidate is also debarred for two consecutive semesters from classwork and all end examinations. The continuation of the course by the candidate is |



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| | | |
|----|---|--|
| | | subject to the academic regulations in connection with forfeiture of seat. |
| 10 | Possesses any lethal weapon or firearm in the examination hall. | Expulsion from the examination hall and cancellation of the performance in that course and all other courses including practical examinations and project work of that semester/year. The student is also debarred and forfeits the seat. |
| 11 | If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in S.No7 to S.No 9. | For Student of the college: Expulsion from the examination hall and cancellation of the performance in that course and all other courses including practical examinations and project work of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case shall be registered against them. |
| 12 | Impersonates any other student in connection with the examination | <p>The student who has impersonated shall be expelled from examination hall. The student is debarred from writing the remaining exams, and rusticated from the college for one academic year during which period the student will not be permitted to write any exam. If the imposter is an outsider, he will be handed over to the police and a case shall be registered against him.</p> <p>The performance of the original student who has been impersonated, shall be cancelled in all the courses of the examination including practicals and project work of that semester/year. The student is rusticated from the college for two consecutive years during which period the student will not be permitted to write any exam. The continuation of the course by the student is subject to the academic regulations in connection with forfeiture of seat.</p> |
| 13 | If any malpractice is detected which is not covered in the above S.No 1 to S.No 12 items, it shall be reported to the college academic council for further action and award suitable punishment. | |



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|----|--|
| 14 | Malpractice cases identified during sessional examinations will be reported to the examination committee nominated by Academic council to award suitable punishment. |
|----|--|

18.0 ADDITIONAL ACADEMIC REGULATIONS:

- 18.1 Any attempt to impress upon the teachers, examiners, faculty and staff of Examinations, bribing for either marks or attendance will be treated as malpractice.
- 18.2 When a component of Continuous Internal Evaluation (CIE) or Semester End Examination (SEE) is cancelled as a penalty, he/she is awarded zero marks in that component.

19.0 AMENDMENTS TO REGULATIONS:

The Academic Council of Bapatla Engineering College (Autonomous) reserves the right to revise, amend, change or nullify the Regulations, Schemes of Examinations and / or Syllabi, Academic schedules, Examination schedules, Examination pattern, Moderation to students, Special opportunity to complete degree beyond stipulated time and any other matter pertained that meets to the needs of the students, society and industry without any notice and the decision is final.



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The following are some of the important rules of discipline. All students are required to be aware of and act consistently with these values.

1. Students must punctually attend all lectures, practicals, tutorials, assignments, tests, examinations, etc. A student whose attendance and/or progress in the various tests and examinations are not satisfactory and who does not perform the required number of assignments, tutorials and/or practicals are likely to lose their terms. Prolonged absence even on ground of ill health may also lead to loss of terms. Defaulters will not be sent up for Final /University Examinations.
2. The identity card is meant for identifying bonafide students and is used for permitting the students to participate in various activities and programs of the college. Every student must wear Identity card as long as he/she is in the college campus. It must be produced by the student whenever demanded by the member of the teaching or non-teaching staff of the college. Every student must wear his/her Identity card in the college every day. He/She must take proper care of it to avoid its misuse by other students and outsiders. In case the Identity card is lost, the matter should be immediately reported to the Principal and an application should be made for a duplicate Identity card, which will be issued on payment of charges.
3. The conduct of the students in the classes and in the premises of the college shall be such as will cause no disturbance to teachers, fellow students or other classes.
4. Every student shall wear a clean formal dress while coming to the college also when representing the college for various activities out station.
5. No Society or Association shall be formed in the College and no person should be invited in the college campus without the specific permission of the Principal.
6. No student is allowed to display any Notice/Circular/Poster/Banner in the College premises without the prior permission of the Principal.
7. Using foul language in the college campus is prohibited. If any student is caught using foul language, disciplinary action shall be initiated against the student.
8. Use of **BEC name tag or logo** by the students for their caste, political, religious, personal reasons is prohibited. Further placing banners on caste, political, religious, personal reasons, promoting cinema heroes & political leaders, taking possessions and burning fire crackers in front of the college is strictly prohibited. If any student is involved in such activities in and around the campus, severe disciplinary action will be taken including rustication from the college and filing a criminal case.
9. Outsiders are not permitted in the college premises without the prior permission of the Principal. College students are not allowed to bring their relatives/friends to the college premises without the permission of the principal.
10. All meetings, cultural programs, debates, elocutions etc. organized on the college premises must be held in presence of teaching staff members and with the prior



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permission of the Principal. The subjects of debates/elocutions must have the prior approval of the principal.

