

# Visvesvaraya Technological University, Belagavi



REGULATIONS GOVERNING THE DEGREE OF BACHELOR OF SCIENCE  
(Honours)[B.Sc(Honours)]

UNDER

OTCOME BASED EDUCATION(OBE)and Choice Based Credit  
System(CBCS)Effective from the academic year 2021-22



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### Definitions of Keywords

The following are the definitions/descriptions that have been followed for the different terms used in the Regulations of B.Sc.(Honours) Programs:

1. **Program:** This is an educational program in a particular subject in Science/branch of specialization leading to the award of the Degree. It involves events/activities, comprising of lectures/tutorials/laboratory work/fieldwork/outreach activities/project work /vocational training /viva-voce/ seminars/ internship/assignments/ presentations/ self-study, etc., or a combination of some of these.
2. **Semester:** Refers to one of the two sessions of an academic year (vide: serial number 3), each session being of sixteen weeks' duration (with not less than 90 working days). The odd and even semesters shall be as per the University academic calendar.
3. **Academic Year:** Refers to two consecutive semesters (odd followed by an even) sessions, including intervening periods.
4. **Course:** Usually referred to as subject and is a component of a Program. All Courses may not carry the same weightage. Each Course will have course objectives and course outcomes. A Course may be designed to comprise lectures/ tutorials/ laboratory work/ fieldwork/ outreach activities/project work/ vocational training/ viva-voce/ seminars/ term papers/assignments/ presentations/ self-study components etc., or a combination of some of these.
5. **Credit:** Refers to a unit or weightage by which the Coursework is measured. It represents the number of hours of instructions prescribed per week. One credit is equivalent to one hour of lecture or two hours of laboratory/practical Courses/ tutorials/ fieldwork etc., per week.
6. **Choice-Based Credit System (CBCS):** The education model refers to customizing the Coursework, through Core, Professional Electives, Open Electives, Skill-based ability Enhancement Courses, Non-Credit Mandatory Courses, and Internships to provide the necessary support for the students to achieve their goals.
7. **Course Registration:** Refers to formal registration to Courses of study in every semester by every student under the supervision of a Faculty Advisor (also called Mentor, Counsellor, Class teacher, etc.), in the Institution to maintain the proper record. Registration to the University portal is mandatory.
8. **Course Evaluation:** Represents the measurement of the impact of the teaching-learning process and offers an opportunity for improving the quality of learning in courses and







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teaching performance. Courses evaluation is done by adopting different methods such as tests, quizzes, assignments, etc., during the teaching-learning period at the end of some modules or chapters of syllabus contents and at the end of the semester. While the former part of the evaluation is called the Continuous Internal Evaluation (CIE) and the latter part of the evaluation is called Semester End Evaluation (SEE).

- 9. Continuous Internal Evaluation (CIE)**(also known as formative assessment): Refers to the evaluation of a student's performance in the course during the teaching-learning process. CIE shall be done by the faculty teaching course and evaluation components may include tests, assignments, group discussion, quizzes, course-specific projects, seminars, etc., conducted during the semester tenure with a weightage for different activities as specified by the University.
- 10. Semester End Examinations Evaluation (SEE)**(also called summative assessment): Refers to the examinations conducted by the University covering the entire Course Syllabus. For this purpose, Syllabi shall be modularized, and SEE questions shall be set from each module as specified by the University.
- 11. First Attempt:** Refers to some students who have studied in a current semester and have attended any one of the University examinations of that semester after satisfying attendance and CIE requirements of all the prescribed courses of that semester and registering for SEE. Such an attempt shall be considered as the first attempt. Even if students absent themselves for all the semester examinations after registering for SEE, such an attempt shall also be considered the first attempt.
- 12. Credit Representation:** Refers to the Credit Values for different academic activities considered, as per Table-1. Credits for the seminar, project phases, project viva-voce and internship shall be as specified in the Scheme of Teaching and Examinations.







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Table-1, Calculation of Credits

| Credit Values                                |  |   |                    |                  |
|--|--|---|--------------------|------------------|
| Theory/Lectures (L)<br>(hours/week/Semester) | Tutorials (T)<br>(hours/week/Semester) | Laboratory/<br>Practical (P)<br>(hours/week<br>/Semester) | Credits<br>(L:T:P) | Total<br>Credits |
| 4  | 0                                      | 0   | 4:0:0              | 4                |
| 3  | 0                                      | 2   | 3:0:1              | 4                |
| 2  | 2                                      | 2   | 2:1:1              | 4                |
| 3  | 0                                      | 0   | 3:0:0              | 3                |
| 2  | 2                                      | 0   | 2:1:0              | 3                |
| 2  | 0                                      | 2   | 2:0:1              | 3                |
| 0  | 0                                      | 6   | 0:0:3              | 3                |
| 2  | 0                                      | 0   | 2:0:0              | 2                |
| 1  | 0                                      | 0   | 1:0:0              | 1                |
| 0  | 2                                      | 0   | 0:1:0              | 1                |
| 0  | 1                                      | 1   | 0:0.5:0.5          | 1                |
| 0  | 0                                      | 2   | 0:0:1              | 1                |

**NOTE:** Activities like practical training, study tour, and participation in Guest lecturers do not carry Credits.

**13. Non-Credit Mandatory Course (NMC):** In the case of non-credit mandatory courses, students shall attend the classes during the respective semesters to satisfy the attendance requirements and as well as CIE requirements. In case, any student fails to register for the said course/fails to secure the minimum 40% of the prescribed CIE marks, he/she shall be deemed to have not satisfied. In such a case, the student has to fulfil the requirements during subsequent semester/s to appear for CIE. These Courses shall not be considered for CGPA calculation and vertical progression, but completion of the courses shall be mandatory for the award of the degree.

**14. Letter Grade:** Course Letter Grade (or simply letter grade or grade) is an index of performance of a student in a said course and refers to a qualitative measure of achievement of a student in each course, based on the percentage range of marks secured in CIE and SEE put together or CIE alone. Grades are denoted by the letters O, A, B, C, P, and F. The rubrics attached to letter grades are as follows:

**O** – Outstanding, **A+** – Excellent, **A** – Very Good, **B+** – Good, **B** – Above Average, **C** – Average,





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**P**- Pass and **F** – Fail. If a student remains absent for SEE of any of the course/s, the letter grade assigned to that course shall be **F**. If a student is not eligible for appearing, in SEE due to non-comply of any of the course/s then the letter grade assigned against that course shall be **NE**

- 15. Grade Point (GP):** Refers to a numerical weightage allotted to each letter grade on a 10-point scale against a preconceived range of percentage of marks secured by students in a course as shown in Table 2.

**Table 2, Letter Grade and corresponding Grade Points on a typical 10 – Point scale**

| Letter Grade and corresponding Grade Points on a typical 10 – Point scale |                         |                        |                       |                   |                           |                     |                  |                  |
|---|-------------------------|------------------------|-----------------------|-------------------|---------------------------|---------------------|------------------|------------------|
| Letter Grade  | <b>O</b><br>Outstanding | <b>A+</b><br>Excellent | <b>A</b><br>Very Good | <b>B+</b><br>Good | <b>B</b><br>Above Average | <b>C</b><br>Average | <b>P</b><br>Pass | <b>F</b><br>Fail |
| Grade Point   | <b>10</b>               | <b>9</b>               | <b>8</b>              | <b>7</b>          | <b>6</b>                  | <b>5</b>            | <b>4</b>         | <b>0</b>         |
| % of Marks secure   | 90-100                  | 80-89                  | 70-79                 | 60-69             | 55-59                     | 50-54               | 40-49            | 0-39             |

- 16. Passing Standards:** Refers to passing a Course only when GP is greater than or equal to **04**. (to be read along with 21OBS14.3)
- 17. Credit Point:** This is the product of GP and the number of credits for a Course i.e.,  
Credit points (CrP) = GP × Credits for the Course.
- 18. Semester Grade Point Average (SGPA):** Refers to the measure of a student's academic performance in a semester. It is the weighted average or weighted mean of the grade points obtained by a student in the various courses of any semester. It results in a number that lies between 0 and 10.
- 19. Cumulative Grade Point Average (CGPA):** This is a measure of the cumulative performance of a student of all semesters and is computed from the 2<sup>nd</sup> semester onwards. It is a measure of the overall cumulative academic performance of a student over the entire span of the academic program. CGPA is not an arithmetic mean a but weighted mean. It is also a number that lies between 0 and 10.
- 20. Grade Card:** Refers to the certificate showing the grades earned by a student. A grade card shall be issued to all the registered students after every semester-end examination. The grade card shall have the Program details (Course code, title, number of credits, grades secured, number of attempts, and alternate course taken instead of successive failure after 4 attempts)





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along with the SGPA of that semester and CGPA (except for the first semester) earned till that semester.

