

**Regulations Governing B.E./B.Tech. and
I Year Scheme & Syllabus
(Common to all Engineering Branches)**

Published by
and
Copyright

REGISTRAR
Visvesvaraya Technological University
"Jnana Sangama", BELGUAM - 590 014,
Karnataka, INDIA.

Year of Publication : 2006

Price : Rs. 20/-

**Regulations Governing
THE DEGREE OF BACHELOR OF ENGINEERING
/ TECHNOLOGY
(with effect from 2006-2007)**

- OB 1 TITLE AND DURATION OF THE COURSE**
- OB 1.1** The course shall be called the degree course in Bachelor of Engineering / Technology, abbreviated as B.E. / B.Tech.
- OB 1.2** The course shall be of 4 academic years duration and conducted in 8 semesters and each semester having duration of 16 weeks. For evening courses the contact hours are to be satisfied by working extra on afternoons of Saturday and Sunday.
- OB 1.3** The calendar of events in respect of the course shall be fixed by the University from time to time.
- OB 1.4** The examination in all the subjects shall be conducted at the end of each semester for all the 8 semesters.
- OB 2 ELIGIBILITY FOR ADMISSION
(The Government orders issued from time to time in this regard shall prevail.)**
- OB 2.1** Admission to I year/ I semester Bachelor Degree in Engineering/ Technology shall be open for the candidates who have passed the second year Pre-University or XII standard or equivalent examination recognized by the University.
- OB 2.2** In addition to OB 2.1, the candidate shall have secured not less than forty five percent (45%) marks in the aggregate with Physics and Mathematics as compulsory subjects, along with one of the following subjects:- Chemistry, Bio-Technology, Computer Science, Biology and Electronics.
- Provided that, the minimum marks for the purpose of eligibility shall be forty percent (40%) in optional subjects in case of candidates belonging to SC/ST and OBC.
- Provided that, the candidate shall have studied and passed English as one of the subjects.

OB 2.3 (a) Admission to II year/ III semester Bachelor Degree in Engineering/ Technology (**Lateral Entry**) shall be open for the candidates who are holders of a diploma or equivalent examination, as recognized by University and has secured not less than forty percent (40%) marks, in the final year examination (fifth and sixth semesters) in respect of candidates belonging to SC/ST and OBC and in respect of other the candidate has secured not less than forty five percentage (45%) marks in the appropriate branch of engineering specified in relevant Government Order issued from time to time.

Such a candidate shall clear prescribed bridge courses as specified by the University.

- OB2.3 (b)** For **Evening Course** admission shall be open for a candidate
- i) who is a holder of a diploma or equivalent examination, as recognized by the University and has secured not less than forty percent (40%) marks, in the final year examination (fifth and sixth semesters) in respect of candidates belonging to SC/ST and OBC and in respect of others, the candidate has secured not less than forty five percent (45%) marks in the appropriate branch of engineering specified in relevant Government Order issued from time to time and
 - ii) who on the first day of the term notified by the University for the year of admission has not less than one-year professional experience in the branch of engineering / technology, in which the candidate holds a diploma, after passing diploma course.

Explanation: Professional experience means employed on regular basis

- a) in Government, Government undertaking, Public Sector undertaking, Corporations or
 - b) in a private company registered under the Directorate of Industries and Commerce or the Directorate of Small Scale Industries or
- in Government, Government recognized institutions as technical staff.

Provided that the period of apprenticeship undergone shall also be treated as professional experience, if sponsored by the Board of Apprenticeship Training, Southern Region, Chennai or by Government, Government undertaking and Public Sector undertaking.

Provided further that employment shall be in an establishment situated within the urban agglomeration of city in which the professional institution is situated.

OB 2.4 Those candidates who have passed a qualifying examination other than the PUC II examination of the Pre-University Education Board of Karnataka, or Engineering Diploma Examinations of the Board of Technical Education of Karnataka, have to obtain eligibility certificate for seeking admission to B.E./B.Tech. Degree course from Visvesvaraya Technological University, Belgaum, or from the Principal of concerned Engineering College of Karnataka State.

OB 3 ATTENDANCE REQUIREMENT

OB 3.1 Each semester is considered as a unit and the candidate has to put in a minimum attendance of 85% in each subject with a provision of condonation of 10% of the attendance by the Vice-Chancellor on the specific recommendation of the Principal for reasons such as medical grounds, participation in University level sports, cultural activities, seminars, workshops and paper presentation.

OB 3.2 The basis for the calculation of the attendance shall be the period prescribed by the University by its calendar of events. For the first semester students, the same is reckoned from the date of admission to the course as per CET allotment.

