

**REGULATIONS GOVERNING
THE AWARD OF THE MASTER OF SCIENCE (M.Sc.,) DEGREE**



Visvesvaraya Technological University, Belagavi

Jnana Sangama, Belagavi-590018, Karnataka

Phone: 0831-2498100/2405468 Fax: 2405467

E-Mail: registrar@vtu.ac.in Web: www.vtu.ac.in

(With Effect From 2023-24)

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Preamble:

The quality of advanced Education depends on many factors but largely on- outcome-based socially and industrially relevant curriculum, good quality motivated faculty, teaching-learning process, effective industry internship, and evaluation of students based on desired outcomes. To regulate, in an orderly manner, the process of admission, registration of students, the conduct of classes, teaching-learning, Assessment, Evaluation, and Grading processes to award Master of Science(M.Sc) degrees in Visvesvaraya Technological University, Belagavi, and the Colleges affiliated to it, with due consideration to the NEP-2020 policy, and applicable Regulations of UGC and AICTE, in the exercise of the powers conferred under Section 22 of UGC Act 1956 and Sections [7(2) and 8(1,2, & 4)] of the VTU Act 1994, the University now makes the following Regulations, namely:

Definitions of Keywords:

The following are the definitions /descriptions that have been followed for the different terms used in the regulations;

1. **Academic Year:** Refers to the sessions of two consecutive semesters (odd followed by an even) including periods of vacation.
2. **Audit Courses:** Means Knowledge/ Skill enhancing Courses without the benefit of a grade or credit for a Course
3. **Branch:** Means discipline of M.Sc., Program, like Chemistry, Physics, Mathematics, etc.
4. **Choice-Based Credit System (CBCS):** Refers to customizing the Course work, through Core, Elective, and soft skill Courses, to provide the necessary support for the students to achieve their goals.
5. **Course:** Refers to usually referred to as 'papers' and is a component of a program. All Courses need not carry the same weight. The Courses should define learning objectives and learning outcomes. A Course may be designed to comprise lectures/ tutorials/ laboratory work/ fieldwork/ outreach activities/project work/ vocational training/ viva/ seminars/ term papers/assignments/ presentations/ self-study etc., or a combination of some of these.
6. **Course Evaluation:** Means Continuous Internal Evaluation (CIE) and Semester End Examinations (SEE) constitute the major evaluations prescribed for each Course. CIE

and SEE to carry 50 % and 50 % respectively, to enable each Course to be evaluated for 100 marks, irrespective of its Credits.

- a. **Continuous Internal Evaluation (CIE):** Refers to the evaluation of students' achievement in the learning process. CIE shall be by the Course Instructor and includes tests, homework, problem-solving, group discussion, quizzes, mini-project, and seminars throughout the Semester, with weightage for the different components being fixed at the University level.
 - b. **Semester End examinations (SEE):** Refers to an examination conducted at the University level covering the entire Course Syllabus. For this purpose, Syllabi is to be modularized, and SEE questions are to be set from each module, with a choice confined to the concerned module only. SEE is also termed a university examination.
7. **Course Registration:** Refers to formal registration for the Courses of a semester (Credits) by every student under the supervision of a Faculty Advisor (also called Mentor, Counselor, etc., in each Semester for the Institution to maintain the proper record.
 8. **Credit:** Refers to a unit by which the Course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of lecture or two hours of laboratory/practical Courses/ tutorials/ fieldwork per week etc
 9. **Credit Based System (CBS):** Refers to quantification of Course work, after a student completes the teaching-learning process, followed by passing in both CIE and SEE. Under CBS, the requirement for awarding a degree is prescribed in terms of the total number of credits to be earned by the students.
 10. **Credit Representation:** Refers to Credit Values for different academic activities considered, as per Table.1. Credits for a seminar, project phases, project viva-voce, and internship shall be as specified in the Scheme of Teaching and Examination

Table 1: Credit Values				
Theory/Lectures (L) (hours/week/ Semester)	Tutorials (T) (hours/week/ Semester)	Laboratory/Practical(P) (hours/week/Semester)	Credits (L:T:P)	Total Credits
4	0	0	4:0:0	4
3	0	0	3:0:0	3

2	2	0	2:1:0	3
2	0	2	2:0:1	3
2	2	2	2:1:1	4
0	0	6	0:0:3	3

NOTE: Activities like study tours and participation in Guest lecturers are not to carry Credits.

