



VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA, BURLA

ACADEMIC REGULATIONS FOR B.TECH. PROGRAMME - 2016

(Applicable for the students admitted to 1st Year B.Tech Course in the Academic Session 2016-17 and available in the University website : www.vssut.ac.in)

1. Admission:

Admission into B.Tech. Courses of the University shall be made once in a year based on the rank secured in Joint Entrance Examination (JEE mains) conducted by CBSE in that year or any other procedure decided by the Government of Odisha from time to time.

2. Award of B.Tech. Degree

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

- 1.1 The candidate shall pursue a course of study for not less than four academic years and not more than eight academic years and three years for Lateral Entry students and not more than six academic years for Lateral Entry students.
- 1.2 The 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 (six academic years for lateral entry students), shall forfeit their seats in B. Tech. course.
- 1.3 The candidate shall register and secure all credits offered for the course.
- 1.4 Obtains at least pass grade in NCC / NSS / YOGA.
- 1.5 Has not been convicted for any cognizable offence during the course of study.
- 1.6 Has secured CGPA 6.0 or more.
- 1.7 Has completed practical training of 30 days in recognized sectors/industries/Institutes.
- 1.8 Has a satisfactory conduct.
- 1.9 A student's level of competence shall be categorized by the GRADE POINT AVERAGE. It shall be the basis of judging his / her overall competence in the course. There shall be no class / division awarded

3. Courses of study

The following B.Tech Programme of study are offered at present.

- 1) Chemical Engineering
- 2) Civil Engineering
- 3) Computer Science and Engineering
- 4) Electrical Engineering
- 5) Electrical and Electronics Engineering
- 6) Electronics and Telecommunication Engineering
- 7) Information Technology
- 8) Mechanical Engineering
- 9) Metallurgical and Materials Engineering
- 10) Production Engineering

The medium of instruction is English.

3.1 The provisions made in the regulations shall be applicable to all B.Tech. Courses offered by the University at present and to any new B.Tech course (s) that may be added in future.

3.2 The University may , change any or all of these regulations at any time.

4. **Duration of Curriculum and Academic Calendar**

4.1 Each year shall be divided into two Semesters – Autumn /Odd Semester (**July to December**) and Spring/Even Semester (**January to June**). The Autumn Semester shall ordinarily begin in **July** for students already on rolls and the Spring semester shall ordinarily begin in **January**. However, the first semester (Autumn, for newly admitted students) may be begin a little later depending on completion of admission formalities. The number of instruction days shall be **a minimum of 90 working days per semester . One week is utilized for Mid-Semester Exams.**

4.2 Each year the University prepare a calendar of academic and associated activities, which shall be adhered to. Details of curricula and syllabi shall be as decided by the **Academic Council** on recommendation of respective **Boards of studies** with provision for modification from time to time as per the needs.

5. Credits Assigned to Courses

Table – 1 Details of Credits

	Maximum Marks	Semester		Pass Grade
		Periods / Week	Credits	
Theory	100	04	04	D
Practical	100	03	02	B
Drawing	100	03	02	B
Comprehensive Viva Voce	100	--	02	B
Seminar	100	03	02	B
Minor Project	100	03	02	B
Major Project	100	06	08	B

6. Distribution and Weightage of Marks

The performance of a student in each semester shall be evaluated subject-wise for a maximum of 100 marks for each Theory, Practical, Drawing, Comprehensive Viva Voce, Seminar and Minor and Major Project.

6.1 Theory Subjects

(a) A theory paper will have 100 marks. The distribution of marks is as follows:

Mid -semester Examination (of 2 Hours duration)	=	20 Marks
Assignments & Quiz	=	10 Marks
End semester Examination (of 3 Hours duration)	=	70 Marks
Total	=	100 Marks

- (b) The syllabus for each theory paper will have 4 modules. The Mid-Semester Examination will be conducted ordinarily after 40-45 days of commencement of Semester. The academic calendar will specify the schedule for Mid-Semester and the End Semester examination.

6.1.1 **Repeat Mid-Semester Examination**

A student remaining absent in Mid-semester examination shall forfeit the marks allotted for the examination. However, a student may be allowed to appear repeat Mid-semester examination to be conducted as per the Academic Calendar under the following cases.

