

GUIDELINE AND RULES GOVERNING

B.Tech. AND M.Tech. PROGRAMMES

To be implemented from the date of circulation i.e. April 1, 2010



**VISVERVARAYA NATIONAL INSTITUTE OF TECHNOLOGY,
NAGPUR – 10**

PREAMBLE

All undergraduate and postgraduate programs will be governed by these rules and regulations. These rules and regulations supersede all previous relevant rules and regulations.

The curriculum provides broad based knowledge and simultaneously builds a temper for the life long process of learning and exploring. At undergraduate level, a student needs to do compulsory foundation courses in the areas of basic sciences, humanities, social sciences and engineering apart from departmental requirements. Further, students undergo instructions in open category electives to develop broad inter-disciplinary knowledge base. At the postgraduate level, students are encouraged to specialize in a particular stream.

The medium of instruction throughout the Course Studies is English.

The Institute follows the semester system. An academic year runs from July through June next year and is comprised of two semesters. Typically, the 1st semester (Odd Semester) starts in the third week of July and ends in the last week of November; the 2nd semester (Even Semester) starts in last week of December and ends in the last week of April. Detailed schedule is given in the Academic Calendar made available before the start of the academic year.

1. GUIDELINES

1.1. FOR COURSE STRUCTURE AND CREDIT SYSTEM

1.1.1. Course Code Scheme

A course code shall be DDTNMM (MEL201).

DD indicates the code of department, which is offering the subject.

T indicates the type of subject.

N indicates the level of subject.

MM indicates the course number in the category. (Even, Odd for corresponding semester)

The codes for the departments are given in ANNEXURE – I.

1.1.2. For deciding the types of courses

The table given below can be used for deciding the type of courses and credits to be assigned to the course.

Code	Type	Credits
L	Theory/Lecture	No. of contact hours * 2
P	Practical	No. of contact hours * 1
	Studio	To be decided by BoS
	Professional Practice	
	Project based courses	
	Training	
C	Combined (Theory + P Practical)	No. of contact hours for theory * 2 + No. of contact hours for practical

1.1.3. For deciding the levels of courses

Given below in the table the guidelines for assigning the level to a course.

Course Level Code	Level of Course
100	Elementary
200	First Courses in the Area (Core Courses)
300	Second Level Courses
400	Advanced / Elective UG / Basic PG
500	Advanced – PG / Elective - UG

1.1.4. Course Description

Course description should consists of following components: (i) Course Code (ii) Title of the Course (iii) Credits assigned (iv) Pre-requisites if any and (vi) the content. An example is given below:

MEL304 Theory of Machine - II
8 credits (3-0-2)
Pre-requisites: MEL208
Overlaps with: MEL213
Course Coordinator:
Timetable Slot:
Content:----- (topics to be covered)

1.2. For assigning a Faculty Advisor (FA)

1.2.1. A group of students (preferably 20 to 30) shall be allotted to a Faculty Advisor.

1.2.2. Faculty Advisor shall be from the same department in which the students are enrolled.

1.2.3 Faculty Advisor shall be allotted in the first year and a student shall have same Faculty Advisor till he / she completes the programme.

1.2.4 The following will be the responsibilities of the Faculty Advisor

1.2.4.1 To approve the registration of students assigned to him/her..

1.2.4.2 To monitor the progress of student and act as his / her mentor.

1.2.4.3. Forwarding application made by a student with recommendations.

2. RULES

2.1. Rules for registration

2.1.1 Every student must register for a course in which he/she is required to undergo instructions in a semester before the start of the semester as per the schedule specified in academic calendar.

2.1.2 A student can register for a course under DE category if that course is in the list of courses identified as DE courses by the department to which he/she belongs. Registration of courses from the list of DE courses of other departments is not permitted.

2.1.3. A student can register for courses under OC and HM categories offered by any department.

2.1.4 For the UG courses under DE, OC and HM categories, minimum 12 registrations should be there for a course to run. For the PG courses under DE category, minimum 4 registrations should be there for a course to run.

2.1.5 Facility is available for dropping a course if that course can not run because of having less than the required number of registrations, and adding another course in place of it.