11. **First Attempt:** Refers to a student who has completed all formalities and has become eligible to attend the SEE and has attended at least one head of passing, such attempt shall be considered as the first attempt.
12. **Letter Grade:** It is an index of the performance of students in a said Course. Grades are denoted by letter grade O, A+, A, B, B+, C and F.
13. **Grading:** Grade refers to the qualitative measure of achievement of a student in each Course, based on the percentage of marks secured in (CIE plus SEE). Grading is done by Absolute Grading The rubric attached to letter grades is as follows: **O** - Outstanding, **A+** - Excellent, **A** - Very Good, **B+**- Good, **B** - Above Average, **C** - 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 SEE, due to non-comply with any of the course/s then the letter grade assigned against that course shall be **NE**.
14. **Grade Card:** Refers to a certificate showing the grades earned by a student. A grade card shall be issued to all the registered students after every semester. The grade card will display the program details (Course code, title, number of credits, grades secured) along with the SGPA of that semester and CGPA earned till that semester.
15. **Grade Point (GP):** Refers to a numerical weightage allotted to each letter grade on a 10-pointscale as under.

Letter Grade and corresponding Grade Points on a typical 10 - Point scale							
Letter Grade	O	A+	A	B+	B	C	F
Meaning	Outstanding	Excellent	Very Good	Good	Average	Pass	Fail
Grade Point	10	9	8	7	6	5	0
% of Marks secured	90-100	80-89	70-79	60-69	55-59	50-54	00-49

Passing Standards: Refers to passing a Course only when getting GP greater than or equal to 5(Grade letter C).

- a. **Semester Grade Point Average (SGPA):** Refers to a measure of academic performance of student/s in a semester. It is the ratio of total credit points secured by a student in various Courses of a semester and the total Course credits taken during that semester.
 - b. **Cumulative Grade Point Average (CGPA):** Is a measure of the overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points earned by a student in various Courses in all semesters and the sum of the total credits of all Courses in all semesters. It is expressed up to two decimal places.
16. **Multiple Entry Multiple Exit:** The multiple entries and exit points in the academic programs offered at Higher Education Institutions (HEIs) would remove rigid boundaries and create new possibilities for students. There are occasions when learners have to give up their education midway for various reasons. To facilitate flexible learning within the stipulated period (four 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 (2ndsemester) and the entry option is provided to the students at the beginning of the odd semester/s (3rd semester)
17. **Program:** This is an educational program in a particular stream/ branch of science/branch of specialization leading to the award of a degree. It involves events/activities, comprising of lectures/ tutorials/ laboratory work/ field work, outreach activities/ project work/ vocational training/ viva/ seminars/Internships/ assignments/ presentations/ self-study etc., or a combination of some of these.
18. **Semester:** Refers to one of the two sessions of an academic year each session being of sixteen weeks' duration (with working greater than or equal to 90 days). The odd semester may be scheduled from August and the even semester from February of the year.
19. **Specialization:** This means specialized subject in the branch, like in Chemistry branch Organic Chemistry, Pharmaceutical Chemistry, Nano Chemistry, Forensics Chemistry, etc. are specializations.
20. **University:** Visvesvaraya Technological University (VTU), Belagavi.

22MSC1.0	Title, Duration, and Credits of the Program of Study;
22MSC1.1	The Program shall be called Master of Science (Branch with Specialization in.....), abbreviated as M.Sc. (Branch with Specialization in).For Example M.Sc. in Chemistry with Specialization in Pharmaceutical Chemistry
22MSC1.2	Full-time Program: There shall be one category of Program: Full-time Program (FT). The Program shall extend over a period of four semesters and each semester shall have a 16-week (not less than 90 days) duration.
22MSC1.3	Maximum Duration for Program Completion: A Full-time candidate shall be allowed a maximum duration of 4 years from the first semester of admission to become eligible for the award of Master’s Degree, failing which he/she may discontinue the program or register once again as a fresh candidate to I semester of the program.
22MSC1.4	Prescribed Number of Credits for the Program: The number of credits to be completed for the award of the degree shall be 80.
22MSC1.5	Definition of Credits: 01-hour Lecture (L) per week per semester =1 Credit 02 hours of Tutorial (T) per week per semester =1 Credit 02 hours of Practical/Laboratory/Drawing (P) per week per semester =1 Credit. Note: <ul style="list-style-type: none"> • Four credit Courses are designed for a 50-60 hours Teaching–learning process. • Four-credit integrated courses are designed for 40 hours of theory and 10-12 sessions of practical components. • Three credit Courses are designed for a 45-50 hours Teaching–learning process. • Two credit Courses are designed for a 25-30 hours Teaching–learning process. • One Credit Courses are designed for a 15-20 hours Teaching–learning process.
22MSC1.6	The Calendar of events in respect of the Program shall be notified by the