11. Conducting fresher's meet, farewell meets etc. by the students outside the campus are prohibited. If any student is involved in such activities (organizing as well as participating), severe disciplinary action will be taken including rustication from the college.
12. Students must take proper care of the college property. Strict action will be taken against students damaging College property and will be required to compensate the damage.
13. Students should not be involved in academic offences including cheating or plagiarism in academic course work malpractices at the College/Board/University Examinations
14. Smoking is strictly prohibited in the college premises.
15. If, for any reason, the continuance of a student in the College is found detrimental to the best interest of the college, the Management may ask the student to leave the college without assigning any reasons and the decision will be final and binding on the student.
16. Playing music on Transistors, Tape-Recorders, Car Stereos, Mobile phones or any other similar gadgets with or without earphones is strictly prohibited in the college premises. Defaulters will be punished and their instrument shall be confiscated.
17. Use of Mobile phones is strictly prohibited in the academic area of the college, Defaulters will be penalized and their instrument confiscated.
18. Students who are travelling to college on personal vehicles (2/4 wheelers) need to have valid driving license issued by RTO and follow all the rules listed by RTO. Students have to park the vehicle in the parking area of the college.
19. Students must not hang around in the college premises while the classes are at work.
20. Students must not attend classes other than their own without the permission of the authority concerned.
21. Students shall do nothing inside or outside the college that will interface with the discipline of the college or tarnish the image of the college.
22. Students are not allowed to communicate any information about college matters to Press.
23. Matters not covered above will be decided at the discretion of the Principal.

Acts of misbehavior, misconduct, indiscipline or violation of the Rules of Discipline mentioned above liable for one more punishments as stated below:

- A. Warning to the students.
- B. Warning to the student as well as inform the parents.
- C. Imposition of a fine.
- D. Denial of gymkhana, library, laboratory, N.C.C., N.S.S. student aid or any other facility for a specified period or for the whole Term/Year.
- E. Expulsion from College for a specified period
- F. Cancellation of Terms.



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- G. Refusal of admission in the term or academic year.
- H. Cancellation of admission.
- I. Rustication.

Anti Ragging Rules and Regulations

(As per AICTE Norms)

1. **What constitutes Ragging:** - Ragging constitutes one or more of any of the following acts:
 - a. any conduct by any student or students whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness a fresher or any other student;
 - b. indulging in rowdy or undisciplined activities by any student or students which causes or is likely to cause annoyance, hardship, physical or psychological harm or to raise fear or apprehension thereof in any fresher or any other student;
 - c. asking any student to do any act which such student will not in the ordinary course do and which has the effect of causing or generating a sense of shame, or torment or embarrassment so as to adversely affect the physique or psyche of such fresher or any other student;
 - d. any act by a senior student that prevents, disrupts or disturbs the regular academic activity of any other student or a fresher;
 - e. exploiting the services of a fresher or any other student for completing the academic tasks assigned to an individual or a group of students.
 - f. any act of financial extortion or forceful expenditure burden put on a fresher or any other student by students;
 - g. any act of physical abuse including all variants of it: sexual abuse, homosexual assaults, stripping, forcing obscene and lewd acts, gestures, causing bodily harm or any other danger to health or person;
 - h. any act or abuse by spoken words, emails, posts, public insults which would also include deriving perverted pleasure, vicarious or sadistic thrill from actively or passively participating in the discomfiture to fresher or any other student;
 - i. any act that affects the mental health and self-confidence of a fresher or any other student with or without an intent to derive a sadistic pleasure or showing off power, authority or superiority by a student over any fresher or any other student.
2. **Actions to be taken against students for indulging and abetting ragging in technical institutions Universities including Deemed to be University imparting technical education:-**