**21. Academic Bank of Credits (ABC):** The Academic Bank of Credits (ABC), is a national-level facility which will promote the flexibility of the curriculum framework and interdisciplinary/multidisciplinary academic mobility of students across the **Higher Education Institutions** (HEIs) in the country with appropriate "credit transfer" mechanism.

**22. Multiple Entry Multiple Exit:** The multiple entries and exit points in the academic programs **offered at HEIs** would remove rigid boundaries and create new possibilities for students. There are occasions when learners have to give up their education mid-way for various reasons. To facilitate flexible learning within the stipulated period (eight years for regular students), multiple exist and entry options are given to the needy students. The student can exit from the program only at the end of the even semester/s (2<sup>nd</sup>, 4<sup>th</sup>, and 6<sup>th</sup> semester) and the entry option is provided to the students at the beginning of the odd semester/s (3<sup>rd</sup>, 5<sup>th</sup> and 7<sup>th</sup> semester).

**23. University:** Visvesvaraya Technological University (VTU), Belagavi.







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|                 |   |   |
|-----------------|---|---|
| <b>21OBS1.0</b> | <b>Title and Credits of the Program of Study.</b> |   |
|                 | <b>21OBS1.1</b>                                   | The Program of study shall be called the degree of Bachelor of Science, abbreviated as B.Sc.(Honors)  |
|                 | <b>21OBS1.2</b>                                   | <p><b>Prescribed Number of Credits for the Program</b></p> <p>(a) The total number of credits to be earned by students admitted to the first semester of 04 years B.Sc.(Honors), the program shall be <b>160</b>.</p> <p>(b) A student shall be eligible to obtain an Undergraduate degree with <b>Minors</b>, if he/she earns a minimum of additional<b>18</b> credits, as specified by university norms from time to time regarding the earning of additional credits [To be read along with Regulations Governing the Award of Minors in B.Sc.(Honors), Degree Program].</p>   |
|                 | <b>21OBS1.3</b>                                   | <p><b>(a) Definition of Credits:</b></p> <ol style="list-style-type: none"> <li>1-hour Lecture (L) per week per semester =1 Credit</li> <li>2 hours Tutorial/(T)per week per semester =1 Credit</li> <li>2 hours Practical/Laboratory (P) per week per semester =1 Credit.</li> <li>Four-credit theory courses shall be designed for 50 hours of the Teaching-Learning process.</li> <li>Three-credit theory courses shall be designed for 40 hours of the Teaching-Learning process.</li> <li>Two-credit theory courses shall be designed for 25 hours of the Teaching-Learning process</li> <li>One credit theory course shall be designed for 15 hours of the Teaching-Learning process</li> </ol> |
| <b>21OBS2.0</b> | <b>Academic Eligibility for admission</b>         |   |
|                 | <b>21OBS2.1</b>                                   | <p><b>Admission to 1<sup>st</sup> year: Eligibility for candidates who have Passed Second PUC or equivalent</b></p> <p>I. As notified by the Government of Karnataka and University from time to time.</p> <p>II. Those students, who have passed a qualifying examination other than the PUC II examination of the Pre-University Education Board of Karnataka <b>or</b> XI and XII CBSE/ICSE studied in Karnataka have to obtain an eligibility/equivalence certificate for seeking admission to 1<sup>st</sup> year B.Sc.(Honors) Degree Program, from Visvesvaraya Technological University, Belagavi.</p>  |





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|                 | <b>21OBS2.2</b>                                    | <b>Qualification earned from foreign countries:</b><br><br>With regard to the qualification earned from foreign countries, an equivalence certificate from the University/Association of Indian Universities is mandatory for admission to B.Sc.(Honors) Programs. In case of any dispute about the equivalence in qualifications earned from foreign countries, the decision of the University in this regard shall be final and binding on all concerned.  |
| <b>21OBS3.0</b> | <b>Minimum and Maximum Duration of the program</b> |  |
|                 | <b>21OBS3.1</b>                                    | Students admitted to first-semester B.Sc.(Honors), shall complete the program within eight academic years from the year of the first admission, failing which they will not be eligible for the award of a degree.   |
| <b>21OBS4.0</b> | <b>Courses and Course Registration</b>             |  |
|                 | <b>21OBS4.1</b>                                    | There shall be the following types of Courses:<br><br>(a) Humanities, Social Sciences, and Management Courses ( <b>HSMC</b> ): These are mandatory for all disciplines.<br><br>(b) Basic Science Courses ( <b>BSC</b> ): Physics, Chemistry, and Mathematics. These are mandatory for all disciplines.<br><br>(c) Engineering Science Courses ( <b>ESC</b> ): Materials, Workshop, Drawing, and Basics of Electrical/ Electronics/ Civil/ Mechanical/ Computer Engineering, etc. These are mandatory for all disciplines.<br><br>(d) Discipline Course ( <b>DC</b> ): These are the Discipline Core Courses, relevant to the chosen specialization/branch/stream. The core courses shall be compulsorily studied by students and it is mandatory to complete them to fulfil the requirements of a Program.<br><br>(e) Discipline Specific Electives ( <b>DSC</b> ): These are professional Electives, relevant to the chosen specialization/branch and can be chosen from the pool of courses. It shall be supportive to the discipline providing extended scope/enabling exposure to some other discipline/domain and nurturing student proficiency skills<br><br>(f) Open Elective Courses ( <b>OEC</b> ): These are the Elective Courses from other technical areas and/or emerging fields. Students of other departments |







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|  |                 | shall opt for these courses to fulfilling of eligibility and prerequisite mentioned in the syllabus.   |
|  |                 | (g) Project Work: Project work is carried out at the parent Institution or any university/Government recognized organization without affecting the regular class work.   |
|  |                 | (h) Seminar: Each student has to present the seminar on a specific topic chosen from the relevant field/list provided by the department under the supervision of a faculty coordinator.  |
|  |                 | (i) Internship ( <b>INT</b> ): The internship (a form of experimental learning) program not only helps fresh pass-outs in gaining professional know-how but also benefits corporate sectors. The internship also enhances the employability skills of the student passing out from Institutions  |
|  |                 | (j) Non-Credit Mandatory Courses ( <b>NCMC</b> ): These Courses are mandatory, without the benefit of a grade or credit, passing each mandatory Course is required to qualify for the award of the degree.   |
|  |                 | (k) Ability Enhancement Courses ( <b>AEC</b> ): These courses are designed to help students to enhance their skills in communication, language, personality development etc. They also promote a deeper understanding of courses like social sciences, ethics, culture, human behaviour human rights, and the law. Ability Enhancement Courses are based upon the content that leads to Knowledge enhancement. |
|  |                 | (l) Universal Human Values Courses ( <b>UHV</b> ): The courses which teach: a holistic perspective based on self-exploration about themselves, family, society, and nature. Understanding (or developing clarity) of the harmony in the human being, family, society, and nature. These are mandatory for all disciplines  |
|  | <b>21OBS4.2</b> | <b>Course Registration:</b><br>In order to maintain a proper academic record at the Institution, every student shall register for the Courses of a semester (Credit) under the supervision of a Faculty Advisor (also called Mentor, Counselor, class teacher, etc.,) at the   |