	University in advance.
22MSC2.0	Eligibility for Admission (As per the Government orders issued from time to time)
22MSC2.1	B.Sc with Chemistry as one of the major/optional subjects provided the candidate has studied Mathematics as one of the optional subjects in the two-year PUC or equivalent.
22MSC2.2	Admission to M.Sc., the program shall be open to the candidates (as per 22MSC 2.1) who have passed the prescribed qualifying examination with not less than 50% of the marks in the aggregate of all the years of the degree examination. However, in the case of candidates belonging to SC/ST and Category I, the aggregate percentage of marks in the qualifying examinations shall not be less than 45%. Rounding off the percentage secured in the qualifying examination is not permissible. (Reservation is applicable only for Karnataka Candidates).
22MSC2.3	For admissions under the Entrance Exam qualification and Roaster system of the Government of Karnataka: The candidates should submit applications as per the format prescribed by the University and appear in the Entrance Examination conducted by the University.
22MSC2.4	The intake under various categories (regular, sponsored candidates, and SC/ST) shall be as sanctioned by State Government, and VTU, from time to time.
22MSC2.5	Graduates other than the Karnataka candidates shall obtain an Eligibility Certificate from VTU to seek admission to P.G. Program in any of the colleges (Autonomous or non-autonomous) affiliated with VTU.
22MSC2.6	Admission to vacant seats: Unfilled seats shall be filled as per the guideline issued /notified by the government of Karnataka/VTU from time to time. OR Seats remaining vacant (unfilled), after the completion of First round of admission process, shall be filled by the Institution by inviting applications through Press notification. The seats shall be filled by Candidates preferably who have valid qualified entrance exam. In the absence of such Candidates,

	admission shall be based on merit in the second round of the entrance test conducted at the Institution level. An Admissions Committee, consisting of the Principal of the College, the Head of the Concerned Department, and the subject experts, shall be in charge of admissions.
22MSC2.7	A Faculty/ Employee working on a Full-Time basis in an Institution/ Organization and pursuing/pursuing any Course conducted in the timing of Regular/ First Shift for the same duration as that of Regular Shift shall be considered ineligible for employment/ higher studies.
22MSC3.0	Types of Courses /Subjects
	<p>The curriculum of the Program shall be any combination of the following types of courses:</p> <ol style="list-style-type: none"> 1. Hard Core Courses (HCC) - relevant to the chosen specialization/ branch. The core course is to be compulsorily studied by a student and is mandatory to complete the requirements of a program in said discipline of study. 2. Soft Core Courses (SCC) - relevant to the chosen specialization/ branch: these are the courses, which are compulsory during first three semesters and are chosen from the pool of papers in the fourth semester in the specialization chosen. It shall be supportive of the discipline/ providing extended scope/enabling exposure to some other discipline/domain / nurturing student skills. 3. Soft Core Practical's (SCP) - relevant to the chosen specialization/ branch: these are the practical courses, which are compulsory. 4. Open Electives Courses (OEC), from other technical and/ or emerging specialization areas. 5. Mandatory Credit Course (MCC) – Course related to research methodology and IPR , which are compulsory 6. Project Work; Project work is an application-oriented academic activity and aims to sharpen your theoretical and quantitative skills through their application in the light of theoretical knowledge gained while pursuing the various courses. 7. Mini-project with Seminar; A mini project in engineering to strengthen

	<p>the understanding of fundamentals through effective application of theoretical concepts. There are separate credits for each mini-project that needs to be completed. Projects will help to boost the skills and widen the horizon of thinking of the student. Mini-project work shall be presented as a seminar in front of examiners who evaluate.</p> <p>8. Audit Courses (AC): Audit course/s are non-credit courses opted for by students for self-enrichment. The audit course/s are mentioned in the grade card without the mention of a letter grade and credit. The student has to select the courses from the suggested list of ONLINE courses. If an Audit course is not necessary for a particular program, then in place of an audit course an</p> <p>9. Ability Enhancement Course (AEC) can be selected from the suggested list of ONLINE courses.</p> <p>10. Internship: Preferably at an industry and D organization/IT company/ Government organization of significant repute for a specified period mentioned in the Scheme of Teaching and Examination.</p> <p>11. On-Line Courses: These mandatory online courses are ability enhancement courses or skill development courses or emerging technology courses or bridge courses or advanced learning courses. These courses are suggested by the concerned board of studies. These courses are notified on the university portal. The Students have to opt for these courses with the help of a mentor/ staff coordinator.</p>
22MSC3.1	Students shall be allowed to choose the elective/s, depending on their career plans, and there shall not be any restriction on the minimum number of students to be registered for an elective course.
22MSC3.2	A candidate shall exercise his /her option in respect of the electives and register for the same before the beginning of the concerned semester. The candidate may be permitted to opt for a change of elective subject within 10 days from the date of commencement of the semester as per the calendar of the University.
22MSC3.3	<p>Registration and Enrolment:</p> <p>1) Except for the first semester, registration for a semester will be done</p>