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- a) The punishment to be meted out to the persons indulged in ragging has to be exemplary and justifiably harsh to act as a deterrent against recurrence of such incidents.
- b) Every single incident of ragging a First Information Report (FIR) must be filed without exception by the institutional authorities with the local police authorities.
- c) The Anti-Ragging Committee of the institution shall take an appropriate decision, with regard to punishment or otherwise, depending on the facts of each incident of ragging and nature and gravity of the incident of ragging.
- d) Depending upon the nature and gravity of the offence as established the possible punishments for those found guilty of ragging at the institution level shall be any one or any combination of the following:-
 - (i) Cancellation of admission
 - (ii) Suspension from attending classes
 - (iii) Withholding/withdrawing scholarship/fellowship and other benefits
 - (iv) Debarring from appearing in any test/examination or other evaluation process
 - (v) Withholding results
 - (vi) Debarring from representing the institution in any regional, national or international meet, tournament, youth festival, etc.
 - (vii) Suspension/expulsion from the hostel
 - (viii) Rustication from the institution for period ranging from 1 to 4 semesters
 - (ix) Expulsion from the institution and consequent debarring from admission to any other institution.
 - (x) Collective punishment: when the persons committing or abetting the crime of ragging are not identified, the institution shall resort to collective punishment as a deterrent to ensure community pressure on the potential ragers.

Guidelines for Remedial Classes and Make-up Test (R20 Regulations)

The guidelines for conducting the remedial classes:



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- d) Faculty need to identify the underperforming students in their respective subject. An underperforming student is one, whose marks less than 50% in the I Mid Term Examination and AAT 1 together. A list of such students should be prepared by the faculty soon after the I Mid Term examination is over and get it signed by the concerned HOD.
- e) Faculty should conduct remedial classes for the underperforming students with an objective of improving their marks in the CIE. Minimum number of remedial classes to be taken should be 20% of the classes taken prior the I Mid Term Examination which is 6 classes. Teaching methodology is left to the faculty member, but he/she should keep the objective in mind.
- f) Regular students who could not appear for the I Mid Term Examination and AAT (with genuine reason) should appear to the remedial classes with the prior permission of the HOD.
- g) The entire process of conduct of remedial classes should be well documented and is subjected to academic audit.

The guidelines for conducting the Make-up test:

- h) A student can appear for a Make-up Test for **maximum two theory subjects** of a semester to improve marks in the Continuous Internal Evaluation (CIE).
- i) A student is eligible for **Make-up test** which is conducted after the second Mid Term examination and before SEE examination if he/she satisfies the following conditions.
 - iv) Unable to secure 50% internal marks (CIE) and has more than or equal to 50% attendance in a particular theory subject (After finalizing the internal marks).**
 - v) Attendance in Remedial classes is more than or equal to 65% (if Remedial classes are conducted) or greater than 50% marks in the I Mid Term Examination and AAT 1 together.**
 - vi) Attended 50% of CIE tests (at least one AAT & one Mid Term Examinations).**
- j) The make-up test will be conducted for 30 marks (6 X 1M, 2X 12M) in Mid Examination format covering the entire syllabus and the marks obtained in this test are final. However, the maximum marks awarded will be 15 only.
- k) The eligible students have to apply by paying a fee prescribed by the institution and submit the application along with a letter of request indicating the genuineness of his/her candidature to be eligible for the make-up test. Applications should be approved by the concerned HOD. After approval from the HOD the concerned department will conduct the make-up test and send the updated CIE marks to COE immediately.

APPLICATION FOR MAKE-UP TEST

Date:

- 1. Name of the Candidate :
- 2. Register Number :



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3. Academic Year :
3. Branch :
4. Year & Semester of Study :
5. Student Mobile No. :

Make-up test Applied For:

| S.No. | Sub Code | Subject Title | % of Subject Attendance in Regular Classes | CIE Marks | | | | (To be filled by the concerned subject faculty) | |
|-------|----------|---------------|--|-----------|-------|-------|-------|---|-----------|
| | | | | AAT-1 | Mid-1 | AAT-2 | Mid-2 | % Attendance in Remedial Classes* | Signature |
| 01 | | | | | | | | | |
| 02 | | | | | | | | | |

* Write 'NA' if the student name is not in the remedial class list.