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|-----------------|-------------------------------|--|
|                 |                               | beginning of each semester. The registration of courses in each semester with the University portal is mandatory.  |
|                 | <b>21OBS4.3</b>               | The minimum number of students registered for any professional Elective Course/Open Elective Courses/Ability Enhancement courses (from 3 <sup>rd</sup> semester onward) offered by the Departments shall not be less than ten. In such cases. If the number of registrants for the elective course is less than 10, the college must seek permission from the Registrar (Evaluation) within 15 days from the date of commencement of the semester as per the academic calendar of the University, if that Open Elective Course/Ability Enhancement course is to be offered in that college.  |
|                 | <b>21OBS4.4</b>               | A student shall exercise the option in respect of a higher semester Discipline Course/Open Elective Course/Ability Enhancement course and register for the same at the end of the previous semester. However, the student may be permitted to opt for a change of Elective Course/s preferably within 15 days from the date of commencement of the semester as per the academic calendar of the University.  |
| <b>21OBS5.0</b> | <b>Attendance Requirement</b> |  |
|                 | <b>21OBS5.1</b>               | Every prescribed course shall be considered as a unit for the calculation of attendance. All the students are required to attend all the lectures, tutorials, practicals, and other prescribed curricular and co-curricular activities, and thus the attendance is 100%. However, the candidate has to put in a minimum attendance of 85% in each course with a provision for condoning up to 10% of the attendance by the Vice-Chancellor on the specific recommendations of the Principal of the college where the candidate is studying, based on medical grounds, participation in NSS/NCC/Red cross/National level Republic Day and Independence Day Parade/participation in University/State/National/International levels sports and cultural activities, seminars, workshops, paper presentation, etc., of significant value. The supporting documents for condoning the shortage of attendance shall be submitted through the office of the Principal along with the recommendations to the office of the Registrar (Evaluation). |





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|                 |                   |   |
|-----------------|-------------------|---|
|                 | <b>21OBS5.2</b>   | <p>a) The basis for the calculation of attendance shall be the period prescribed by the University by its academic calendar of events and as notified by the Registrar.</p> <p>b) In case of late admissions, approved by competent authority (KEA/DTE/VTU), to I semester of the Bachelor of Science Program, the attendance shall be reckoned from the date of admission to the Program.</p>  |
|                 | <b>21OBS5.3</b>   | The Course Instructor/ Mentor/Class-teacher or the College office shall inform the students as well as their parents /guardians about the attendance status every month. Students who are facing a shortage of attendance shall be mentored to make up for the shortage. The Principal shall also notify every month, the list of candidates who are falling short of required attendance.  |
|                 | <b>21OBS5.4</b>   | A student who does not satisfy the attendance requirement in one or more Courses shall not be eligible to appear for the Semester End Examinations (SEE) of that course(s). The grade card for such courses shall be marked as NE (not eligible). The candidate shall be required to repeat that course/s whenever that course/s is offered next.   |
|                 | <b>21OBS5.5</b>   | <p>If a student fails to satisfy the attendance requirement of the course/s of the semester, he/she will not be permitted to appear for SEE of that course/s. However, the student will be allowed to appear for the Semester End Examination (SEE) for other courses of the semester.</p> <p>The student will repeat the course/s in which he/she falls short of attendance only, whenever the course/s is offered next.</p> <p>These courses of shortage of attendance will not be considered for vertical progression.</p> |
| <b>21OBS6.0</b> | <b>Internship</b> |   |
|                 | <b>21OBS6.1</b>   | <p><b>Internship:</b></p> <p>The internship is an extended period of work experience undertaken by University/Institute students looking to supplement their degree with professional development. The students are allowed to prepare themselves for the workplace and develop practical skills.</p>   |





The Internship shall be completed during the period specified in the Scheme of Teaching and Examinations. There will be Two internships:

**1) Innovation/Societal/Entrepreneurship-based Internship:**

**(21INT58)** During the intervening period of IV and V semesters the Internship of **03** weeks period shall be carried out in industries /Govt. organization/NGO/MSME. Focus may be given to Rural Internship/Innovative activities and Entrepreneurship (Social/Industrial). CIE shall be carried out during the Internship period/V semester and prescribed marks shall be included in the V semester grade cards. **Innovation/Societal/Entrepreneurship based will have only CIE and no SEE.**

**2) Research Internship/Industry Internship of 04 weeks duration:**

**(21INT77):** During the intervening period of VI and VII semesters the Internship of **04** weeks period shall be carried out. CIE shall be carried out during the Internship period/VI semester and prescribed marks shall be included in the VII semester grade cards. Research Internship/Industry Internship shall be carried out at Industry/ government organizations, non-governmental organizations (NGOs)/ Micro, Small & Medium Enterprises (MSME)/Research and development organizations/Organizations of National or international repute/ Institution Research Centers / Innovation and Incubation Centres/Start-ups/entrepreneur cells. The institution shall encourage students to take up (i) interdisciplinary Research Internship or Industry internship and (ii) rural internship, a work-based activity carried out to learn practical experiences in rural areas, for the upliftment of living standards. In case students want to undergo an internship at his/her family business, he/she shall be permitted to provide; a declaration by a parent that is submitted directly to the Principal of the Institution. With the consent of the internal guide and Principal of the Institution, students shall be allowed to carry out the internship at their hometown (within or outside the state or abroad),



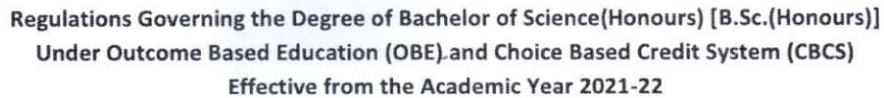




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|          |          | <p>provided favourable facilities are available for the internship and the student remains regularly in contact with the internal guide.</p> <p><b>University shall not bear any cost involved in carrying out the internship by students.</b> However, students can receive any financial assistance extended by the organization. <b>Research Internship/Industry Internship will have only CIE and no SEE.</b></p> <p><b>Responsibilities of Department and Guides:</b></p> <ol style="list-style-type: none"><li>1. The Department/College shall nominate a department coordinator /staff member/s to facilitate, guide, and supervise students under internship.</li><li>2. The students shall report the progress of the internship to the Guide at regular intervals and seek his/her advice. The Guide shall maintain the progress record/diary of the candidates undergoing internship.</li><li>3. After the completion of the Internship, students shall submit a report with a completion certificate to the Head of the Department with the approval of internal Guides.</li><li>4. There shall be 100 marks for CIE for Inter/Intra Institutional Internship and Innovation/Societal/Entrepreneurship based Internship. For Research/industry internship 100 marks for CIE no SEE. The minimum requirement of CIE shall be 40% of the maximum marks respectively.</li><li>5. The internal Guide and one senior faculty shall be the internal examiners for CIE Inter/Intra Institutional Internship and Innovation/Societal Entrepreneurship-based Internship.</li></ol> |
| 21OBS7.0 | 21OBS7.1 | <p><b>Project Work:</b> Based on the ability/abilities of the student/s and recommendations of the mentor, a single disciplinary or a multidisciplinary Major-project can be assigned to a group having not more than 4 students. The main project work needs to be taken up within the institute/research laboratory/industry. It is desirable, that the outcome of the project work may be published /patented.</p>   |
|          |          |   |