- 2.1.6.** Before proceeding for practical training or training as part of the curricular requirement, a student should register for the respective course after obtaining approval from the Training Coordinator and Head of the Department..
- 2.1.7.** All (UG) students are required to enroll for NCC, NSS or NSO in their first year. This requirement should be completed in one year. If, however, a student is not able to complete this requirement in the first year, he/she must complete it by the end of the 2nd year (4th semester). Alternatively a student can enroll for Sports / Yoga in first two semesters.
- 2.1.8.** As per the Senate decision UG students can take Department Electives of their respective departments in lieu of open courses (OC) and humanities courses (HM/HU). Maximum number of open courses students can take will be two. Students can opt for at the most only one humanities course after first year. This is applicable to all the students who have taken admission in the academic year 2009 and after that. All these students should not register for humanities course if they have already taken a humanities course after first year.
All the other credit requirements remain unchanged.
- 2.1.9.** All the M.Tech students should note that as per the present rules a student must obtain a minimum Cumulative Grade Point Average (CGPA) of 6.0 to be eligible for award of M.Tech degree. If the student does not get CGPA of 6.0, he/she will be allowed to register for additional department courses of 400 level and above so as to enable him/her achieve CGPA equal to or above 6.0.
However, time limit for M.Tech degree will be three years as sanctioned by senate.

2.2. Attendance Rules

As resolved in the 18th meeting of Senate the attendance rules are as follows:

- 2.2.1** The Senate in its meeting held on 18th December 2009 (Ref. S 18.06) had revised the rules regarding attendance. It is for information of all concerned that 100% attendance is expected from the students. However, in consideration of the constraints / unavoidable circumstances, the attendance can be relaxed only to the extent of not more than 25%.
- 2.2.2** Every student must attend minimum of 75 % of the classes actually held for that course to become eligible to write end semester examination for that course.
- 2.2.3** There is, as such, no provision in the Academic Calendar for 'absentee tests'. All students are therefore strongly urged to appear for all their sessional tests.
Note that a medical certificate does not automatically entitle a student to an absentee test.
A teacher, however, is free to conduct an absentee test if he/she is convinced of the genuineness of the reason for a student's absence from the regular test.
- 2.2.4** Students who have got less than 75% attendance, the course coordinator awards grade "W" in the main examination and reexamination. Even if student appears for the examination the paper of such students will not be evaluated even if he/she appeared for main examination or reexamination.
- 2.2.5** If attendance falls below 75 % of the classes actually held for any course, then a student may be debarred from writing end semester examination for that course.

2.3. Rules for evaluation & Completion of programme

- 2.3.1. Continuous evaluation is followed for evaluating the performance of students in both theory as well as practical subjects.
- 2.3.2. In each course for which a student have registered, based on the performance of the student one of the following grades is required to be assigned by the teacher concerned, as an indicator of the performance of a student in that course.

Grade	Grade points	Description
AA	10	Outstanding
AB	9	Excellent
BB	8	Very good
BC	7	Good
CC	6	Average
CD	5	Below average
DD	4	Marginal
FF	0	Very poor/ Unsatisfactory/Absence in End-sem exam
SS	-	Satisfactory
ZZ	-	Not Satisfactory

2.3.3. Relative grading must be followed for awarding the grades to the students

2.3.4. The overall performance of a student will be evaluated in terms of two indices, viz, the Semester Grade Point Average (SGPA) which is the Grade Point Average for a semester and Cumulative Grade Point Average (CGPA) which is the Grade Point Average for all the completed semesters at point in time.

The SGPA is calculated as follows:.

$$SGPA = \frac{\sum (\text{Course credits} \times \text{Grade point})}{\sum (\text{Course credits})} \text{ for credit courses registered in a semester}$$

The CGPA is calculated as follows:

$$CGPA = \frac{\sum (\text{Course credits} \times \text{Grade point})}{\sum (\text{Course credits})} \text{ for credit courses registered in all completed semesters}$$

2.3.5. 320 credits are required to be earned to qualify for a B. Tech. degree and 104 credits for M. Tech. degree. These credits are required to be earned from different categories like DC,DE,OC, and HM. The credits required to be earned from these categories are given in table.

B. Tech.

For all the students who have admitted before academic year 2009- 2010

	Category	Symbol	B.Tech. (4-year)
1	Departmental core	DC	152
2	Departmental Elective	DE	60 - 72
3	Humanities & Management	HM	12
4	Open course	OC	0-12
	TOTAL REQUIREMENT	Total =(DC+DE+HM+OC)	320

For all the students who have admitted in and after academic year 2009-2010

	Category	Symbol	B.Tech. (4-year)
1	Departmental core	DC	152
2	Departmental Elective	DE	72-90
3	Humanities & Management	HM	0-6
4	Open course	OC	0-12
	TOTAL REQUIREMENT	Total =(DC+DE+HM+OC)	320

M. Tech.

	Category	Symbol	M.Tech. (2-year)
1	Departmental core	DC	72
2	Departmental Elective	DE	32
	TOTAL REQUIREMENT	Total =(DC+DE)	104

For department of architecture separate document is given by the department.
Please contact your faculty advisor incase of any difficulty.

- 2.3.6.** A student of the B.Tech. / B. Arch. must complete the prescribed number of days of practical training to the satisfaction of the concerned department. The training coordinator should send a report after completion of training to award SS/ZZ grade.
- 2.3.7** The maximum allowable period for completing degree is six years for B.Tech. programmes, 7 years for B.Arch. programme, and 3 years for M.Tech. programmes, from the date of first registration.

