

ACADEMIC REGULATIONS FOR B.TECH PROGRAMS

(With effect from the academic year 2013- 2014)

1. Preamble

SR Engineering College, Warangal was established in 2002. It is permanently affiliated autonomous institution under JNTU, Hyderabad. In line with the UGC guidelines for Autonomy and according to the curriculum norms of All India Council for Technical Education (AICTE), the institution had introduced semester system for the first year B.Tech programs with effect from the academic year 2012-13. The curriculum was revised for all the four years of B.Tech. Program. The course structure comprised of contents in Humanities, Basic Sciences, Core Engineering, Interdisciplinary and Elective courses in every engineering discipline. The academic regulations were approved by the Academic Council after due consideration of the recommendations of the Board of Studies for each of the program that were duly constituted in accordance with guidelines of University Grants Commission (UGC).

The academic regulations, examination pattern for evaluation, course structure and detailed syllabi of 4-Year B.Tech Program are **applicable for batches admitted from the academic year 2013-14.**

2. Branches of Program

The following branches/disciplines of study in B.Tech Degree are offered at present:

Branch Code	Branch
1	Civil Engineering
2	Electrical and Electronics Engineering
3	Mechanical Engineering
4	Electronics and Communication Engineering
5	Computer Science Engineering

3. Distribution and Weightage of Marks

3.1 The performance of the student shall be evaluated course wise with a maximum of **100 marks for each theory course** and **75 marks for each practical course**. In addition, the Industry oriented mini-project shall be evaluated for a maximum mark of **50**, Seminar for a maximum mark of **50**, Comprehensive viva-voce for a maximum mark of **100** and Major Project Work for a maximum mark of **200**.

3.2 For each theory course, the distribution of marks **for Internal Evaluation** shall be **30** and **for the External Evaluation** shall be **70**, totaling to a maximum mark **100**.

3.3 For each practical course, the distribution of marks **for Internal Evaluation** shall be **25** and **for the External Evaluation** shall be **50**, totaling to a maximum mark **75**.

3.4 **Internal Examinations (Theory):** For each theory course, in each semester, there shall be **Two** Internal Examinations as per the academic calendar approved by the Academic Council. In each course, the first internal examination shall be conducted for the first 50% of the syllabus and the second internal examination shall be conducted for the remaining 50% of the syllabus. Each internal examination is evaluated for a maximum mark **30**, out of which **20 marks** are allotted to internal examination question paper. The internal examination question paper shall consist of Part-A and Part-B.

Part-A is of objective type comprising of **10** questions of **short answer type** carrying each of half mark i.e., 0.5.

Part-B comprising of **5** questions out of which **3** are to be answered and each question carry **5 marks**. The time duration of each internal examination is 1½ hours. The **20 marks** allotted for each Internal Examination question paper are further scaled to **10 marks**.

The balance of **10 marks** in the internal evaluation shall be allotted on the basis of the percentage of attendance a student has put in. The marks for **attendance** are allotted in a graded manner based on the statistics of attendance for that course in that semester and recommendation made by the department.

The sum of the marks obtained in **two** internal examinations and the marks awarded for **attendance** will be considered to finalize the internal examination marks in that course.

The courses having design and / or drawing such as Engineering Graphics, Machine Drawing, etc., shall be evaluated on par with theory courses with a due weightage of **05 marks for day-to-day work** and **05 marks based on the percentage of attendance** a student has put in. The time duration for each of these internal examinations shall be 2 hours.

NOTE:

A student who is absent in an Internal examination for what so ever reasons shall be deemed to have secured 'zero' marks in that internal examination. There shall be no makeup test conducted for that internal examination.

3.5 **External Examinations (Theory):** Each Course shall be evaluated for maximum mark of **70** and the duration of external examination will be of 3 hours. The examinations are scheduled as per the academic calendar approved by the Academic Council. The Question paper contains two sections (Part-A and Part-B). **Part-A:** carries **20 marks** comprising of 10 questions of short answer type each carrying **2 marks**. Answering of all questions shall be compulsory. **Part-B:** carries **50 marks** comprising of 8 descriptive type

questions out of which 5 questions shall be answered, each carrying **10 marks**. Courses related to Design / Drawing will have only descriptive questions, which shall be evaluated for maximum mark of **70**.

3.6 **Text books / Reference books:** At the end of the syllabus for each course, a minimum of two text books and two reference books shall be typically prescribed. Students are however advised to consult other text/reference books that are relevant to the course.

3.7 **Internal Examinations (Laboratory):** For practical courses there shall be a **Continuous Internal Evaluation** during the semester for **25 marks** based on the following guidelines:

3.7.1. All the issues with reference to an experiment to be performed must be resolved and award of marks should be recorded within a week from that date by the concerned faculty members under intimation to the Head of the Department.