VTU, Belagavi





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| 21OBS8.1b             | <p><b>Theory Course with 01 credit</b></p> <p>Three Tests (preferably in MCQ pattern with 20 questions) each of <b>20 Marks (duration 01 hour)</b></p> <ol style="list-style-type: none"><li>1. First test at the end of 5<sup>th</sup> week of the semester</li><li>2. Second test at the end of the 10<sup>th</sup> week of the semester</li><li>3. Third test at the end of the 15<sup>th</sup> week of the semester</li></ol> <p>Two assignments each of <b>10 Marks</b></p> <ol style="list-style-type: none"><li>1. First assignment at the end of 4<sup>th</sup> week of the semester</li><li>2. Second assignment at the end of the 9<sup>th</sup> week of the semester</li></ol> <p>Quiz/Group discussion/Seminar, any two of three suitably planned to attain the COs and POs for <b>20 Marks (duration 01 hours)</b>.</p> <p>The sum of total marks of three tests, two assignments, and quiz /seminar/ group discussion will be out of 100 marks and shall be <b>scaled down to 50 marks</b>.</p>   |
| 21OBS8.2<br>21OBS8.2a | <p><b>Field Visit:</b></p> <p><b>Continuous Evaluation(CIE) of Field Visit</b></p> <p>CIE marks will be split into two components 80% of maximum marks (40 marks) are given for fieldwork report evaluation and 20% of maximum marks (10 marks) for internal assessment test evaluation(seminar/viva-voce).</p> <p>Field visit evaluation includes attendance, data collection through survey, and use of data for a report. The split-up of marks for the report shall be decided by the faculty member who is guiding them for the report. The criteria for split-up of marks shall be done to achieve the course outcomes. The report evaluation shall be carried out for 100 marks and scored marks shall be scaled down to 40 marks.</p> <p>The assessment shall be through a presentation of the report followed by the viva-voce. If the field visit coordinator happens to be the same faculty then, HOD or senior faculty member will conduct the test with the guide.</p> <p>The sum of the report and test marks will be the total CIE marks for field visit work.</p> |







21OBS8.3

**Practical Courses:**

CIE marks for the practical course is **50 Marks**.

The split-up of CIE marks for record/journal and test are in the ratio of **60:40**.

- Each experiment is to be evaluated for conduction with an observation sheet and record write-up. Split up of marks for the evaluation of the journal/write-up for hardware/software experiments designed by the faculty who is handling the laboratory session and shall be made known to students at the beginning of the practical session.
- The record should contain all the specified experiments in the syllabus and each experiment write-up will be evaluated for 10 marks.
- Total marks scored by the students shall be scaled down to 30 marks (60% of maximum marks).
- Weightage to be given for neatness and submission of record/write-up on time.
- The department shall conduct 02 tests for 100 marks, the first test shall be conducted after the 8<sup>th</sup> week of the semester and the second test shall be conducted after the 14<sup>th</sup> week of the semester.
- In each test, test write-up, conduction of experiment, acceptable result, and procedural knowledge will carry a weightage of 60% and the rest 40% for viva-voce.
- The suitable split up of marks can be designed to evaluate each student's performance and learning ability (Split-up of marks is as suggested in Annexure-I).
- The average of 02 tests is scaled down to **20 marks** (40% of the maximum marks).

**The Sum of scaled-down marks scored in the report write-up/journal and average marks of two tests is the total CIE marks scored by the student.**

Internal tests for laboratory courses with software experiments will be conducted for 100 marks



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|          | Observation, write-up of procedure/Algorithm/program, and execution of experiment will be assessed for 80 marks and Viva-voce for 20 marks.<br><br>Scored marks out of 100 are scaled down to 50 marks   |
| 21OBS8.4 | <b>Internship:</b><br>The Internship shall be taken up during the period specified in the Scheme of Teaching and Examinations.<br><br>The Department/College shall nominate faculty member/s to facilitate, Guide, and supervise students under an internship.<br><br>The students shall report the progress of the internship to the Guide in regular intervals and seek his/her advice. The Guide shall maintain the progress record of the candidates undergoing internship.<br><br><b>Duration of Internships</b> <ul style="list-style-type: none"><li>• Innovation/Societal/Entrepreneurship based Internship 03 weeks</li><li>• Industry/Research Internship 04 weeks</li></ul> There shall be only a CIE of 100 marks for Inter/Intra Institutional Internship and Innovation /Societal /Entrepreneurship based Internship.<br>Inter/Intra Institutional Internship and Innovation /Societal /Entrepreneurship based Internship Research/Industry Internship will have only the CIE component.<br><br><b>Report evaluation</b> for Research / Industry internships shall be evaluated for 50% of maximum marks – The split-up of marks suggested for report evaluation shall be based on the <ul style="list-style-type: none"><li>• Report formatting (20% of marks of CIE for report)</li><li>• Presentation of the outcomes in the report (40% of marks of CIE for report) and</li><li>• The technical content of the report (40% of marks of CIE for report)</li></ul> |







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|                 | <p>(Weightage may be given for paper publication in reputed journal/refereed journal/Conferences/Product-developed/Patent filed -only for Industry /Research Internship).</p> <p><b>Viva-Voce conducted</b> for 50% of marks of CIE. The split-up of marks suggested are</p> <ul style="list-style-type: none"><li>• For a demonstration of (soft) skills/Engineering Knowledge gained (50% of marks of CIE for Viva-voce).</li><li>• The question-answer session will be checked for the understanding of the fundamentals and concepts (40% of CIE marks for Viva-voce)</li><li>• The clarity in answering the questions (10% of CIE marks for Viva-voce)</li></ul> <p><i>Viva-voce will be conducted by the Mentor /guide and Head of the department /one of the senior faculty assigned by the head of the department</i></p>   |
| <b>21OBS8.7</b> | <p><b>Project Work:</b> The project work shall be evaluated considering both CIE and SEE; The CIE marks awarded for Project Work shall be based on the evaluation of the Project Report, Project Presentation skill, and Question and Answer session in the ratio of 50:25:25. <b>The marks awarded for the Project report shall be the same for all the batch mates.</b></p> <p>50 marks of CIE for the report shall be evaluated by the faculty guide /mentor who is guiding the project work.</p> <p>The Head of the Department shall make arrangements for the conduct of a viva-voce evaluation of the project work. The committee shall consist of a guide/mentor and two senior faculty members of the Department. This committee shall evaluate Project Work for 50 marks considering the project presentation and question-answer session.</p> <ul style="list-style-type: none"><li>• Project presentation: 25 marks</li><li>• Question and answer session:25 marks</li></ul> |
| <b>21OBS8.8</b> | <p>The candidate shall write tests, assignments/unit-tests /written quizzes in Blue-Books, which shall be preserved by the Principal/Head of the Department for at least 3 years after the announcement of University results</p>   |



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|           |   | and shall be made available for verification as per the direction of the Registrar (Evaluation).   |
| 21OBS8.9  | <b>Maximum and Minimum CIE and SEE Marks:</b> |  |
|           |   | <p>The maximum CIE marks shall be 50. To appear for the SEE, the minimum CIE marks to be secured in all the courses shall be <b>40 % of the maximum marks</b>. Inter/Intra Institutional Internship and Innovation /Societal /Entrepreneurship based Internship, Technical Seminar, Mini-Project Works will have only the CIE component, maximum CIE marks shall be 100. Minimum CIE marks to be secured shall be 40% of the maximum marks, to qualify in these courses.</p> <p>For Research Internship/ Industry Internship /Major Project the maximum CIE marks shall be 100.</p> <p><b>Maximum and Minimum SEE Marks:</b></p> <p>The maximum SEE marks for all the courses mentioned in the scheme of teaching and examination maximum SEE marks are 50 and the minimum SEE marks to secure shall be 35% of the maximum marks i.e. 18 marks.</p> <p>No SEE component for Inter/Intra Institutional Internship and Innovation/Societal /Entrepreneurship based Internship.</p> |
| 21OBS8.10 |   | Any corrections or overwriting of CIE marks on the blue book/drawing sheet laboratory record etc., where CIE marks are awarded, shall bear the signature(s) of the concerned Teacher(s) and the Head of the Department.  |
| 21OBS8.11 |   | CIE marks shall reach the University before the commencement of examinations as per the notification from the office of the Registrar (Evaluation) from time to time. After submission of CIE marks to the University, any request under any circumstances for a change of CIE marks shall not be considered.  |
| 21OBS8.12 |   | i. Students satisfying the attendance requirement but failing to secure the minimum percentage of CIE marks, in any course/s, shall not be eligible for the SEE, conducted by the University and they shall be considered as fail in that Course /those Courses and marked as NE in the grade cards against this course/s. However, they can appear for University examinations  |