Signature of the Student

Signature of the HOD

Fee Particulars:

The make-up test fee has to be paid through HDFC payment gateway and a printout of the receipt has to be taken. The student has to submit the office copy of the receipt in the COE office, get the signature and has to submit the signed application form along with student copy of the receipt in the department.

| Amount paid in Rs | Date of payment | Signature of Exam Section Clerk |
|-------------------|-----------------|---------------------------------|
| | | |

Note:

1. As per the "Make-up test guidelines", the eligible students have to fill this form, with the signature of the concerned subject faculty and the HOD.
2. After making the payment, the filled form along with a photocopy of the payment receipt has to be submitted in the department.
3. The make-up test will be scheduled and conducted by the department.

Guidelines for Internships



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As per R20 guidelines, every student has to undergo internship twice, once between IV and V semester, the other between VI and VII Semester. The first internship is for a duration of 4 weeks and the second internship is for a duration of 6 weeks.

There shall be a departmental internship committee consisting of the Head of the Department and two faculty members nominated by the HOD. The committee shall identify the potential organizations which can provide internship opportunity to the students. The department shall enter into an MOU with the concerned organization and the details will be shared with the students.

The students shall be informed to apply for undergoing internship in the specified proforma. The details and consent of the organization in which he/she is seeking for internship are to be furnished. Further, the student along with the parent must submit an undertaking form. The committee shall scrutinize the applications and approve the same. If a student fails to acquire internship, he/she may be permitted to undergo equivalent work (mini project, research project, fabrication work, field work, research paper, etc.,) in the department under the guidance of a faculty member.

After the completion of the internship, the student must submit the report and attend a departmental internal assessment for award of grade and credits.



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Internship Approval Proforma

| | |
|------------------------|---------------------------------------|
| Name of the Department | |
| Name of the Student | |
| Registered No | |
| Email id | |
| Mobile No | |
| Academic Year | |
| Internship Semester | After VI Semester / After IV Semester |

Internship Details

| | |
|---|--|
| Internship Organization | |
| Duration in weeks | |
| Start Date of Internship | |
| End Date of Internship | |
| Probable Date of Certificate Submission | |

Note:

- 1. The consent letter from the organization is to be enclosed*
- 2. Undertaking form from the student and parent*

Signature of the Student

Recommendations of the Internship Committee:

Signature of the Head of the Department

Guidelines for Massive Open Online Courses (MOOCs)



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1. Head of the department should constitute a three member MOOC committee under his chairmanship along with two more members.
2. The committee should take the responsibility of
 - (i) Notifying the MOOC courses twice in a semester (May and November) along with the details of portals offering the MOOC such as NPTEL/SWAYAM.
 - (ii) Checking the relevance of courses to the concerned branch.
 - (iii) Verifying the syllabus of chosen MOOC course and to ensure that it is not studied in the regular curriculum (either full or partial)
3. A student willing to take MOOCs course should apply in the prescribed format to the concerned Head of the Department at least one week prior to the commencement of the MOOC course.
4. The MOOC committee should ensure the following
 - (i) The course duration must be minimum of 12 weeks
 - (ii) The course should contain a proctored examination for evaluation
 - (iii) The agency offering MOOCs should be a recognized and reputed one and approved by
the BOS of the concerned program.
5. Students should submit the Course completion certificate with marks memos to the department MOOCs committee.
6. If the certifying authority/agency is not able to conduct the exam, then the student can show certified course progress, applied hall ticket and mail communication from the authority as proofs and can avail the extension time by one semester for submitting the course completion certificate.
7. After the student submits the MOOCs certificates, the committee should recommend 3 credits and the appropriate grade to be allocated to the student and send to the Controller of Examination.
8. If a student fails to successfully complete and acquire the certificate as per the guidelines and timelines specified by the concerned MOOCs authority, he/she has to register for that course subsequently. Unsuccessful candidates in the first attempt shall be marked as supplementary.

MOOCs APPLICATION



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Date:

| | |
|--------------------------|--|
| Name of the department: | |
| Name of the Student: | |
| Registered No: | |
| Email id: | |
| Mobile No: | |
| Academic Year & Semester | |

| S.No | Course Title | MOOCS Agency | Duration in Weeks | Course Start & End date | Probable Date of Certificate Submission | MOOCs Course in lieu of (Professional Elective/Job Oriented) | Remarks |
|------|--------------|--------------|-------------------|-------------------------|---|--|---------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Note: Syllabus, Timelines and Guidelines of the MOOC course should be attached.