3.7.2. The evaluation of laboratory classes should be divided into two major components namely, evaluation on a continuous basis and internal assessment laboratory test.

Component 1: (Evaluation on continued basis) (20 Marks)

It is recommended to allocate **20 marks** to this component. These marks are to be awarded for every experiment carried out by the student in his regular practical class on weekly basis.

Component 1.1: Experiment (10 Marks)

The student is required to write the principle, theory and calculation method of the experiment allotted to him either in the observation notebook or on a separate sheet immediately after entering into the laboratory. At the end of the experiment the student should show the observations and the result to the faculty. The marks of this sub-component are to be awarded taking all the points mentioned above into consideration.

The marks awarded in this sub-component should be reduced depending on the attendance/delay in conducting the experiment.

The students who are absent with proper permission from the administration are to perform the experiment and report to the concerned faculty for evaluation with an appropriate penalty per day on the allocated marks of each component. The faculty in consultation with HOD shall award such penalties by the end of the week under intimation to the administration.

Component 1.2: Submission of Record Book (10 Marks)

The student has to submit the practical record book updated every week. The faculty has to ask a few viva questions based on experiment carried out by the student in the previous class. The

marks awarded in this sub-component should be reduced depending on the extent of delay in the submission of record book.

**Component 2: (Evaluation at the end of the Semester/Year):
(05 Marks)**

An internal assessment laboratory test and the viva-voce are to be conducted at the end of the Semester/Year.

3.7.3. The marks of component 1 & component 2 are to be entered by the faculty in students' attendance registers regularly.

3.8 External Examinations (Laboratory):

Each practical course shall be evaluated for **50 marks**. The examination shall be conducted by the concerned internal examiner, duly assigned by that department, along with an External Examiner concerned with the course drawn from another institution. The External Examiner will be appointed by the Controller of Examinations in consultation with Head of the Department as and when required.

3.9 Supplementary Examinations:

Supplementary examinations will be conducted along with regular external examinations as per the academic calendar approved by the Academic Council.

3.10 There shall be an **Industry Oriented Mini-Project**, in collaboration with industry, to be taken up during the summer vacation after III year B.Tech II Semester examinations and shall be evaluated during the IV year B.Tech I Semester. The industry oriented mini project shall be submitted in the form of mini project report and presented before a Mini Project Evaluation Committee (PEC). There shall be **50 internal marks** for industry oriented mini project. The mini project shall be evaluated for a maximum mark of **50** as per the guidelines listed below.

3.10.1. The Mini-project evaluation committee (PEC) is to be constituted with 4 members i.e., Chairman - Head of the Department, Convener - Senior faculty member and 2 other faculty members to be nominated by the Head of the department with the consent of administration. In addition to the above members the supervisor must be present while his project batch of students are presenting.

3.10.2. The committee shall evaluate the progress of the mini-project work by conducting two (2) presentations. Each presentation shall be evaluated for **10 marks**. Mini-project report shall be evaluated for **20 marks**. A balance of **10 marks** is for continuous evaluation by supervisor. The marks will be finalized based on the performance of the student by calculating cumulative sum of presentations, mini project report and continuous evaluation.

3.10.3. Supervisor is expected to evaluate the mini-project work regularly based on the progress report submitted by the students in every week

for **10 marks** and the same should be recorded in the project attendance register.

- 3.10.4. 1st presentation: **Registration Seminar:** Identification of problem and literature survey.
 - 3.10.5. 2nd presentation and Viva-voce: **Synopsis Seminar:** Mini-project work carried out, results should be demonstrated and report must be submitted.
 - 3.10.6. The presentations will be scheduled and notified by the department.
 - 3.10.7. The department will enter into a Memorandum of Understanding, with the consent of administration, in order to collaborate with the industry for catering the requirement of Mini-project work.
- 3.11 There shall be a **Technical Seminar to be presented by every student in IV year B.Tech II Semester**. The student shall collect the information on a specialized topic other than the topic of his/her major project and mini-project. The student shall prepare a **Seminar Report**, showing his understanding of the topic, and submit it to the department. There shall be **no external examination for seminar**. The seminar report shall be evaluated for a maximum mark of **50** as per the guidelines listed below.
- 3.11.1. The Students of IV-year II semester are to register a relevant topic within 4 weeks of commencement of semester class work and submit the same to the department.
 - 3.11.2. Seminar shall be evaluated by a Seminar Evaluation Committee (SEC) consisting of the Head of the department, Seminar Supervisor and an approved panel of Internal Faculty Members to be nominated by the Head of the department with the consent of administration.
 - 3.11.3. Evaluation of seminar consists of two components namely Report and Presentation each for 50 marks.
 - 3.11.2.1 **Report:** The Students are required to submit a report on the chosen seminar topic as per the prescribed format and last date specified by the Departmental Seminar Evaluation Committee (SEC).
 - 3.11.2.2 **Presentation:** The students are required to deliver the seminar before the SEC as per the schedule notified by the department.
- 3.12 There shall be a **Comprehensive Viva-Voce in IV year B.Tech II semester**. The Comprehensive Viva-Voce is aimed to assess the student's understanding in various courses studied during the B.Tech. Program. There will be **no internal marks** for the Comprehensive Viva-Voce. The Comprehensive Viva-

Voce shall be evaluated for a maximum mark of **100** as per the guidelines listed below.