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|  |                  | <p>conducted for other Courses of the same semester and backlog course/s if any.</p> <p>ii. Students who have satisfied the attendance requirement but not the CIE requirements can be permitted to register afresh and appear for SEE after satisfying the CIE requirements in the same Course(s) when offered during the next immediate semester/s or later.</p> <p>iii. Each appearance to SEE or absence after completing CIE and attendance requirements to complete a course shall be treated as an attempt.</p> <p>iv. The student shall be permitted to register for total courses not exceeding 28 credits. These 28 credits include the courses of the regular semester and backlogs. The registration of these additional credits includes the courses having a shortage of attendance and the courses whose CIE requirements are not fulfilled. A student has to pay the prescribed fee as notified by the University from time to time.</p> |
|  | <b>21OBS8.13</b> | CIE marks of those students, who come under 21OBS8.12 (i) and (ii), shall also be sent to the Registrar (Evaluation) along with other course CIE Marks.  |
|  | <b>21OBS8.14</b> | <p>i. The final list, incorporating corrections (if any), of CIE marks awarded to the students in the Theory/Practical/Internship/Technical Seminar /Major-Project Work shall be displayed on the notice board of the college much before the closure of the semester.</p> <p>ii. The college/institution shall enter the CIE marks of each semester in the format of the University's online CIE marks portal and submit a certified copy of the same to the University Examination Section within the stipulated date notified by University. Every page of the CIE marks sheet (hardcopy) shall bear the signatures of the concerned Teacher/Teachers, Head of the Department, and Principal.</p>   |
|  | <b>21OBS8.15</b> | <p><b>Moderation Committee for CIE;</b></p> <p>Moderation of assessment is an organized procedure that ensures the use of valid assessment methods and consistent application of criteria, to provide fair academic judgment and reliable outcomes in the form of marks or grades. It</p>  |





assures appropriate designing and implementation of assessment activities along with the generation of valid and reliable results.

There shall be a Moderating Committee for Internal Assessments in every Department, which shall be chaired by the Head of Department and two senior faculty members to be nominated by the Principal. This Committee shall be responsible for the entire process of Internal Assessment in the Department, including redressal of grievances if any.

***Guideline for the moderation Committee-***

Moderation may be conducted after each test or after the tests in case there is a large number of fail grades or higher letter grades, or when large numbers of students who have received the same grade or clustering of students on letter grades, or when there are discrepancies between marks allocated to individual students in different courses,

- Split-up of marks used for each of the different types of assessment in the course to be checked.
- Checking the questions and whether they map with course outcomes.
- Checking of the level of difficulty of questions paper i.e is difficulty level on the extremes, very easy or otherwise.
- Whether the assessment modes are used to cover the entire syllabus or not.
- Checking the manner of awarding the marks, i.e has correction been at the extremes, liberal or tough.

Moderation should not be restricted to just assessment but also includes the assessment design (scheme of evaluation).





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| 210BS9.0 | Semester End Examination (SEE) Marks and Passing standards |   |
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|          | 210BS9.1   | <p>a. University examination for all Courses under SEE shall be conducted for a maximum of 100 Marks. The marks secured by the students for 100 marks shall be proportionately <b>scaled down</b> to a maximum of 50 marks to add the same with the CIE marks for the award of the letter grade.</p> <p>b. The University examinations for all the Programs of study shall be conducted at the end of each semester.</p> <p>c. Students having no backlog course/s, may not have more than one examination on the same day. However, students having backlog course/s may face a situation where they may have</p> <ol style="list-style-type: none"><li>1. Two examinations are scheduled at the same time of the day,</li><li>2. To take two examinations on the same day, one during the morning session and the other in the afternoon session, and</li><li>3. Examinations on consecutive days.</li></ol> <p>d. As changing the examination dates is not an option, the examination timetable shall not be modified/alterd/adjusted in any of the above three cases. In the first case, the students shall select any one of the clashing courses and in the second and third cases, the students shall manage the examinations as per their decision.</p> <p>e. For all theory Courses of the Program, the <b>maximum SEE marks</b> shall be 50, the minimum SEE marks to be secured shall be 35 % of the maximum marks i.e., 18 marks</p> <p>f. For Practical/Fieldwork/ the maximum SEE marks shall be 50, and the minimum SEE marks to be secured shall be 35 % of the maximum marks i.e., 18 marks. <i>Inter/Intra Institutional Internship, Innovation/Societal /Entrepreneurship based Internship, Technical Seminar and Mini-Project are not having any SEE component.</i></p> <p>g. <b>Students who satisfy the conditions (e) and (f) and obtain any grade from O to P in a course shall be considered to have passed that course.</b></p> <p>h. <b>A student shall be declared fail if he/she</b></p> <ul style="list-style-type: none"><li>• Fails to satisfy the conditions (h) above</li></ul> |





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|           | <ul style="list-style-type: none"><li>• Absents himself/herself to the University examination.</li><li>• Is held guilty of examination malpractice and for any other reasons and declared the performance of any course/s as null and void by the competent authority.</li><li>• The course/s in which student/s fail to satisfy attendance and CIE requirement (NE courses) are also considered as F only.</li></ul> <p>j. If a student secures an F grade in any of the Courses, he/she shall reappear for that Course(s) during the subsequent SEE. The CIE marks awarded to the student at the first attempt in the concerned Course(s) shall be carried forward. Revised CIE marks are considered only in cases NE (not eligible to appear for SEE due to non-comply of attendance and CIE) cases.</p> <p><b>The sum of CIE and SEE marks must be 40% of the maximum marks prescribed for a course as per the scheme of teaching and examination.</b></p> |
| 21OB9.1a  | <p><b>Theory Course with 2, 3 and 4 Credits</b></p> <p>Theory SEE will be conducted by University as per the scheduled timetable, with common question papers for the course (duration 03 hours)</p> <ol style="list-style-type: none"><li>1. The question paper will have ten questions. Each question is set for 20 marks.</li><li>2. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub-questions), <b>should have a mix of topics</b> under that module.</li></ol> <p>The students have to answer 5 full questions, selecting one full question from each module. Marks scored by the students out of 100 marks will be proportionally reduced to 50 marks.</p>   |
| 21OBS9.1b | <p><b>Theory Course with 1 Credit</b></p> <p>SEE paper shall be set for 50 questions, each of 01 mark. The pattern of the question paper is MCQ (multiple choice questions). The time allotted for SEE is <b>01 hour</b>.</p>  |







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| 21OBS9.1c | <b>Field Visit</b><br><b>SEE for field visit</b> Conducted by the Internal guide and one senior faculty of the department as external examiner.<br>Viva-voce for 50 marks.  |
| 21OBS9.1d | <b>Practical Course</b><br>SEE marks for the practical course shall be 50 Marks.<br>SEE shall be conducted jointly by the two examiners of the same institute one acts as internal and another as external examiner. Examiners are appointed by the University. <ul style="list-style-type: none"><li>• All laboratory experiments are to be included for practical examination.</li><li>• The breakup of marks and the instructions printed on the cover page of the answer script is to be strictly adhered to by the examiners or based on the course requirement, a split-up of marks for evaluation shall be decided jointly by internal and external examiners.</li><li>• Students can pick one question (experiment) from the questions lot prepared by the internal /external examiners jointly.</li><li>• Evaluation of write-up/conduction procedure and result/viva will be conducted jointly by Internal and external examiners.</li><li>• The general split-up of marks for SEE mentioned are procedure/ writeup- 20%, Conduction and result in -50%, Viva-voce 30% of maximum marks. SEE for the practical course shall be evaluated for 100 marks and scored marks shall be scaled down to 50 marks (however, based on course type, the split-up of the marks shall be decided by the examiners)</li><li>• Change of experiment is allowed only once and 20% of Marks allotted to the procedure/write-up part to be made zero (Evaluation is to be carried out for 80% of total maximum marks).</li></ul> The duration of SEE is 03 hours. |
| 21OBS9.1e | <b>Project Work:</b><br>As project work is evaluated for 100 marks (CIE: 50 marks, SEE:50 marks), the marks awarded in SEE for 50 marks must take as it is to decide the letter grade along with the CIE marks awarded for 50 marks. SEE for Project Work will be   |