	<p>during a specified week before the semester end examination of the previous semester.</p> <p>2) The registration sheet should have the Candidate details, course name and code, number of credits and category (core/elective/audit) for each course of that semester.</p> <p>3) The Faculty Adviser, assigned by the Head of the Department, will counsel the students in planning their courses of study and provide guidance, motivation, emotional support, and enable the mentees to reach the desired professional and career goals.</p>
22MSC3.4	<p>Attendance Requirement:</p> <p>Courses of each semester shall be treated as a separate unit for Calculation of the attendance.</p>
22MSC3.5	<p>The candidate has to put in a minimum attendance of 85-90 % in each course with a provision to condone 15-10 % of the attendance by the Vice-Chancellor on the specific recommendation of the Principal of the college where the candidate is studying, based on medical grounds, participation in NSS/NCC/Red Cross /Republic Day and Independence Day parades/University/ State/ National/ International level sports and cultural activities, seminars, workshops, paper presentation etc., of significant value. The necessary documents in support are to be submitted along with recommendations to condone the shortage.</p>
22MSC3.6	<p>In case of late admission, approved by competent authority (KEA/DTE/VTU), to the I semester of the program, the attendance shall be reckoned from the date of admission to the program.</p>
22MSC3.7	<p>A candidate, who does not satisfy the attendance requirement (in one or more Courses), shall not be eligible to appear for the SEE of that semester however he/she is permitted to appear for the examinations of other subjects. The candidate has to register for the courses/subjects in which he/she has remained absent in the subsequent semester when those courses/subjects are offered.</p>
22MSC3.8	<p>Principals of the concerned colleges shall notify regularly, the list of candidates who fall short of attendance subject-wise. The list of candidates</p>

	falling short of attendance course-wise/subject-wise shall be sent to the University at least one week before the commencement of the examination.
22MSC4.0	Continuous Internal Evaluation (CIE) and Semester End Evaluation (SEE)
22MSC4.1	Continuous Internal Evaluation For each theory and practical paper, the CIE marks shall be 50. For Mini-Project with Seminar, Project Phase –I, and Societal Project, Phase-II both CIE and SEE are as per the Curriculum.
22MSC4.2	CIE Marks shall be based on; the split up mentioned in the Curriculum, if all different methods put together are evaluated for 100 marks. Marks scored by the student/s proportionally scaled down to 50 marks.
22MSC4.3	The candidates shall write the Tests in Blue Book/s. The Blue book/s and other documents relating to award of CIE marks shall be preserved by the Principal / Head of the Department for at least six months from the date of announcement of University results and made available for verification at the directions of the Registrar (Evaluation).
22MSC4.4	Every page of the CIE marks list shall bear the signatures of the concerned Teacher, Head of the Department and the Principal. The CIE marks list shall be displayed on the Notice Board and corrections, if any, shall be incorporated before submitting to the University. The CIE marks shall be sent to the university by the principals well in advance before the commencement of Semester End Examinations. No corrections of the CIE marks shall be entertained after the submission of the marks list to the University.
22MSC4.5	Candidates obtaining less than 50% of the CIE marks in any course (Theory/Laboratory/Seminar/Internship/Project) shall not be eligible to appear for the University examination (SEE) in that course/s. In such cases, the Head of the Department shall arrange for the improvement of CIE marks in the course/ Laboratory when offered in the subsequent semester
22MSC4.6	Semester End Evaluation: There shall be a University examination at the end of each semester. Setting Theory Question Papers and Evaluation: Question papers in theory courses shall be set by the Examiners appointed