- 3.12.1 Comprehensive Viva-Voce examination would be conducted immediately after the end of II semester along with the other Laboratory Examinations.
 - 3.12.2 The Comprehensive Viva-Voce will be conducted by a Committee consisting of the Head of the Department as internal examiner, external examiner to be invited from another institute and a panel from Internal Faculty Members to be nominated by the Head of the Department with the consent of administration.
 - 3.12.3 All the members of the internal faculty, other than panel members, should also be present for the same.
- 3.13 The **Major Project Work** shall be started by the student in the beginning of the IV year I Semester. Major Project work shall be evaluated for a maximum mark of **200**, out of which **50 marks** shall be for **Internal Evaluation** and **150 marks** for the **External Evaluation**. The External evaluation of project work shall be conducted at the end of the IV year B.Tech II Semester. The Internal Evaluation shall be as per the guidelines listed below.
- 3.13.1 The Major-project evaluation committee is same as that which is constituted for Mini-Project Evaluation.
 - 3.13.2 The same committee shall assist the External examiner in Major Project External Viva-Voce and finalize the marks to be awarded by taking into consideration the students' performance.
 - 3.13.3 The committee is to assess the progress of the major project work by conducting two (2) presentations in **II-Semester** by allocating **50 marks** for each presentation and **50 marks** for continuous evaluation by supervisor.
 - 3.13.4 1st presentation shall be one week before 1st mid examination for **50 marks: Registration Seminar: Identification of problem and literature survey.**
 - 3.13.5 2nd presentation and Viva-Voce one week before 2nd mid examinations for **50 marks: Final Project Seminar: Together with thesis, a presentation to be made and the execution of the project work carried out should be demonstrated to the committee.**
 - 3.13.6 Supervisor is to evaluate the project works regularly based on the progress report submitted by the students in every week for **50 marks** and the same should be recorded in the project attendance register.

3.13.7 The internal marks are to be awarded based on the marks secured by the students in the above procedure and finalized by the department for a maximum mark of **50**.

3.13.8 The department will enter into a Memorandum of Understanding, with the consent of administration, in order to collaborate with the industry for catering the requirement of Major project work.

4. Attendance Requirements

4.1 A student shall be eligible to appear for the External Examinations if he maintains a minimum of 75% of attendance in aggregate of all the courses for that semester.

4.2 Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in that semester may be granted by the Academic Council on medical grounds with sufficient medical proof.

4.3 Condonation of shortage of attendance attracts a penal fee.

4.4 **Shortage of attendance, below 65% in aggregate, shall in NO case be condoned.**

4.5 A student will not be permitted to write the External Examinations and hence shall not be promoted to the next semester, unless he satisfies the attendance requirement of the present semester as applicable. They may seek re-admission for that semester when offered next.

4.6 Students whose shortage of attendance is not condoned in any semester are not eligible to take their external examination of that semester.

5. Minimum Academic Requirements

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in item no.4.

5.1 A student shall be deemed to have satisfied the minimum academic requirements and earned the credits allotted to each theory, practical, design or drawing subject or project, if he secures a minimum of 40% of marks in the sum total of the internal evaluation and external examination taken together and not less than 35% of marks in the external examination.

5.2 A student shall be **promoted from II to III year** only if he fulfils the academic requirement of 37 credits from the following examinations, irrespective of whether the candidate takes the examinations or not.

5.2.1 Two regular and one supplementary examinations of I year I semester.

5.2.2 One regular & one supplementary examinations of I year II semester,

5.2.3 One regular examination of II year I semester

5.3 A student shall be **promoted from III year to IV year** only if he fulfils the academic requirements of total 62 credits from the following examinations, irrespective of whether the candidate takes the examinations or not.

5.3.1 Three regular and two supplementary examinations of I year I semester

5.3.2 Two regular and two supplementary examinations of I year II Semester

5.3.3 Two regular and one supplementary examinations of II year I semester

5.3.4 One regular and one supplementary examinations of II year II semester

5.3.5 One regular examination of III year I semester

6. Program pattern

6.1 The duration of the B.Tech program is four academic years to be studied in a semester pattern.

6.2 A student eligible to appear for the external examination in a course, but absent or has failed in the external examination may reappear for that course at the supplementary examination whenever conducted.