OB 3.3 The students shall be informed about their attendance position periodically by the Colleges so that the students shall be cautioned to make up the shortage. The Principals of the affiliated Colleges shall submit the list of students who have been detained for shortage of attendance by the end of the semester to the Registrar (Evaluation) with a copy to the Registrar.

OB 3.4 A Candidate having shortage of attendance in one or more subjects shall have to repeat the whole semester and such candidates shall not be permitted to take admission to next higher semester.

Such students shall take readmission to the same semester in the subsequent academic year.

OB 3.5 Temporary Discontinuation of course:

A student, who wishes to temporarily discontinue the course and continue subsequently, has to obtain prior permission from the University by applying through the Principal. Such students have to take readmission to the same semester/year in the subsequent academic year. However, the candidate shall complete the course as per OB 6.2.

OB 4. INTERNAL ASSESSMENT MARKS

OB 4.1 Each subject of theory or practical shall have a maximum Internal Assessment Marks of 25. For seminars, the IA marks shall be 50.

OB 4.2 The Internal Assessment marks in a theory subject shall be based on two tests generally conducted at the end of 8 and 12 weeks of each semester. An additional test may be conducted for desirous before the end of the semester to give an opportunity to such students to improve their Internal Assessment Marks. The test shall be answered in Blue Books shall be kept in the custody of the Principal of the college till one month from the date of announcement of the result by the University. These shall be made available to university authorities for verification as per the direction of the Registrar(Evaluation) Registrar.

OB 4.3 Average of the better marks obtained from any two tests shall be the Internal Assessment Marks for the relevant subject.

OB4.4 If a candidate absent for all the test conducted, the Inter Assessment Marks shall be marked as A for the subject against the University Seat number (USN) of the candidate in the marks sheet submitted to the University by the principal of the College.

OB 4.5 In the case of Practical, the IA marks shall be based on the laboratory journals/reports and one practical test.

OB 4.6 i) For I year Computer Aided Engineering / Drawing:
a) 15 marks for class work (sketching and Computer Aided Engineering drawing).

b) 10 marks for test in the same pattern as that of the main examination (better of the two tests)

ii) The IA marks for other Drawings and Design Drawings offered by Various branches shall be based on the evaluation of the sheets and one test in the ration 60:40.

OB 4.7 The IA marks in the case of Project and seminar in the final year shall be based on the evaluation at the end of 8th semester by a committee consisting of the Head of the concerned Department and two senior faculty of the Department (one of them being the project / seminar guide).

OB 4.8 The final list, incorporating corrections (if any) of IA marks awarded to the students in the Theory / Practicals / Project work / Seminar, shall be displayed on the notice board of the College at least seven days before the closure of the semester and a certified copy of the same shall be sent by the Principals to the University Examination Section within the stipulated date. The IA marks sheets shall bear the signature of the concerned Teacher/Teachers, Head of the Department and Principal.

OB 4.9 Any corrections or over writing of IA marks shall bear the signature of concerned Teacher(s) and in such cases the Head of the Department shall indicate the number of corrections and attest it with his signature.

OB4.10 (a) A candidate failing to secure a minimum of 50% of the IA marks (12/25) in Practicals, 50% of marks in Project Work, shall not be eligible for the corresponding subject(s) in the University examination.

OB4.10 (b) For Seminars, the minimum requirement of IA marks shall be 40% of the maximum.

- OB 4.11** Such candidates as mentioned in OB 4.10, shall repeat the laboratory work/project work during the subsequent semester(s) and secure at least the minimum marks prescribed.
- OB 4.12** For theory subjects, there shall not be any minimum requirements of IA marks.
- OB 4.13** There shall be no provision for improvement of IA marks in theory subjects and in cases of Laboratory/Workshop/Seminar where the candidate has already secured the minimum required marks.
- OB 4.14** IA marks of those candidates to whom OB 4.11 applies, shall be sent separately to the Registrar (Evaluation).
- OB 4.15** IA marks shall reach the University before the commencement of examination. After the submission of Internal Assessment marks to the University, any request for change of IA marks shall not be considered under any circumstances.
- OB 5** **ELIGIBILITY FOR PASSING**
- OB 5.1 (a)** For a pass in a theory subject/drawing, the candidate shall secure minimum of 35% of the maximum marks prescribed in the University examination provided he/she secures 40% of marks in the aggregate inclusive of the IA marks.
- OB 5.1 (b)** For a pass in a Practical/Project/Viva-voce examination, a candidate shall secure a minimum of 40% of the maximum marks prescribed for the University Examination in the relevant Practical/Project/Viva-voce.
- OB 5.1 (c)** For a pass in Seminar, a candidate shall secure a minimum of 40% of the maximum marks prescribed.
- OB 5.2** The candidates who do not satisfy the condition OB 5.1 shall be deemed to have failed in that subject and may reappear for the University examination in the subsequent examinations. However, the IA marks awarded to the candidate/s at first attempt in the concerned theory subject will be carried forward. In case of Practicals/Projects/Seminar revised marks will be taken as per regulations OB 4.10 (a & b) and OB 4.11.
- OB 5.3** The candidate who passes a subject of a semester as per OB 5.1 is not allowed to appear for the same again, unless he/she opts for rejection of results as per OB 5.4, 5.5, 5.6, 5.7 & 5.8.