	by the University.
22MSC4.7	There shall be a double valuation of theory papers. The theory Answer booklets shall be valued independently by two examiners appointed by the University. Or regarding the valuation the guideline issued/notified from time to time by the Registrar (Evaluation) office shall be followed.
22MSC4.8	If the difference between the marks awarded by the two Examiners is not more than 15per cent of the maximum marks, the marks awarded to the candidate shall be the average of two evaluations.
22MSC4.9	If the difference between the marks awarded by the two Examiners is more than 15 percent of the maximum marks, the answer booklet shall be evaluated by a third Examiner appointed by the university. The average of the marks of the nearest two valuations shall be considered as the marks secured by the candidate. In case, if one of the three marks falls exactly midway between the other two, then the highest two marks shall be taken for averaging.
22MSC4.10	Mini Project and Seminar; is one of the heads of passing. Each candidate shall complete one mini project work as per the scheme of teaching and examination under the guidance of the supervisor/guide. This course will have only CIE and no SEE. CIE shall be conducted by the guide and one senior faculty of the department. Marks allotment shall be in the ratio of 50:25:25 for project work completion, report, and Seminar followed by question answer session.
22MSC4.11	Project Work: The project is one of the heads of passing. Project work shall preferably be on an individual basis. The candidate shall submit a soft copy (CD) of the dissertation work to the University. The CD should contain the entire Dissertation in monolithic form as a PDF file (not separate chapters). The Guide, after checking the report for completeness shall upload the Dissertation along with the name, University Seat Number, address, mobile number of the candidate, etc., as prescribed in the form available on the online Dissertation evaluation portal. The guide shall submit a panel off our approved University Examiners for evaluation of the dissertation.
22MSC4.12	Plagiarism Check

	<p>Once the Guide uploads the dissertation, the same shall be linked for plagiarism check. The allowable plagiarism index is less than or equal to 25%. If the check indicates a plagiarism index greater than 25% :</p> <ul style="list-style-type: none"> • For the first time, the candidate has to resubmit the dissertation, to the Registrar (Evaluation), Regional Center/Head Office, VTU along with the penal fees of Rs.2000/- (Rupees Two thousand only) in person. • For the second time, the candidate has to resubmit the dissertation along with the penal fees of Rs. 4000/- (Rupees four thousand only) in person. • If the dissertation is rejected again during the second resubmission with reference to the plagiarism index, the candidate shall redo the project and submit it after a semester subject to provisions of 22MSC1.3.
<p>22MSC4.13</p>	<p>The dissertation shall be sent through email for evaluation to two examiners – one internal examiner (guide/co-guide) and one external examiner (first) appointed by the University. The evaluation of the dissertation shall be made independently by each examiner.</p>
<p>22MSC4.14</p>	<p>Examiners shall evaluate the dissertation normally within a period of not more than two weeks from the date of receipt of the dissertation through email. The examiners shall independently submit the marks through the specified link. The average of the marks awarded by the two Examiners shall be the final evaluation marks for the Dissertation.</p>
<p>22MSC4.15</p>	<p>a) Viva-voce examination of the candidate shall be conducted as per 22MSC4.19 if the dissertation work and the reports are accepted by the external examiner (first).</p> <p>b) If the external examiner (first) finds that the dissertation work and the report are not up to the expected standard and the minimum passing marks cannot be awarded, the dissertation shall not be accepted for SEE. The external examiner (first) can recommend modifications/suggestions for the dissertation or totally reject the dissertation. The examiner shall offer suggestions for improvement of the dissertation for resubmission or list the reasons for rejection of the dissertation.</p>

	<p>c) The resubmitted Dissertation incorporating the modifications /suggestions [as per 4.8 (b)] of the external examiner (first) and satisfying provision 22MSC4.15 (b) shall be sent again to the external examiner (first) for evaluation. If the dissertation report are accepted by the external examiner (first), the viva voce examination of the candidate shall be conducted as per 22MSC4.19.</p> <p>d) In case of rejection of the Dissertation by the external examiner (first), the same will be sent to a Second Examiner (external) approved by the University. The decision of the Second Examiner (external) is final. If the dissertation and the report are accepted by the Second Examiner (external), Viva-voce examination of the candidate shall be conducted as per 22MSC4.19. If the Second Examiner (external) rejects the dissertation and the report, the candidate shall have to carry out the dissertation work once again and submit the dissertation subject to provisions of 22MSC1.3. In such cases of rejection, the candidate shall redo the entire procedure starting from the submission of the Dissertation in soft copy.</p> <p>e) In case of rejection of the Dissertation, with reasons, by the external examiner (first) [as per 22MSC4.15 (b)], the same will be sent to a Second Examiner (external)[not necessarily the same examiner considered under 22MSC4.15(d)] approved by the University. The decision of the Second Examiner (external) is final. If the dissertation and the report are accepted by the Second Examiner (external), the Viva-voce examination of the candidate shall be conducted as per 22MSC4.19. If the Second Examiner (external) rejects the dissertation and the report, the candidate shall have to carry out the dissertation work once again and submit the dissertation subject to provisions of 22MSC1.3. In such cases of rejection, the candidate shall re do the entire procedure starting from the submission of the Dissertation in soft copy.</p>
<p>22MSC4.16</p>	<p>The candidate, whose Dissertation is rejected, can rework the same topic or choose another topic of the dissertation under the same Guide or a new Guide if necessary. In such an event, the report shall be submitted within four years for the case of a full-time student from the date of admission to</p>