- a) Death in family (to be supported by necessary documents).
- b) Illness leading to hospitalization (to be supported by the Discharge Certificate from the hospital)
- c) Participation in cultural/sports/Conferences etc./other official/academic assignment in the interest of University/Government (to be supported by relevant documents and duly permitted by Dean, Students' Welfare).
- d) Appearing the interview/written test for a job/higher study (to be supported by suitable evidences and certified by Dean, Students' Welfare)

Procedure of application for Repeat Mid-Semester Examination

(i) If such cases occur during the Mid-semester examinations then the student should apply in proper format of application, which will be available in the *University website* or in the *office of Dean, Academic Affairs* for **prior permission** from the officials as specified in the following Table-2 with necessary supporting documents **before remaining absent in the Mid-Semester Examination**.

(ii) The offices of Wardens of different Halls of Residence, and Dean, Students' welfare will send **recommended cases only** out of such applications in a consolidated form with respective supporting documents **within seven days from the conduct of last date of mid-semester examination of respective semester** to the office of the Dean, Academic Affairs.

(iii) The office of the Dean, Academic Affairs will scrutinize such recommended cases and if required the Repeat Mid-Semester Committee comprising of Dean, Academic Affairs, Dean, PGS&R, Dean Students' Welfare, COE, Medical Officer of the University, Warden of respective Hall of Residences will be called under the Convener ship of Dean, Academic Affairs for verification of genuineness of cases of application. Otherwise the recommendation cases will be treated as final.

Table – 2: Details of Officials for Prior Permission by the students for Repeat Mid-Semester Examination under different Cases

Sl.No.	Cases	Authorized Recommending Officials
1	i) Cases (a) & (b)	Warden (for Boarders) & DSW (For Day Scholars)
2	ii) Case (c) & (d)	DSW (For all students)

6.2 **Practical/Laboratory Courses/Design/Drawing**

Day to Day work	=	70 Marks
End semester Examination (of 3 Hours duration with External Teacher)	=	30 Marks
Total	=	100 Marks

For practical subjects there shall be a continuous evaluation during a semester for day-to-day work in the laboratory including record writing 70 marks and 30 marks for end semester examination. The end semester examination shall be conducted with an external examiner (Teacher other than the concerned laboratory Teacher but of same department) and the laboratory teacher. Student has to secure minimum of 35 marks from day to day work and 15 marks in end semester examination for securing pass mark that is "B" Grade. Each student has to do independently one experiment/ drawing or design problem. The teacher in charge of the subject has to formulate the modalities of assigning the experiment/ drawing or design problem to the students in a fair and transparent way in the end semester examination.

6.3 Comprehensive Viva-Voce

There shall be a Comprehensive Viva-Voce at the end of 8th semester. The Comprehensive Viva-Voce will be conducted by a Committee consisting of Head of the Department and at least three Senior Faculty members of the Department covering different specializations and two External Examiners one from relevant Industry and one from reputed academic institutes. The Comprehensive Viva-Voce is intended to assess the student's understanding of the subjects he studied during the entire B. Tech. programme of study. The Comprehensive Viva-Voce is evaluated for 100 marks by the Committee. There are no internal marks for the Comprehensive Viva-Voce.

6.4 Seminar

There shall be a seminar in 8th Semester. For the seminar the student shall collect the information on a specialized topic and prepare a technical report, showing his understanding of the topic, and submit it to the department. Further, student has to give a power point presentation on the seminar report. The marks for seminar are awarded as follows:

1) Day to Day work	20Marks
2) Report preparation	20 Marks
3) Seminar Presentation	40 Marks
4) Viva-Voce on the Seminar topic	20 Marks

Total

100 Marks

6.5 Project

There shall be B.Tech. Project called *Minor Project* in seventh semester and *Major Project* in eighth semester. The student/group of students shall investigate or work on a topic in any field of Engineering related to the department. During the project work student shall do experimental or analytical work or Design work or any other type of project approved by the Departmental committee to be formed by Head of the Department. The Committee should adopt a rational approach in assigning project supervisor to a student or a group of students in seventh semester that is at the time of Minor Project so that the interest of student/ group of students in carrying out project work should get priority with available faculty members in the Department of different specialisations. The same project supervisor to a student or a group of students will continue in eighth semesters for Major Project.