2.4. Additional Rules for M.Tech. Programmes

- 2.4.1.** A full-time M.Tech. student during his/her stay at the Institute will be entitled for 30 days leave (including leave on medical grounds) per academic year.
- 2.4.2.** Full time M.Tech. students do not have vacation. Even during mid-semester breaks and summer and winter vacations, he/she will have to explicitly apply for leave. He/she, however, may be permitted to avail leave only up to 15 days during winter vacation at the end of the first semester.
- 2.4.3.** The leave will be subject to approval of the Head of Department concerned and the department concerned shall be responsible for maintaining proper leave account of each student.
- 2.4.3.** M.Tech. student irrespective of the source of assistantship must attend at least 75 % of classes in each course in which he/she is registered. In case his/her attendance falls below 75 % in any course during a month, he/she will not be paid assistantship for that month. Further, if his/her attendance again falls short of 75 % in any course in any subsequent month in that semester, his/her studentship and assistantship will be terminated..
- 2.4.5.** All students who are offered assistantship are expected to put in 8 hours per week towards the work assigned by the Department / Faculty.
- 2.4.6.** Continuation of assistantship in a subsequent semester would be subject to the condition of obtaining a satisfactory academic performance and assigned task.

2.5. Rules related to completion Courses of Special Nature

Courses of special nature are: National Cadet Corps (N.C.C.), National Sports Organization (N.S.O.) and National Service Scheme (N.S.S);

N.C.C., N.S.O. and N.S.S. (UG Only)

Satisfactory completion of one of these non-credit (NC) courses is mandatory requirement and every student is required to complete this course in the first year by participating in the prescribed requirements. At the time of joining the Institute, all students have to opt for one of these three activities. Based on facilities available, a student will be enrolled in one of these and he/she will get registration in the corresponding course: NCN100 for N.C.C., NSN100 for N.S.S., and NPN100 for N.S.O. A SS grade in these courses will be awarded on successful completion of prescribed activities in a semester. Every student is required to obtain SS grade in NCN100/NSN100/NPN100 in two semesters. This requirement should preferably be completed in the first year, but not later than the end of his/her second year (4th semester). If a student does not complete these requirements within the first two years of his/her stay at the Institute, he/she will not be allowed to register for any course except NCN100/NSN100/NPN100.

Additional option to this requirement shall be four courses offered by sports section SPN101, SPN102, (Sports –I & Sports – II) SPN103, SPN104 (Yoga – I & Yoga – II). Any two programmes can be completed by a student as a substitution to NCN100/NSN100/NPN100.

2.5. Rules related to formation of academic committees

2.5.1. Board of Studies

Each Discipline/Department shall have one Board of Studies. The BoS shall look after all the programmes offered under the discipline or by the Department.

2.5.1.1 Constitution

Chairman : Head of the concerned Department

Member : All teachers in the Department / All teachers in the discipline

One teacher from other department/other discipline (to be nominated by BoS)

One teacher from other Institute, preferably from IIT / NIT (to be nominated by BoS)

One expert from Industry (to be nominated by BoS)

2.5.1.2 Responsibilities

1. To frame the programme qualification.

2. To frame the programme requirement.

3. To prepare the course content.

2.5.2 Class Committee

A class committee shall be formed for group of courses, which are offered to large number of students simultaneously, or group of courses recommended by BoS.

2.5.2.1 Constitution

Chairman : Faculty of the department/discipline who does not teach any course prescribed for programme (to be nominated by BoS).

Member : All course coordinators of courses covered in the group.

Two students with CGPA of more than 7.5 (to be identified by HoD)

2.5.2.2 Responsibilities

1. To review conduct of the course and results of first sessional after first sessional examination.

2. To review conduct of the course and results of second sessional after first sessional examination.

3. To finalize grades awarded for the courses.

4. Any other academic matters.

ANNEXURE –I

1.1 Departments

The various Departments and their two-letter codes are given below.

S. N.	Name of Department (alphabetical order)	Code
1	Department of Applied Mechanics,	AM
2	Department of Architecture and Planning,	AR
3	Department of Chemical Engineering,	CM
4	Department of Chemistry,	CH
5	Department of Civil Engineering,	CE
6	Department of Computer Science and Engineering,	CS
7	Department of Electrical Engineering,	EE
8	Department of Electronics,	EC
9	Department of Humanities and Social Sciences,	HU
10	Department of Mathematics,	MA
11	Department of Mechanical Engineering,	ME
12	Department of Metallurgy and Materials Engineering,	MM
13	Department of Mining Engineering,	MN
14	Department of Physics,	PH