	the Program.																																								
22MSC4.17	The candidates who fail to submit the dissertation work within the stipulated time have to submit the same at the time of the next ensuing examination.																																								
22MSC4.18	The relative weights for the evaluation of the dissertation and the performance at the viva voce shall be as per the scheme of teaching and examination.																																								
22MSC4.19	Viva-voce examination of the candidate shall be conducted by the external examiner and internal examiner/ guide. Internal examiner as per the direction of the University shall have to arrive at a mutually convenient date for the conduct of viva-voce examination of the concerned candidate with intimation to the Registrar (Evaluation). In case one of the examiners expresses his/her inability to attend the viva voce, the Registrar (Evaluation) shall appoint a substitute examiner in his/her place.																																								
22MSC4.20	The marks awarded by both Examiners at the viva voce Examination shall be sent jointly to the University immediately after the examination. Examination fees as fixed from time to time by the University for evaluation of dissertation report and conduct of viva voce shall be remitted through the Head of the Institution as per the instructions of the Registrar (Evaluation) from time to time.																																								
22MSC5.0	Computation of SGPA and CGPA																																								
22MSC5.1	<p>I. The University adopts an absolute grading system wherein the marks are converted to grades, and every semester's results will be declared with semester grade point average (SGPA) and Cumulative Grade Point Average (CGPA). The CGPA will be calculated for every semester, except for the first semester.</p> <p>II. The grading system with the letter grades and the assigned range of marks under the absolute grading system is as given below:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="8">Letter Grade and corresponding Grade Points on a typical 10 - Point scale</th> </tr> <tr> <th>Letter Grade</th> <th>O</th> <th>A+</th> <th>A</th> <th>B+</th> <th>B</th> <th>C</th> <th>F</th> </tr> </thead> <tbody> <tr> <td>Meaning</td> <td>Outstanding</td> <td>Excellent</td> <td>Very Good</td> <td>Good</td> <td>Average</td> <td>Pass</td> <td>Fail</td> </tr> <tr> <td>Grade Point</td> <td>10</td> <td>9</td> <td>8</td> <td>7</td> <td>6</td> <td>5</td> <td>0</td> </tr> <tr> <td>% of Marks</td> <td>90-100</td> <td>80-89</td> <td>70-79</td> <td>60-69</td> <td>55-59</td> <td>50-54</td> <td>00-49</td> </tr> </tbody> </table>	Letter Grade and corresponding Grade Points on a typical 10 - Point scale								Letter Grade	O	A+	A	B+	B	C	F	Meaning	Outstanding	Excellent	Very Good	Good	Average	Pass	Fail	Grade Point	10	9	8	7	6	5	0	% of Marks	90-100	80-89	70-79	60-69	55-59	50-54	00-49
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	<table border="1"> <tr> <td>secured</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>a) Minimum marks to score for CIE is 50% of the maximum marks of CIE, and minimum passing marks for SEE is 40% of the maximum marks of SEE. In aggregate the students have to secure 50% total marks of the course (CIE + SEE marks).</p> <p>b) A student obtaining Grade F in a Course shall be considered a failure and is required to reappear in subsequent SEE. Whatever the letter grade secured by the student during his /her reappearance shall be retained. However, the number of attempts taken to clear a Course shall be indicated in the grade cards/ transcripts.</p>	secured															
secured																	
<p>22MSC5.2</p>	<p>Grade Point Averages:</p> <p>SGPA and CGPA: The credit index can be used further for calculating the Semester Grade Point Average (SGPA) and the Cumulative Grade Point Average (CGPA), both being important academic performance indices of the student. While SGPA is equal to the credit index for a semester divided by the total number of credits registered by the student in that semester, CGPA gives the sum total of credit indices of all the previous semesters divided by the total number of credits registered in all these semesters. Both equations together facilitate the declaration of the academic performance of a student, at the end of a semester and at the end of successive semesters respectively. Thus,</p> $SGPA = \frac{\sum[\text{Course Credits} \times \text{Grade Points}] \text{ for all the Courses in that Semester}}{\sum[\text{Course Credits}] \text{ for all the Courses in that Semester}}$ $CGPA = \frac{\sum[\text{Course Credits} \times \text{Grade Points}] \text{ for all Courses excluding those with F and transitional grades until that Semester}}{\sum[\text{Course Credits}] \text{ for all Courses excluding those with F grades until that semester}}$																
<p>22MSC5.3</p>	<p>Grade Card: Based on the secured letter grades, grade points, SGPA, and CGPA, a grade card for each semester and a consolidated grade card indicating the performance in all semesters shall be issued.</p>																
<p>22MSC5.4</p>	<p>Conversions of Grades into Percentage and Class Equivalence</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</p>																