- OB 5.4** If a candidate so desires, there shall be provision for rejection of total performance of a semester (including IA marks) or rejection of results of performance in University examination of a semester only. But rejection is permitted only once during the entire course of study.
- OB 5.5** The candidate who desires to reject the performance as per OB 5.4 shall reject performance in all the subjects of the semester, irrespective of whether the candidate has passed or failed in any subject. However, the rejection of performance of 8th semester project results shall not be permitted
- OB 5.6** A candidate who desires to reject the total performance of the semester including Internal Assessment, has to take readmission for the relevant semester. Application for such readmission shall be sent to the Registrar, through the Principal of College within 30 days from the date of the announcement of the results. Late submission of application shall not be accepted for any reasons. Readmission to First semester in such cases will not be considered as fresh admission i.e., the candidate will continue to have the same University Seat Number, which was allotted earlier.
- OB 5.7** The candidate, who desires to reject only the results of University examination of a semester and does not desire readmission, will be permitted to re-appear for examinations of all the subjects of the semester in the subsequent examinations. However, the IA marks obtained by the candidate in the rejected semester shall be retained. Applications for such rejection shall be sent to the Registrar (Evaluation) through the Principal of the College within 30 days from the date of announcement of the results. Late submission of applications shall not be accepted for any reasons.
- If the rejection of the University examination results of the semester happens to be of an odd semester, the candidate can take admission to the immediate next even semester. However, if the rejection of the University result is of even semester, the candidate cannot take admission to the next odd semester.

OB 5.8 Such candidates who opt for rejection at final year are eligible for award of class and distinction at the B.E./B.Tech. degree level, but not eligible for award of ranks.

OB 5.9 A candidate shall be declared to have completed the course of B.E./B.Tech. degree, provided the candidate has undergone the stipulated course work in all eight semesters as per the regulations.

OB 6 **MAXIMUM DURATION FOR COURSE COMPLETION:**

OB 6.1 A candidate who has not obtained the eligibility for third semester after a period of three academic years from the date of first admission shall discontinue the course. However, the candidate is eligible for readmission for first year B.E./B.Tech. in respective College of the University and he/ she shall be allotted a University Seat Number (USN) without any change in the year of admission in the USN but the serial number of the candidate shall start with Seven hundred (7XX) series in the same branch.

OB 6.2 The candidate shall complete the course within a period of eight academic years from the date of first admission, failing which he/she has to discontinue the course.

OB 7 **PROMOTION AND ELIGIBILITY FOR THE EXAMINATIONS**

OB 7.1 There shall not be any restriction for promotion from odd semester to even semester, provided the candidate has fulfilled the attendance requirement.

OB 7.2 A candidate is eligible for promotion from even semester to odd semester (i.e. to next academic year) provided, the candidate has not failed in more than four heads of passing of the immediately preceding two semesters and has passed in all the subjects of all the still lower semester examinations. A Theory or Practical shall be treated as a head of passing, for example:

a. A candidate seeking eligibility to 3rd semester should not have failed in more than 4 heads of passing of first and second semesters taken together.

b. A candidate seeking eligibility to 5th semester should have passed in all the subjects of 1st and 2nd semesters and should not have failed in more than 4 heads of passing of third and fourth semesters taken together.

c. A candidate seeking eligibility to 7th semester should have passed in all the subjects up to 4th semester and should not have failed in more than 4 heads of passing of fifth and sixth semesters taken together.

OB 8 : **ELECTIVES**

OB 8.1 A candidate shall take one elective in 6th semester ('A' group), two electives in 7th semester ('B' and 'C' groups) and two electives in 8th semester ('D' and 'E' groups) choosing one from each group in 7th and 8th semester. Minimum of three electives are to be listed in each group.