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|          | <p>conducted by two examiners one internal and one external examiner appointed by University. SEE marks for the project shall be awarded based on the quality of the report and presentation skill, participation in the question and answer session in the ratio of 50:25:25 as per the University norms jointly by the examiners.</p> <p>Split-up marks to be followed are suggested for CIE <b>or</b> Internal and external examiners shall decide the split-up of marks for SEE and the same may be submitted to the University along with evaluation marks.</p>  |
| 21OBS9.2 | <p><b>Rejection of Result:</b></p> <p>A student may, at his/her desire, can reject the total performance of a semester (including CIE marks) or reject only the result of his/her performance in University examinations (SEE) of a semester. The rejection is permitted only once during the entire Program of study.</p>  |
| 21OBS9.3 | <p>Students who desire to reject the SEE results of a semester shall reject the total performance (irrespective of the earned Course grades) in all the Courses of the semester either rejecting or retaining the CIE marks.</p> <p>Students who desire to reject the total SEE performance of an odd or even semester including CIE marks, have to repeat that odd or even semester of the prevailing scheme by taking <b>readmission</b> during the subsequent academic year/s. They shall also be governed by <b>readmission and</b></p> <p><b>Maximum duration clauses</b> (21OBS13.1-7 and 21OBS3.1)</p> <p>(i) If the rejection of SEE results excluding CIE marks is of the odd semester, students shall be allowed to take admission to the immediate next even semester.</p> <p>(ii) If the rejection of SEE results excluding CIE marks is of even semester, then students shall be allowed to take admission to the next odd semester.</p> <p>(iii) Readmission to odd/even semester shall not be considered as fresh admission and therefore students shall continue to have the same University Seat Number, which was allotted earlier. The maximum</p> |





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|                  |                                       | <p>duration of the Program shall be counted with reference to the University Seat Number (USN).</p> <p>(iv) Applications for rejection of results excluding CIE and approval to reappear for University examinations shall be sent to the Registrar (Evaluation) through the Principal of the College within 30 days from the date of announcement of the results, with the prescribed fee as notified by the university from time to time. Late submission of applications shall not be accepted for any reason.</p> <p>(v) Application for rejection of results including CIE and approval for readmission shall be sent to the Registrar through the Principal of the College within 30 days from the date of the announcement of the results with the prescribed fee as notified by the university from time to time. Late submission of application shall not be accepted for any reason.</p>                               |
|                  | <b>21OBS9.4</b>                       | <p>Registration for SEE is compulsory if the student/s has satisfied the attendance and CIE requirement of the ODD /EVEN semester.</p> <p>In case, the students fail to register for SEE of the odd semester after satisfying the attendance and CIE requirements of the semester, they shall be permitted to move to an even semester of that academic year. However, such students have to register for odd semester examinations conducted at the end of the academic year for all the semesters and registration shall be considered for the first attempt.</p> <p>In case, students fail to register for odd semester SEE after completing successfully the even semester, they shall not be permitted to move to the higher odd semester of the subsequent academic year. Irrespective of the student appearing for SEE, he/she has to register for SEE of odd and even semesters before completing the academic year.</p> |
|                  | <b>21OBS9.5</b>                       | <p>Students who opt for rejection of results of University examination shall be eligible for the award of the degree and Minor Degree but not for the award of <b>ranks and Honors degree.</b></p>   |
| <b>21OBS10.0</b> | <b>Multiple Entry and Exit Option</b> |  |
|                  | <b>21OBS10.1</b>                      | <p><b>Entry 1:</b> (at 1<sup>st</sup> semester) A program of study leading to entry into the first year of the Bachelor's degree is open to those who have met the entrance</p>  |





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|  |                 | <p>requirements, including specified levels of attainment at the secondary level of education specified in the program admission regulations at clause no. 21OBS2.1</p> <p><b>Exit 1:</b> The exit option is given to the student at the end of year 1 (after the 2<sup>nd</sup> semester). The student has to complete all academic requirements of 1<sup>st</sup> year of the undergraduate program and earned requisite credits of 1<sup>st</sup> and 2<sup>nd</sup> semesters and recommendation of the counselling team of the Institute.</p>  |
|  | <b>21OB10.2</b> | <p><b>Entry 2:</b> (at 3<sup>rd</sup> semester) A program of study leading to the second year of the Bachelor's degree is open to those who have met the entrance requirements, including specified levels of attainment, in the program admission regulations clause no. 21OBS2.1. Admission to a program of study is based on the evaluation of documentary evidence (including the academic record) of the applicant's ability to undertake and complete a Bachelor's degree program.</p> <p>This option is open to those who have left after completion of the 1<sup>st</sup> year of the program and want to join back for the continuation of their study subject to the condition of a maximum duration of 8 years from the date of 1<sup>st</sup> admission.</p> <p><b>Exit 2:</b> The exit option is given to the student at the end of year 2 (after the 4<sup>th</sup> semester). The student has to complete all academic requirements to complete the two years of the undergraduate program and earned requisite credits for the 1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> and 4<sup>th</sup> semesters and recommendation of the counselling team of the Institute.</p> |
|  | <b>21OB10.3</b> | <p><b>Entry 3.</b> This option is open to those who have left after completion of the 2<sup>nd</sup> year of the program and want to join back for the continuation of their study subject to the condition of a maximum duration of 8 years from the date of 1<sup>st</sup> admission.</p> <p>A program of study leading to the Bachelor's degree is open to those who have met the entrance requirements, including specified levels of attainment. Admission to a program of study is based on the evaluation of documentary</p>   |







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|                  |                  | <p>evidence (including the academic record) of the applicant's ability to undertake and complete a Bachelor's degree program.</p> <p>Students opting for multiple entries at the 5<sup>th</sup>-semester level have to undergo mandatory Summer Internship-I (21INT58) of 03 weeks during the intervening period of semesters IV and V. CIE shall be conducted in the 5<sup>th</sup> semester and prescribed credits earned for the internship shall be entered into the grade card of 5<sup>th</sup> semester.</p> <p><b>Exit 3.</b> (after 6<sup>th</sup> semester) On successful completion of three years, the relevant degree shall be awarded. The student has to complete all academic requirements to complete the three years of the undergraduate program and earned requisite credits of the 1<sup>st</sup> to 6<sup>th</sup> semester and recommendation of the counselling team of the Institute.</p> |
|                  | <b>21OB10.3</b>  | <p><b>Counselling Team:</b></p> <p>The students who choose to drop out (exit) undergo counselling to understand why they are making such decisions. The exit option is given to students only after the recommendation of the counselling team constituted by the Principal of the Institute.</p>  |
| <b>21OBS11.0</b> | <b>Grading</b>   |  |
|                  | <b>21OBS11.1</b> | <p>The University adopts an absolute grading system wherein the marks are converted to grades, and every examination result shall be declared in terms of Semester Grade Point Average (SGPA) considering all the courses that appeared in that Semester End Examinations including backlog course/s or arrear papers (refers to courses other than the current semester courses that have not yet been completed) and Cumulative Grade Point Average (CGPA). The CGPA will be calculated for up to an academic session semester, except for the first semester.</p>   |