	<p>studies, etc may be used;</p> <p>Percentage of marks secured, $M = \text{CGPA Earned} \times 10$</p> <p>Illustration for a CGPA of 8.20;</p> <p>Percentage of marks secured $M = 8.20 \times 10$</p> <p style="text-align: center;">$= 82.0 \%$</p>
22MSC5.5	<p>Class Equivalence:</p> <p>After the conversion of final CGPA into the percentage of marks (P), a graduating student is reckoned to have passed in</p> <ol style="list-style-type: none"> 1. First Class with Distinction (FCD) if $P \geq 70\%$ 2. First Class (FC) if $P \geq 60\%$ but $< 70\%$ and 3. Second Class (SC) if $P < 60\%$. But $\geq 50\%$
22MSC6.0	<p>Eligibility for Passing and Award of Degree</p>
22MSC6.1	<ul style="list-style-type: none"> • A student who obtains any grade O to C shall be considered as passed and if a student secures an F grade in any of the heads of passing, he/she has to reappear in that head for the SEE. • A student shall be declared successful at the end of the Programme for the award of a Degree only on obtaining $\text{CGPA} \geq 5.00$, with none of the Courses remaining with an F Grade.
22MSC6.2	<p>For a pass in all the courses, the student shall secure a minimum of 40% of the maximum marks prescribed in the Semester End Examination and 50% of marks in CIE, and 50% in the aggregate of CIE and SEE marks. The Minimum Passing Grade in a course is C.</p>
22MSC6.3	<p>IV semester Full-time candidates having backlog courses are permitted to upload the dissertation report and to appear for SEE. The IV semester grade card shall be released only when the candidate completes all the backlog courses and become eligible for the award of a degree.</p>
22MSC6.4	<p>A candidate may at his/her desire reject his/her latest semester results of the University examination in respect to all courses of that semester. However, in the IV semester, the rejection shall not include the Project work. Rejection shall be permitted only once during the entire Program. The CIE marks of the rejected semester shall remain the same. Rejection of results of the University examination including CIE marks is not permitted.</p>

22MSC6.5	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 an even semester, the candidate cannot be admission to the next odd semester.
22MSC6.6	Application for rejection shall be submitted to the Registrar (Evaluation) through the principal of the college, within thirty days from the date of announcement of results.
22MSC6.7	A candidate, who opts for rejection of results of a semester shall be eligible for the award of class and distinction, but shall not be eligible for the award of rank.
22MSC6.8	<p>Eligibility for Award of Degree:</p> <p>A student shall be declared to have completed the degree of Master of Science, provided the student has undergone the stipulated course work as per the regulations and has earned the prescribed Credits, as per the Scheme of Teaching and Examination, of the program.</p>
22MSC7.0	<p>Promotion and Eligibility (Vertical Progression)</p>
22MSC7.1	<p>Promotion: There shall be no restriction for promotion from an odd semester to the next even semester, irrespective of the attendance of the student. The courses/subjects in which she/he remained absent are permitted to register only when offered in subsequent semesters.</p>
22MSC7.2	<p>a) Candidates, under a full-time program, with a maximum of backlog courses totaling 16 credits in the first year shall be eligible for admission to the second year (III semester).</p> <p>b) Each credit course shall be treated as a head of passing.</p>
22MSC7.3	The Mandatory non-credit courses (NCMC), if any, shall not be considered for the Eligibility criterion prescribed for promotion, award of Class, calculation of SGPA and CGPA. However, a pass in the above courses is mandatory before the completion of the Degree.
22MSC7.4	Each student have to complete online courses whose durations are not less than 08 weeks/12 weeks. Passing ONLINE courses is mandatory for the award of a degree. ON-LINE courses are not considered under vertical progression; however, the student has to pass these courses before the