Signature of the Student

Recommendations of the MOOCs Committee:

Signature of the Head of the Department

Guidelines for Project work



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1. In R20 regulations, there is no theory or practical courses in VIII semester. An exclusive 12 credit course is included as Project Work and Internship. The student should mandatorily undergo internship as well as project work parallelly. At the end of the semester the student should submit an internship completion certificate along with a project report. A student shall also be permitted to submit project report on the work carried out during the internship.
2. The departmental internship committee is advised to strictly adhere to the established guidelines for internships. Furthermore, it is recommended that internships for students be limited to organization/ industry authorized by **APSCHE/AICTE INTERNSHIP PORTAL/PUBLIC SECTOR ORGANIZATIONS**. This restriction applies to both online and offline internship opportunities.
3. The Head of the department should constitute a three-member Project Work Committee (PWC) under his chairmanship with three faculty members as defined in the Process Document for project work (R20 regulation). The PWC shall adhere to the process explained in the said document.
4. Evaluation of the Project work:
 - i) The evaluation shall be based on CIE and SEE. The CIE is for 30 marks which consists of reviews at the end of each month as per the Process Document in the form of seminars/presentations for 15 marks and the project report submitted at the end of the semester which is evaluated for 15 marks. A minimum of 15 (50%) marks and 50% attendance are to be secured by the student exclusively in CIE in order to be declared as qualified in the project work and eligible to write the SEE in the project work.
 - ii) SEE shall be evaluated in the form of a Viva-Voce and demonstration of the thesis work for 70 marks. Viva-voce Examination in project work shall be conducted by one internal examiner (Member of PWC) and one external examiner to be appointed by the principal. A minimum of 25 marks shall be obtained exclusively in SEE in order to be declared as passed in the Project work.
 - iii) Completion of internships along with Project work in VIII Semester is mandatory, if any student fails to complete internship, he/she will not be eligible for the award of degree. In such cases, the student has to repeat and complete the internship.
5. The project work committee should ensure the following, if the students are doing project work at any organization/ industry.
 - i) The student gets placement before commencement of eighth semester and joined the organization/Industry as advance placement. The student who



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obtained project work opportunity in organization / Industry may also be allowed as per the recommendation of the PWC.

- ii) The above students will be informed to apply in the specified proforma for approval to undergo for project work along with the details and consent of the organization in which he/she is seeking for doing project work. Further, the student and the parent/guardian have to submit an undertaking form to the concerned department. The PWC shall scrutinize the applications and approve.
- iii) The list of such approved students undertaking project work in organization/ industry shall be maintained in the department by the PWC.
- iv) The students who are undertaking the project work out side the campus have to necessarily submit the monthly attendance duly certified by the concerned authority in the organization/ industry.
- v) The PWC will have to maintain interaction regularly with the out-side organization/ concerned who are offering the project works.
- vi) During the course of project work, the student has to attend the departmental internal reviews/assessment periodically as notified by the department mandatory. After the completion of the project work, the student has to submit the report and attend semester end assessment examination by paying prescribed exam fee for award of grade and credits.
- vii) The students who are undertaking the project work outside the campus will have to complete their project work with in the stipulated period (as per Academic Calander) along with the inhouse project work students and also submit the internship completion certificate at the end of the semester.



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PROJECT WORK APPROVAL PROFORMA

Date:

| | |
|----------------------------|--|
| Name of the Department | |
| Name of the Student | |
| Registered No. | |
| Email id | |
| Mobile Number | |
| Academic Year and Semester | |

Project Work Details:

| | |
|---|--|
| Organization/Industry Name | |
| Duration in weeks | |
| Start Date of Project work | |
| End Date of Project work | |
| Probable Date of Project work completion Certificate Submission | |

Note: 1. The Consent letter from the organization/Industry is to be enclosed.

2. Undertaking form from the student and parent.

Signature of the Student

Recommendations of the Project work Committee (PWC):

Signature of the Project Coordinator

Signature of the Head of the Department



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Process document for Project work

As per the R20 regulations, students are required to do a project work in the VIII semester and submit a report. The following is the process to be followed for the project work.