6.5.1 Evaluation of Minor Project and Major Project

(i) Minor Project : The internal evaluation of Minor projects preferably should be through presentations before Departmental committee by student/ group of students, as the case may be, and submission of the report with a weightage of marks as follows.

The award of Marks for the Minor Project

1) Day to day work (awarded by the Supervisor)	60 Marks
2) Project Report (Awarded by the Committee)	10 Marks
3) Presentation of Project Seminar (Awarded by the Committee)	20 Marks
4) Viva Voce (Awarded by the Committee)	10 Marks

Total

100 Marks

(ii) Major Project :At the end of the 8th semester the student shall submit a project report for Major Project and give a presentation before the Departmental Committee with an external Examiner outside the University in the relevant field of Engineering.

The award of Marks for the Major Project

1) Day to day work (awarded by the Supervisor)	50 Marks
2) Project Report (Awarded by the Committee)	10 Marks
3) Presentation of Project Seminar (Awarded by the Committee)	20 Marks
4) Viva Voce (Awarded by the Committee)	20 Marks
Total	100 Marks

7. Attendance Requirements

7.1 A student is eligible to write the University examinations in a subject provided he/she registers, pursues a regular course of study in respective department and attends at least 75% of classes in respective theory, practical, sessional subjects and project work scheduled during the semester.

7.2 The student will be given attendance for all the days he/she attended sports, games, NCC and NSS activities, other academic/ official assignments in the interest of the University / Government and the period of journey required with prior written permission of the University, after due recommendation from Head of the Department (subjected to a maximum of 10% all together)

7.3 Condonation of shortage of attendance up to 10% (65% and above and below 75%) in each subject may be granted by the Committee consisting of Medical Officer of the University COE, Dean, Students' Welfare, Dean, PGS&R and Dean, Academic Affairs as Convener for a student who has remained absent in classes for short periods due to death in the family, long period of his/her hospitalization. The Committee will examine the case based on the documents submitted by the students, facts and circumstances. Assessment will be done by the Committee on the merit of the case and spell out their recommendation to Vice-Chancellor. Based on this recommendation, vice-Chancellor may then give condonation of attendance, if deserving, but in any case, condonation cannot exceed 10%. The concerned students, including both boarders and day scholars, should apply for this purpose in the prescribed application form available in University website with supporting documents in the office of Dean, Students' Welfare immediately after his/her absent.

The consolidated list of such applications will be sent by the office of the Dean, Students' Welfare to the Office of Dean, Academic Affairs before seven days of starting of End Semester Examination.

7.4 Shortage of attendance below 65% in a subject shall not be condoned. It is the responsibilities of each and every student to keep track/monitor his/her percentage of attendance for each subject and ensure that he/she satisfies the attendance norms presented by the University. If the student finds any discrepancy/error in the attendance status, he/she should immediately bring it to the attention of the concerned faculty members and respective HOD, if required, and seek redressal.

7.5 Students whose attendance is less than 65% in any subject are not eligible to write their end semester examination. He/she is allowed to appear Supplementary Examination with one Grade less except for the student securing P grade.

8. Minimum Academic Requirements

Results and Promotions

8.1 (a) In order to pass a programme / course a candidate must secure minimum grade as specified in the following sub-section

i) Pass in a Subject Item (Theory):

A candidate declared pass a Theory Paper if he/she has secured minimum of 30 Percentage Marks in End Semester examination and overall 35 percentage marks in a subject including internal examination. (P – Grade)

(ii) Pass in a Subject Item (Practical / Drawing/ Seminar / Viva- Voce):

In a Practical / Sessional / Seminar / Viva-Voce Paper a candidate shall pass (clear) a subject if he / she has secured minimum of **50 Percentage** Points. (B – Grade).

(iii) Pass in Minor Project and Major Project :

In Minor Project and Major Project a candidate is declared pass if he/she secured minimum **60 Percentage** Points, (B⁺-Grade).