OB 8.2 The minimum number of students to be registered for an Elective to be offered shall be not less than ten.

OB 8.3 A candidate shall opt for his/her choice of electives and register for the same at the beginning of each of 6th, 7th and 8th semesters. The candidate is permitted to opt for change of subject within 15 days from the date of commencement of the semester as per the calendar of the University.

OB 9 **SEMINAR AND PROJECT**

OB 9.1 Seminar topic shall be selected from the emerging technical areas only.

OB 9.2 Project work at 8th semester shall be completed batch wise, the batch shall consist a maximum of 4 candidates.

OB 9.3 Project Viva-Voce examination shall be conducted batch-wise.

OB 10 AWARD OF CLASS AT SEMESTER LEVEL

OB 10.1 For the award of First Class with Distinction, in a semester, the candidate shall have passed the semester examination in one or more attempts securing not less than 70% marks in aggregate in **first attempt**.

OB 10.2 For the award of First Class in a semester examination, the candidate shall have passed the semester examination in one or more attempts securing not less than 60% but less than 70% marks in aggregate in **first attempt**.

OB 10.3 A candidate who secures less than 60% of marks in aggregate in **first attempt** and passes in all the subjects in one or more attempts, shall be declared to have passed the semester examination in only Second Class

OB 11 AWARD OF CLASS AT DEGREE LEVEL

OB 11.1 The Bachelor Degree in Engineering/Technology shall be awarded to the candidates who have passed all the stipulated examinations from 1st to 8th semesters. However, declaration of the class of the degree shall be based on the performance of the candidate in **first attempt** from 5th to 8th semester examinations taken together.

OB 11.2 A candidate who has passed in all subjects of 1st to 8th semester securing not less than 70% marks in the first attempt of 5th to 8th semesters taken together shall be declared to be eligible for the award of the B.E. / B.Tech. degree in **first class with distinction**.

OB 11.3 A candidate who has passed in all subjects of 1st to 8th semester securing not less than 60% but less than 70% of marks in aggregate in the first attempt in 5th to 8th semester examinations taken together shall be declared to be eligible for the award of the B.E./ B.Tech. degree in **First Class**.

OB 11.4 A candidate who has passed in all subjects of 1st to 8th semester securing less than 60% in aggregate in the first attempt in 5th to 8th semesters shall be declared to be eligible for the award of the B.E. / B.Tech. degree in **Second Class**.

OB 11.5 The marks secured by the candidate in a semester examination after rejecting the results will also be taken as first attempt marks and will be considered for the award of class of the Semester/ Degree but not for award of rank.

OB 12 AWARD OF PRIZES, MEDALS & RANKS

OB 12.1 For the award of Prizes and Medals, the conditions stipulated by the Donor may be considered as per the statutes framed by the University for such awards.

OB 12.2 For award of ranks in a branch, a minimum of 10 candidates should have appeared in the 8th semester examination. The total number of ranks awarded shall be 10% of total number of candidates appeared in 8th semester or 10 whichever is less in that branch.

OB 12.3 For award of rank in a branch of Engineering / Technology, the aggregate marks secured by the candidate from 5th semester to 8th semester shall be considered. A candidate shall be eligible for a rank at the time of award of degree in each branch of Engineering / Technology, provided the candidate

- has passed 1st to 8th semester in all the subjects in first attempt only
- has not repeated/rejected any of the lower semesters.

OB 13 TRANSFER OF STUDENTS

OB 13.1 Transfer of students from one College to another College within Karnataka state is permitted only at the beginning of third, fifth, and seventh semesters, subject to availability of seats within the permitted intake in respective Colleges and subject to the prior approval of the University and the provisions of OB 7.2.

In the case of candidates from Universities other than VTU they should have passed in all the subjects of 1st & 2nd semesters for admission to 3rd semester and all the subjects of 1st to 4th semesters for admission to 5th semester and all the subjects of 1st to 6th semesters for admission to 7th semester.

The candidates seeking admission from Universities other than VTU shall have

- a) to apply for establishment of equivalence with prescribed fees as notified by VTU and
- b) obtain No Objection for admission from the University before commencement term as notified by VTU

OB 13.2 Transfer of students within the College from one branch to another branch at 3rd semester is permitted as per the provisions of Government of Karnataka/ AICTE. The change of branch requires approval of the University.

OB 13.3 For transfer from College to College or within the College (change of branch) a fee shall be charged by the University for administrative purpose (for updating of the records) which will be notified from time to time.