	completion of the maximum duration of the program. If a student fails a selected ON-LINE course in a semester then he/she can pass the course in the next semester by taking the same course (if offered online) or other university-approved available courses during that session. The title of the course/s in which he/she qualifies shall be mentioned in the grade card with the letter PP.
22MSC8.0	Provision to move to Integrated Ph.D. program
22MSC8.1	<p>a) The candidates pursuing M.Sc. Degree at the University and who have completed the prescribed common coursework of the first three semesters of study with a minimum CGPA of 7.0 out of 10 or 70 % aggregate marks and published research papers in 'SCOPUS/SCI/WoS Indexed Journals /UGCCARE Approved Journals' or obtained/filed patents shall be eligible for up-gradation to the Ph.D. Program, subject to approval by the Admissions Committee.</p> <p>b) Integrated Ph.D. program is a fulltime program.</p>
22MSC9.0	Temporary Discontinuation/Break in the Program
22MSC9.1	If a candidate, for any reason, temporarily discontinues the Program or take a break from the program during any semester, he/she may be permitted to continue in the program by registering to the same semester of the prevailing scheme. The candidate shall complete all the remaining course work. Also, the Candidates may have to complete additional course/s, if any, as per the decision of the concerned Board of Studies and approval of Dean, Faculty of Engineering, on establishing an equivalence between the two schemes. A Grade card shall be issued to that effect. Additional course/s shall not be considered for the eligibility criterion prescribed for promotion. However, based on the individual cases, it is considered to decide the SGPA and CGPA to admit the student for the award of a degree. Such a candidate shall not be eligible for the award of rank.
22MSC9.2	Candidates who take admission to any semester of the existing scheme from another scheme, as a repeater/fresher because of various reasons have to complete additional course/s, if any, as per the decision of the concerned Board of Studies and approval of Dean, Faculty of Engineering, on

	<p>establishing equivalence between two schemes. A Grade card shall be issued to that effect. Additional course/s shall not be considered for the eligibility criterion prescribed for promotion. However, based on the individual cases, it is considered to decide the SGPA and CGPA to admit the student for the award of a degree. Such a candidate shall not be eligible for the award of rank.</p>
22MSC9.3	<p>Multiple Entry and Multiple Exist;</p> <p>The multiple entries and exit points in the academic programs offered at Higher Education Institutions (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 (four 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 (2nd semester) and the re-entry option is provided to the students at the beginning of the odd semester/s (3rd semester).</p> <p>However, the students who pass all his/her registered courses of the 1st and 2nd semesters as per the scheme of teaching and examinations and obtain the required credits shall be awarded Post Graduate Diploma Certificate if he/she shall opt for exit. However, he/she shall be permitted to take admission (3rd semester) subjected to the maximum duration of the course. He/she has to complete 06 weeks of Internship before admitting to 3rd semester.</p>
22MSC10.0	<p>Award of Prizes, Medals and Ranks:</p>
22MSC10.1	<p>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.</p>
22MSC10.2	<ol style="list-style-type: none"> 1) For the award of rank in a Specialization of Master of Science, the CGPA secured by the student on completion of the program is considered. 2) A student shall be eligible for a rank at the time of award of the degree of Master of Science, provided the student <ol style="list-style-type: none"> a. Is not a repeater in any semester

	<p>b. Has not rejected the results of any semester.</p> <p>c. Has passed I to IV semester in all the courses in first attempt only</p> <p>3) The total number of ranks awarded shall be 10% of total number of students appeared in IV semester subject to a maximum of 10 ranks in a Specialization.</p> <p>4) For award of ranks in a Specialization, a minimum of 10 students should have appeared in the IV semester examination.</p>
22MSC10.3	<p>Ranks are 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+, A, B+, B etc., shall be taken into account to decide the order of the rank.</p>
22MSC11.0	<p>Applicability and Power to Modify:</p> <p>The regulations governing the Degree of Master of Science of Visvesvaraya Technological University shall be binding on all concerned.</p>
22MSC11.1	<p>(a) Notwithstanding anything contained in the foregoing, the University shall have the power to issue directions/ orders to address any difficulty.</p> <p>(b) 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.</p>