(iii) If a candidate fails in a subject item (Practical / sessional/ Seminar / Project/ viva-voce)

in a semester he/she has to take readmission in that semester in the **next academic year**.

All such failure cases shall be reported to the HOD of the concerned subject by the concerned teacher (Examiner) before submission of marks to the Controller of Examinations. The same is to be discussed in the departmental committee to be formed by the HOD. The departmental committee should consist of concerned teacher (Examiner) and at least three senior faculty members and HOD as chairman and the decision taken thereon with revised marks, if any, shall be forwarded to the concerned Conducting Board for consideration.

8.1 (b) Passed and Promoted (**denoted by P**) indicating that:

The candidate has cleared every registered subject of both odd and even semester of the academic year.

He / She has no backlog from lower levels.

He / She has secured CGPA ≥ 5.5 in cleared subjects.

8.1 (c) Eligible for Promotion with backlogs (**denoted by XP**) indicating that

The candidate is eligible for promotion with backlog (XP) as shown in Table-3

Table No.3 Requirements for Promotion/Admission to Next Higher Semester

1	2	3	4	5
For Admission into	Should have passed Sessional/ Practical/ Project/ Seminar/ Viva-Voce items of	Should not have failed in more than four theory papers of	Should have cleared all course items of all cleared of	Should have a minimum CGPA 5.5 in subjects of
2 nd Semester	1 st Semester	-	-	-
3 rd Semester	2 nd Semester	1 st & 2 nd Semesters taken together	-	1 st & 2 nd Semesters
4 th Semester	3 rd Semester	-	-	-
5 th Semester	4 th Semester	3 rd & 4 th Semesters taken together	1 st & 2 nd Semesters	3 rd & 4 th Semesters
6 th Semester	5 th Semester	-	-	-
7 th Semester	6 th Semester	5 th & 6 th Semesters taken together	3 rd & 4 th Semesters	5 th & 6 th Semesters
8 th Semester	7 th Semester	-	-	-
For issue of Final Grade sheet	All Semesters	No backlogs in any semesters	All Semesters	6.0 or more

8.1 (d) **Ineligible for Promotion (denoted by X) indicating that**

The candidate is NOT eligible for promotion to next higher level / year if he do not satisfy the conditions in Table- 3. A student who fails to satisfy Table - 3 shall become non-collegiate student for clearing the papers in which he/she has failed. He/she has to register for those subjects for appearing the examination in the next academic year subject to permission of 1.1 & 1.2.

8.2 The overall performance of a successful candidate for the award of a degree shall be based on the combined results of all the examinations of the concerned programme within the stipulated period as specified in 1.1 and 1.2.

9. **Branch Change**

The students shall normally pursue their B.Tech Programmes allocated to them at the time of admission. However, the University permits a limited number of academically meritorious students as assessed by their performance in the 1st year to change branch.

Any student pursuing B.Tech programme, may be allowed a **change of branch** in the University after completion of course requirements for the first and secondsemesters of the first year programme, as per approved guidelines. Students admitted under self-financing (self-sustaining) schemes will continue to pay the same amount of fees and development fees in self-financing mode after change of branch till completion of the B.Tech. Programme.

Guidelines for the Change of Branch

9.1 Change of branch will be considered at the end of 1st year and effected at the beginning of 3rd Semester. No application for change of Branch will be entertained in subsequent years.

(i)The change of branch shall be accorded to only such students who have cleared all examinations of both the semesters in the first attempt, in examinations held during academic session of his / her first admission to the course.

(ii)The minimum CGPA requirement for branch change is 8.0.

9.2 Change of branch may be accorded subject to the condition that, because of the change of branch the consequent increase of student strength in the 'gainer' branch shall not exceed by 10% of the sanctioned student strength of the respective branch and the reduction of the student strength in the loser branch shall not be more than 10% of the sanctioned student strength of the respective branch. The allotment of new branch would be made in order of merit and in accordance with the order of preference specified by the student subject to the availability of the seat with the following conditions.

9.2.1 **How to apply for the Change of Branch**

Students who wish to change their branch after the first year shall apply in a prescribed format notified by Dean, Academic Affairs in university website and must submit a no objection certificate

from their parents/ guardian within the due date along with Branch change Application Form, copy of the Grade Sheet of 1st and 2nd semester.