6.3 When a student is detained due to shortage of attendance in any semester, he may be readmitted into that semester when it is offered next, with the academic regulations of the batch into which he gets readmitted.

6.4 When a student is detained due to failure to secure required number of credits in any year, he may be readmitted whenever he fulfils the academic requirements with reference to the academic regulations of that batch into which he gets readmitted.

7. Award of Degree and Class

A student will be declared eligible for the award of the B. Tech. Degree if he fulfills the following academic regulations:

7.1 Pursued a **course of study for not less than four academic years and not more than eight academic years.**

7.2 Registered for 200 credits and secured 200 credits.

NOTE: Students, who fail to fulfill 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 program.

7.3 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 shall be placed in one of the following four categories:

Class Awarded	% of marks to be secured	From the aggregate marks secured for the 200 credits.
First Class with Distinction	70% and above	
First Class	Below 70% but not less than 60%	
Second Class	Below 60% but not less than 50%	
Pass Class	Below 50% but not less than 40%	

(The marks in Internal Evaluation and External Examination shall be shown separately in the marks memorandum).

8. Withholding of Results

If the student has not paid dues to College, or if any case of indiscipline is pending against him, the result of the candidate may be withheld and he will not be allowed to go into the next higher Semester. The award or issue of the Degree may also be withheld in such cases.

9. Transitory Regulations

The student, who had discontinued or had been detained for want of attendance or for any other academic requirements, may be considered for readmission as and when they become eligible. They have to take up equivalent course as substitute course in lieu of a course repetition as approved by the Academic Council.

10. Minimum Instruction Days

The minimum instruction days for each semester shall be **90 clear instruction days**.

11. There shall be **no branch transfers** after the completion of admission process.

12. The decision of the Academic Council will be final in respect of equivalent courses for those students who are transferred from other colleges. The procedure for permitting students to transfer from other colleges will be decided by the Principal / Academic Council according to the Government Rules in vogue.

13. General

13.1 Where the words “he”, “him”, “his”, occur in the regulations, they include “she”, “her”, “hers”.

13.2 The academic regulations should be read as a whole for the purpose of any interpretation.

13.3 **In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal / Academic Council is final.**

13.4 **In the case of any discrepancy or error in the above rules and regulations, the decision of the Principal / Academic Council is final.**

13.5 The College may change or amend any or all of the academic regulations or syllabi at any time and the changes or amendments made shall be applicable to all the students concerned with effect from the dates notified by the College.

14. Academic Regulations for B.Tech. (Lateral Entry Scheme - Regular)

(Applicable for the batches admitted from the academic year 2014-2015)

14.1 A student shall register for all 150 credits and earn all the 150 credits. Marks obtained in all 150 credits shall be considered for the calculation of the class.

14.2 A student who fails to earn 150 credits as indicated in the course structure within six academic years from the year of their admission shall forfeit their seat in B.Tech program and their admission stands cancelled.

14.3 The attendance requirements are same as described in item no. 4.

14.4 A student shall be **promoted from III year to IV year** only on fulfilling the academic requirements of securing 37 credits from the following examinations.

14.4.1. Two regular and one supplementary examinations of II year I semester

14.4.2. One regular and one supplementary examinations of II year II semester

14.4.3. One regular examination of III year I semester.

14.5 Irrespective of whether the candidate appears at the end examination or not as per the normal course of study and in case of getting detained for want of credits the student may make up the credits through supplementary examinations before the date of commencement of class work for IV year B.Tech I semester.

14.6 All other regulations as applicable for 4 - year B. Tech. Program will hold good for B. Tech. (Lateral Entry Scheme - Regular).

14.7 **Award of Class:** After a student has satisfied the requirement prescribed for the completion of the program and is eligible for the award of B.Tech. Degree he shall be placed in one of the following four categories:

Class Awarded	% of marks to be secured	From the aggregate marks secured for 150 credits. (i.e. II year to IV year)
First Class with Distinction	70% and above	
First Class	Below 70% but not less than 60%	
Second Class	Below 60% but not less than 50%	
Pass Class	Below 50% but not less than 40%	

(The marks in Internal Evaluation and External Examination shall be shown separately in the marks memorandum).

15. **Academic Honesty**

Upon accepting admission into SREC, a student immediately assumes a commitment to uphold the Ethics Code and to follow the prevailing disciplinary rules and regulations. Students will be required to state their commitment on examinations, research and publications, and other academic work. Ignorance of the rules does not exclude any member of the SREC community from the requirements or the processes of ethics code. Cases related to malpractices at the external examinations will be dealt with the existing rules and regulations laid down by the University.