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| 21OBS11.2          | The grading system with the letter grades and the assigned range of marks under the absolute grading system shall be as given below:  |             |           |           |       |               |         |      |      |
|                    | Letter Grade and corresponding Grade Points on a typical 10 – Point scale   |             |           |           |       |               |         |      |      |
|                    | Letter Grade  | O           | A+        | A         | B+    | B             | C       | P    | F    |
|                    |   | Outstanding | Excellent | Very Good | Good  | Above Average | Average | Pass | Fail |
|                    | Grade Point   | 10          | 9         | 8         | 7     | 6             | 5       | 4    | 0    |
| % of Marks secured | 90-100  | 80-89       | 70-79     | 60-69     | 55-59 | 50-54         | 40-49   | 0-39 |      |
| 21OBS11.3          | <p>If a student remains absent for SEE of any of the courses, the letter grade assigned in the grade card to that course shall be <b>F</b>. If a student is not eligible to appear for SEE due to non-comply of any of the course/s then the letter grade assigned against that course/s shall be <b>NE</b>.</p> <p>In the case of all the courses of the program, the maximum CIE marks shall be 50 and the maximum SEE marks shall be 50. The minimum CIE marks secured shall be <b>40%</b> of maximum marks, i.e. 20 out of 50 marks for passing. The minimum SEE marks to be secured shall be <b>35 %</b> of the maximum marks i.e., 18 out of 50marks for passing. In total, the student has to secure <b>40 % of the course maximum marks i.e.,</b> the sum of the CIE and SEE marks prescribed for the Course.</p> |             |           |           |       |               |         |      |      |
|                    | <p>A student obtaining Grade F in a Course/s shall be considered to fail in that course/s and is required to reappear for the corresponding course/s in the subsequent SEE. Whatever the letter grade secured by the student in his /her reappearance shall be awarded. The number of attempts taken to clear courses/s shall be indicated in the grade card.</p>   |             |           |           |       |               |         |      |      |
| 21OBS12.0          | Computation of SGPA and CGPA  |             |           |           |       |               |         |      |      |
| 21OBS12.1          | Computation of SGPA and CGPA  |             |           |           |       |               |         |      |      |
|                    | <p>The following expressions shall be used to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) respectively:</p> <p><b>SGPA</b></p> $= \frac{\sum[\text{CourseCredits} \times \text{GradePoints}] \text{ for all the Courses applied in that semester}}{\sum[\text{CourseCredits}] \text{ for all the Courses applied in that semester}}$  |             |           |           |       |               |         |      |      |





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**Effective from the Academic Year 2021-22**

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|  |                  | $CGPA = \frac{\sum [CourseCredits \times GradePoints] \text{ for all Courses excluding those with Fgrades until that semester}}{\sum [CourseCredits] \text{ for all Courses excluding those with Fgrades until that semester}}$ <p>The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the grade cards. SGPA and CGPA calculation: An illustrative example for one academic year is shown in Annexure-III.</p>   |
|  | <b>21OBS12.2</b> | <p><b>Conversions of CGPA into Percentage of marks and Class Equivalence</b></p> <p>There is no formula for the conversion of CGPA into the percentage of marks. However, the following formula for conversion of the CGPA on a 10-point scale into the percentage of marks (M) for employment / higher studies, etc may be used;</p> <p>Percentage of marks secured, <math>M = CGPA \text{ Earned} \times 10</math></p> <p>Illustration for a CGPA of 8.20;</p> <p>Percentage of marks secured <math>M = 8.20 \times 10</math><br/> <math>= 82.0 \%</math></p>   |
|  | <b>21OBS12.3</b> | <p><b>Class Equivalence:</b></p> <p>Subsequent to the conversion of the final CGPA, after successful completion of the Program, into the <b>percentage of marks (M)</b>, a graduating student is reckoned to have passed in</p> <ul style="list-style-type: none"> <li>(i). First Class with Distinction (FCD) if <math>M \geq 70</math></li> <li>(ii). First Class (FC) if <math>60\% \leq M &lt; 70\%</math></li> <li>(iii). Second Class (SC) if <math>50\% \leq M &lt; 60\%</math></li> <li>(iv). Pass Class (P) if <math>40\% \leq M \leq 50\%</math> (to be read along with 21OBS14.3)</li> </ul> |

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| <b>21OBS13.0</b> | <b>Vertical progression</b> |
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| <b>21OBS13.1</b> | <p>All the below clauses are subject to a maximum duration of eight semesters (for Regular Students).</p> <ol style="list-style-type: none"><li>1) (a) Students have to fulfil the attendance and CIE requirement to appear for SEE of course/s<br/>(b) The students who fail to satisfy CIE and attendance requirement has to repeat the courses whenever offered next</li><li>2) Obtaining CIE: From the student who obtains the required attendance for the course, but not the required CIE marks is allowed to move forward to the next semester. However, the student has to mandatorily obtain the required CIE in the subsequent semester. Obtaining minimum CIE marks for the course is mandatory. It may also be noted that the student shall not be permitted to appear for SEE in such courses until he/she obtains the required CIE.</li><li>3) Carryover of backlog courses: the student/s who obtains required attendance, CIE, and appears for university examinations but fails (F Grade) to pass a course/s is allowed to move forward to the next semester (odd/even) irrespective of the number of F grades. However, for the award of the degree, the student has to pass in all courses as per the applicable scheme and regulations and earn the prescribed credits. This is subject to a permitted maximum duration.</li><li>4) Permitted Maximum credits for registration: The student shall be permitted to register for total courses not exceeding 28 credits. These 28 credits include the courses of the regular semester and backlogs. The registration of these additional credits includes the courses having a shortage of attendance and the courses whose CIE requirements are not fulfilled. A student has to pay the prescribed fee as notified by the University from time to time.</li><li>5) <b>Successive Failures:</b><ol style="list-style-type: none"><li>a) If a student fails to pass a Course even <b>after four attempts</b>, that course is deemed to be exempted for him/her. Then, the student may choose a course of his / her choice with the same number of credits from the</li></ol></li></ol> |
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pool of courses suggested by the concerned Board of Studies. The course so selected should not have been studied by the student or to be studied in higher semester/s. The faculty advisor shall guide/advise the student in this regard. The college has to make arrangements for the registration and conduction of CIE for the selected course.

- b) This provision is given only for two courses (one at a time) during the entire maximum duration of a course.
- 6) This provision is **optional**; the student/s can continue appearing for SEE with the same course without opting for a change of course as mentioned in clause 21OBS14.1-6a.

**Readmission:**

- a) Students who are temporarily discontinuing the program and getting readmitted or rejoin to the eligible semester are subject to a maximum duration of eight (for Regular students) years as applicable.
- b) The permission for readmission is only on request through the Principal and is not treated as a matter of right. Such students shall not claim any benefits based on the readmission.
- c) Students who take re-admission to any semester of the existing scheme from another scheme, as a repeater/fresher because of various reasons, shall attend and complete all the remaining semester/s of the program adhering to the regulations of the prevailing scheme and shall complete additional Course/s, if any, as per the decision of equivalence committee in concurrence with concerned Board of Studies on establishing the equivalence between two schemes. Such a candidate shall not be eligible for the award of rank.
- d) Readmission to odd/even semester shall not be considered as fresh admission and therefore students shall **continue to have the same University Seat Number**, which was allotted at the time of admission to the program. The maximum duration of the Program shall be counted with reference to the USN (University Seat Number) allotted during admission to the program.