The selection shall be on the basis of merit, assessed through the combined results of the first and second semester examinations declared in the form of (CGPA) at the end of the first year. In case of tie, it will be resolved by JEE Main Rank.

All changes of branch will be final and binding on the applicants. No student will be permitted, under any circumstances, to refuse the change of branch offered after notification.

10. Supplementary Examination

There shall be a Supplementary Examination for Theory papers every year in **June / July**. Students who have failed in the theory subjects registered by them in odd and even semesters of the year, may avail this opportunity to clear these backlog subjects. The exact schedule for supplementary examination for theory papers will be notified by the Controller of Examinations (COE) in university web site. Students are allowed to appear the supplementary examination only after registering in the backlog subjects by paying necessary dues during the notified period. Those who have attendance shortage in theory subject, as mentioned in clause 7.5, are allowed to appear Supplementary Examination.

11. Grading System

11.1 A letter grading system is followed in the University. A base of 10 points as follows, recommended by UGC.

Table 4. Details of Percentage of Points and corresponding Grade points

Qualification	Grade	Score on 100 Percentage Points	Points
Outstanding	O	$\geq 90\%$	10
Excellent	A+	$\geq 80\% \ \&\lt; \ 90\%$	9
Very Good	A	$\geq 70\% \ \&\lt; \ 80\%$	8
Good	B+	$\geq 60\% \ \&\lt; \ 70\%$	7
Above Average	B	$\geq 50\% \ \&\lt; \ 60\%$	6
Average	C	$\geq 40\% \ \&\lt; \ 50\%$	5
Pass	P	$\geq 35\% \ \&\lt; \ 40\%$	4
Fail	F	$\lt; 35\%$ Failure due to insufficient marks in course.	0
Absent	Ab	Failure due to non appearance in examination	0

11.2 A student's level of competence shall be categorized by a GRADE POINT AVERAGE to be specified as:

SGPA -Semester Grade Point Average.
CGPA-Cumulative Grade Point Average.

A subject successfully completed cannot be re-registered for improvement.

11.3 **Definition of Terms**

- a) POINT-Integer showing each letter grade. (as shown in Table- 4)
- b) CREDIT -Integer signifying the relative emphasis of individual course item(s) in a semester as indicated by the Course structure and syllabus (also see Table -1).
- c) CREDIT POINT = (b) x (a) for each course item.
- d) CREDIT INDEX = \sum CREDIT POINTS of course items in a semester.
- e) GRADE POINT AVERAGE = $\frac{\text{CREDIT INDEX}}{\sum \text{CREDITS}}$ in the semester
- f) SEMESTER GRADE POINT AVERAGE (SGPA)

$$\text{SGPA} = \frac{\text{CREDIT INDEX for the Semester}}{\sum \text{CREDITS}}$$

(Note: e) and f) are same for course; e) referred for the limited research programs where a limited courses are registered for and f) referred for regular semester courses). The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

- g) CUMULATIVE GRADE POINT AVERAGE (CGPA)

$$\text{CGPA} = \frac{\sum \text{CREDIT INDEX of all previous Semesters}}{\sum \text{CREDITS of all previous Semesters up to a semester.}}$$

11.4 The Grade secured in NCC / NSS / YOGA will be mentioned in the 8th Semester Grade Sheet along with the CGPA.

11.5 Conversion Formula to percentage (as per UGC Guidelines):

The conversion from CGPA to percentage of marks shall be as follows:

Percentage of marks : (CGPA - 0.5) x 10%. This shall be mentioned in the final grade sheet.

11.6 For noncredit courses ‘Satisfactory’ or ‘Unsatisfactory’ shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

11.7 **Grade Sheet**

At the end of each even semester, grade sheet shall be made available to each student free of cost. However, if a student requires a duplicate grade sheet he / she should apply to the Controller of Examinations along with a money receipt of necessary fee. The grade sheet of a students may be withheld if he has not paid his dues, or its there is a case of indiscipline pending against him for any other reason.