A. Projects Batches and Guide allocation

1. The Head of the department should constitute a three-member Project Work Committee (PWC) under his chairmanship with three faculty members. One of them shall be a senior faculty member and acts as a Project Coordinator.
2. List of faculty members and their specializations, research areas will be communicated to the students. The information is disseminated via email, notice boards and display on the website. List of projects and their titles/themes should be identified and same may be communicated to all the students. Project batches are formed based on the performance of the students up to VI semester.
3. Students are given an option of specifying their choices for the project titles/guides and the final allocation of guides to project batches is done based on the merit order and the choices opted by the project batches.
4. It is to be ensured that no project batch should have more than 4 students.
5. Not more than two batches should be allocated to each project guide.

B. Project classification and mapping with program outcomes and program specific outcomes.

Projects may be broadly classified into the following categories.

1. Application oriented: When the project is related to hardware, then all the components are procured and assembled to get the desired outcome. If it is related to software, then a complete working version of the application is to be created.
 2. Research oriented: In this category extensive review of literature is done. This aims to learn and implement new methods or procedures and validate results.
 3. Simulation projects: These projects may be hardware or software related. The students will create a working prototype for the same.
- The PWC should ensure that the projects are selected in such a way that the program outcomes and program specific outcomes are mapped with the themes of the project works.
 - A document consisting of project titles, area of specialization, project guides should be prepared and submitted to the concerned HOD and should be put on the website. The theme of the work may be changed with the consent of the project guide.

C. Continuous monitoring mechanism and evaluation

1. Project slots (24 hours per week) should be allocated as per the existing scheme and curriculum.
2. A laboratory or a class room should be identified for executing the project works. It is preferred to have a separate laboratory for the purpose of conducting the project works.



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3. Each project batch is allowed to consult their respective guide to discuss about their Progress during the project slot.
4. At the end of every month there will be an overall assessment of each project by the PWC by scheduling project reviews in association with project guides.
5. The performance of the students should be evaluated in each review and should be documented.
6. Department staff meeting should be conducted to discuss the performance of the students in the projects and should be documented.

D. Methodology to assess individual as well as collective Contribution/understanding of

Project:

1. The project guide should monitor the presence (attendance) of each student in the project work
2. The project guide should ensure that the batch allocated to him is able to understand the objectives of the project. The guide should also identify the requirements (hardware and software) of the project. If a particular software or hardware is not available, same may be communicated to the HOD and may be procured based on the financial and budgetary requirements.
3. Evaluation of the project is based on
 - i. Understanding the objectives of the project.
 - ii. Day to day work done by the students (Should be documented)
 - iii. Partial/Full completion of the project
 - iv. Students presentation and demonstration
 - v. Results and documentation
4. Evaluation is intimated to the students for further improvement

F. Papers published/Awards won/conferences attended

1. It is encouraged for every project batch to publish/communicate a paper in any national/ international conference/journal. The project guide may encourage the students so that the work of their batch is published as a research paper.
2. Students must be given some awareness/training program for effective writing of a research paper. The research papers should be checked with anti-plagiarism software before the submission to the concerned journal or conference.
3. A report should be prepared by the concerned coordinator comprising all the research papers published and should be made available in the library and soft copies must be put on the website for availability to the students.



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APPLICATION FOR HONOR/MINOR DEGREE (A.Y _____ SEMESTER _____)

Date:

1. Name of the Candidate _____ :
2. Register Number and Branch :
3. Semester wise SGPA obtained _____ : (Enclose Xerox copies of marks memos)

| S.No. | Passed all the subjects in single attempt(Yes/No) | B.Tech/ Lateral Entry* | Month and Year | SGPA |
|-------|---|---------------------------|-------------------|------|
| 01 | | Semester I | | |
| 02 | | Semester II | | |
| 03 | | Semester III | | |
| 04 | | Semester IV | | |
| 05 | | Semester V | | |
| 06 | | Semester VI | | |

*For Lateral entry students, furnish the SGPA from third Semester of B.Tech only

4. Student Mobile No. _____ :
5. Parent Mobile No. _____ :
6. Undertaking by the Candidate: _____

(To be written by the candidate)

Undertaking : I have read the guidelines for Honor/Minor Degree and I will abide by the same.

SIGNATURE OF THE CANDIDATE

Signature of the Mentor

Signature of the HOD

Signature of the Principal