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|                  |                        | <b>7) Permitted Maximum credits for registration:</b><br><br>The student shall be permitted to register for total courses not exceeding 28 credits. These 28 credits include the courses of the regular semester and backlogs. The registration of these additional credits includes the courses having a shortage of attendance and the courses whose CIE requirements are not fulfilled. A student has to pay the prescribed fee as notified by the University from time to time.   |
|                  | <b>21OBS13.2</b>       | <ol style="list-style-type: none"><li>1) The candidates who have temporarily discontinued the Program of study or changed the scheme of study from one to another because of various reasons or transferred with credits from the autonomous college of VTU/other University to a non-autonomous constituent/affiliated college of VTU shall be eligible for the award of degree provided the credits earned at that stage are equal to or greater than the credits decided by the University in the individual cases.</li><li>2) In case, the forecasted or estimated credits are going to be less than that of the credits prescribed by the University on the completion of all the semesters of the program under the prevailing scheme, the candidate shall register for a course or courses not studied earlier and make up the credits which are equal to or greater than the university prescribed credits.</li><li>3) In case of any difficulty, Vice-Chancellor shall decide on individual cases, which shall be final.</li></ol> |
| <b>21OBS14.0</b> | <b>Award of Degree</b> |   |
|                  | <b>21OBS14.1</b>       | <b>B.Sc.(Honors) with Minor degree</b><br><b>a)</b> A student shall be declared to have completed the Program of B.Sc. (Honors) Degree and shall be eligible to get an undergraduate B.Sc.(Honors), degree with minors, provided. <ul style="list-style-type: none"><li>• <b>(a.1)</b> The student has undergone the stipulated Course work of all the semesters under the same Scheme of Teaching and Examinations and has earned the prescribed number of credits, i.e. 160 credits for I semester admitted student.</li></ul>  |





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|           |  | <ul style="list-style-type: none"><li>• <b>(a.2)</b> Has earned an additional 18 or more credits through a University-approved courses list recommended by the board of studies.</li></ul> |
| 21OBS14.2 | <b>Award of Degree for an Extraordinary Student:</b> <p>The University through college can offer a fast-track degree for an extraordinary student. The same is done by offering courses of his / her choice to fulfil the requirement of the program in three and half years. However, the degree shall be awarded on completion of 04 years. However, the course completion letter may be issued jointly by University and Institute immediately after completion of the program, notwithstanding the minimum duration.</p> <p>Aspirant students have to register with University through the Principal of the college at the 5<sup>th</sup>-semester level, with the prescribed registration fee as fixed by the University from time to time. A special provision to registering for more credits other than regular semester credits shall be made only after registration.</p> <p>The extraordinary student is one with a CGPA <math>\geq 9</math> in the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> semesters and maintains the same in all the semesters. Otherwise, his/her registration will stand cancelled automatically.</p> |  |
| 21OBS14.3 | <b>(1) Noncompliance of CGPA <math>\geq 5.00</math> at the end of the Program</b> <p><b>(A)</b> Students, who have completed all the courses of the Program but do not have a CGPA <math>\geq 5.00</math> at the end of the Program, shall not be eligible for the award of the degree.</p> <p><b>(B)</b> In the cases of 21OBS14.3 (A), students shall be permitted to appear again for SEE in course/s [other than Internship, Project and Laboratories] of any Semester/s without the rejection of CIE marks for any number of times, subject to the provision of the maximum duration of the Program to make up the CGPA equal to or greater than 5.00 for the award of the Degree.</p> <p><b>(C)</b> In case the student earns improved grade/s in all the reappeared course/s, the CGPA shall be calculated considering the improved grade/s. If it is <math>\geq 5.00</math>, the students shall become eligible for the award of the degree.</p>   |  |



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|  | <p>If CGPA &lt;5.00, the students shall follow the procedure laid down in 21OBS14.3(B).</p> <p>(D) In case the students earn improved grade/s in some course/s and the same or lesser than the previously earned pass grade/s in the other reappeared course/s, the CGPA shall be calculated considering the improved grade/s and the pass grades earned before the reappearance. If it is <math>\geq 5.00</math>, the student shall become eligible for the award of the degree. If CGPA &lt;5.00, the students shall follow the procedure laid down in 21OBS14.3(B)</p> <p>(E) In case the student earns improved grade/s in some courses and fails in the other reappeared course/s, the CGPA shall be calculated by considering the improved grade/s and the previously earned pass grade/s of the reappeared course/s in which the student has failed. If it is <math>\geq 5.00</math>, the student shall become eligible for the award of the degree. If CGPA &lt;5.00, the student shall follow the procedure laid in 21OBS14.3(B).</p> <p>(F) In case the student fails (i.e., earns an F grade) in all the reappeared course/s, pass grade/s of the course/s earned by the students before reappearance shall be retained. In such cases, the student shall follow the procedure laid in 21OBS14.3(B).</p> <p>(G) The student shall obtain written permission from the Registrar (Evaluation) to reappear in SEE to make up the CGPA equal to or greater than 5.00.</p> <p><b>(2) Noncompliance of project work</b></p> <p>The Project Work shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take up/complete the Major-project shall be declared fail in that course and shall have to complete the same during subsequent University examinations after satisfying the Major-project requirements.</p> <p><b>(3) Noncompliance of Internship</b></p> <p>All the students of B.Sc.(Honors) shall have to undergo a mandatory internship as per 21OBS6.1. The internship shall be considered as a head of passing and shall be considered for the award of the degree. Those, who do not take</p> |
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|           |   | up/complete the internship shall be declared fail in that Course and shall have to complete the same during subsequent University examinations after satisfying the internship requirements.   |
| 21OBS15.0 | <b>Award of Prizes, Medals, and Ranks</b> |  |
|           | 21OBS15.1                                 | For the award of Prizes and Medals, the conditions stipulated by the Donor shall be considered subject to the provisions of the statutes framed by the University for such awards.   |
|           | 21OBS15.2                                 | <p>(1) For the award of rank in a Specialization of Bachelor of Science (Honors), the CGPA secured by the students from III to VIII semesters shall be considered.</p> <p>(2) <b>The additional credits earned for the award of Minors degree</b> shall not have any bearing for the Rank declaration.</p> <p>(3) A student shall be eligible for a rank at the time of award of the degree of Bachelor of Science(Honours), provided that the student,</p> <ul style="list-style-type: none"><li>a) Has passed all the Courses of I to VIII semester in the first attempt only in case of Candidates admitted to I year.</li><li>b) Is not a repeater in any semester because of rejection of result of a semester/shortage of attendance/<b>temporarily discontinued and rejoined/readmitted etc.</b></li><li>c) Has completed all the Courses/semesters of the same Scheme of Teaching and Examinations without any break/discontinuity.</li><li>d) Has completed all the semesters (I to VIII) in VTU constituent college or in any VTU affiliated non-autonomous college.</li><li>e) Has not been transferred from any autonomous institution affiliated to VTU or from any other University.</li></ul> <p>(4) The total number of ranks awarded shall be 10% of the total number of students who appeared in the VIII semester subject to a maximum of 10 ranks in a specialization.</p> <p>(5) For an award of ranks in a specialization, a minimum of 10 students should have appeared in the VIII semester examination.</p> |





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|                  |  | <b>Illustration:</b><br>a) If 1228 students appeared for the VIII semester in B.Sc. Honours(Physics) Program, the number of ranks to be awarded for B.Sc. Honours(Physics) Program shall be 10.<br>b) If 90 students appeared for the VIII semester in B.Sc. Honours(Physics) Program, the number of ranks to be awarded for B.Sc. Honours(Physics) Program, will be 09.<br>c) In the case of a fractional number of ranks, it is rounded to a higher integer only when the first decimal place is greater than or equal to 5. |
|                  | <b>21OBS15.3</b>   | Ranks shall be awarded based on the merit of the students as determined by CGPA. If two or more students get the same CGPA, the tie shall be resolved by considering the number of times a student has obtained a higher SGPA. If it is not resolved even at this stage, the number of times a student has obtained higher grades like O, A, B, etc., shall be taken into account to decide the order of the rank.   |
| <b>21OBS16.0</b> | <b>Change of College: Transfer of students: The Regulations Governing the Change of College shall be followed.</b> |  |
| <b>21OBS17.0</b> | <b>Applicability and Power to Modify</b>   |  |
|                  | <b>21OBS17.1</b>   | The regulations governing the degree of Bachelor of Science (Honours) of Visvesvaraya Technological University shall be binding on all concerned.  |
|                  | <b>21OBS17.2</b>   | i) Notwithstanding anything contained in the foregoing, the University shall have the power to issue directions/ orders to address any difficulty.<br>ii) Nothing in the foregoing may be construed as limiting the power of the University to amend, modify or repeal any or all of the above.  |