12. **Transit Regulation in case of change in Regulations or Course of Studies**

12.1 When a student seeks admission/ readmission to a semester other than 1st semester at a later academic year due to various reasons he/she has to prosecute study according to the new courses of study from that semester onwards. But he/she shall be governed by regulation prevalent at the time of his/her admission to first semester and shall have to appear back papers of the previous semesters according to the old course of studies.

- 12.2 The degrees shall be awarded to such students by the **University** after the recommendations of the Academic Council of the University as per the provision made in the Statue of University.

13 **Residence**

- 13.1 Veer Surendra Sai University of Technology, Odisha, Burla is ordinarily a residential University. However, upon non-availability of seat in halls of residence students shall make their own arrangement for boarding & lodging outside under intimation to the Dean, Students' Welfare of the University.
- 13.2 The boarders shall abide by the rules of the halls of the residence framed from time to time and follow the code of conduct mentioned in Regulation-11 and shall clear all dues up to date.
- 13.3 The University will provide reasonable accommodation to students with disabilities as per availability in order to promote academic success.

14. **Conduct and Discipline**

- 14.1 Students shall conduct themselves within and outside the premises of the University in a manner befitting his association with this legendary University.
- 14.2 Students shall show due respect to the teachers of the University, / Wardens / Asst Wardens of Hostels, the Physical Training Officer, and Instructors of the NCC/Professor in-charge of Yoga/NSS. Proper courtesy and consideration should be extended to the employees of the University and of the Halls of Residence. They shall also pay due attention and courtesy to the visitors to the University and residents of the Campus.
- 14.3 Students are required to develop a friendly, camaraderie with fellow students. In particular, they are expected to show kindness and consideration to the new students admitted to the University every year. ***Ragging in any form inside and outside in campus is banned by law.*** Acts of ragging will be considered as gross indiscipline and will be severely dealt with.
- 14.4 The following acts of omission and/or commission shall constitute gross violation of the code of conduct and are liable to involve disciplinary measures:
- Ragging (See UGC regulations on curbing the menace of Ragging).
 - Lack of courtesy and decorum, indecent behavior anywhere within or outside the campus.
 - Willful damage or stealthy removal of any property/ belongings of the University /Hostels or fellow students.
 - Possession, consumption or distribution of alcoholic drinks or any kind of hallucinogenic drugs.
 - Adoption of unfair means in the examinations.
 - Mutilation or unauthorized possession of Library books and University property.
 - Noisy and unseemly behavior, disturbing fellow students. Commensurate with the gravity of offence, the punishment may be reprimand, fine/ expulsion from the hostel, debarment from examination, with holding of grades/ Withdrawal of Scholarship and/or Placement Services, rustication for a specified period or even outright expulsion from the University. The Vice-Chancellor on recommendation of the Disciplinary Committee may take any disciplinary action as deemed fit and deserving. The Academic Council may not recommend a student, who is found guilty of some major offence, to BOM for the award of a degree even if he has satisfactory completed the entire academic requirement.

15. **Readmission to a Semester**

15.1 The following categories of students may seek readmission to a semester:

- Those who have discontinued study in a semester of previous academic year on valid grounds.
- Those who have been rusticated for some definite period in a semester of previous academic year provided the period of punishment is over by the time of admission.
- Those who have been detained due to shortage of attendance in a semester of previous academic year.
- Those who have failed to satisfy the requirements under regulation for promotion to the next year / semester.

16. Anomaly (if any)- All differences and disputes arising in the interpretation and implementation of these regulations as above in this regulation will be referred to the Vice-Chancellor and his decision shall be final and binding.

17. Jurisdiction for all disputes, if any relating to VSSUT is Sambalpur, Odisha, India only.

18. General

18.1 Wherever the words he/him/his occurs in the regulations, they include she/her/hers.

18.2 The academic regulation should be read as a whole for the purpose of any interpretation.

18.3 In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Vice-Chancellor is final.

18.4 Notwithstanding and thing contained in this regulation may change or amend the academic regulations of syllabi at any time without Notice and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the University.

19. **Withdrawal of the Degree**

Under extremely exceptional circumstances where gross violation of the graduation requirements is detected at a later stage, the Academic Council may recommend for withdrawal of degrees already awarded.