#### Annexure – Sen - 2012.1.G

# M. TECH. ORDINANCES, RULES AND REGULATIONS

#### A. ORDINANCES

- 1. All M. Tech. programmes offered by the Institute shall be governed by the M. Tech. Rules and Regulations.
- 2. The M. Tech. rules and regulations shall also be applicable to any new discipline(s) under these programmes that may be introduced in future.
- 3. A student becomes eligible for the award of the M.Tech. degree after fulfilling all the academic requirements as prescribed by the M.Tech. Rules and Regulations.
- 4. The Institute shall have the following M.Tech. programmes:

# 4.1. M.Tech. Programme

Schools/ Departments	Specialisations
School of Engineering & Technology (Department of Mechanical Engineering jointly with Department of Electrical Engineering)	Mechatronics
School of Basic Sciences (Department of Mathematics) jointly with School of Engineering & Technology (Department of Computer Science & Engineering)	Mathematics and Computing
School of Basic Sciences (Department of Physics jointly with Department of Chemistry)	Nanoscience and Technology

# M. TECH. RULES AND REGULATIONS

# 1. CATEGORIES OF MTECH STUDENTS

The Institute admits M. Tech. students under the following categories:

### 1.1 **REGULAR**

A student in this category works full-time for her/his M. Tech. degree. She/he receives assistantship from the Institute or any other recognized funding agency.

#### 1.2 **SPONSORED**

A student in this category is sponsored by a recognized R&D organization, academic institution, government organization or industry for doing M Tech in the Institute on a full-time basis. The Institute does not provide any assistantship to such a student.

# 1.3 **PROJECT-STAFF**

This category refers to a student who is working on a sponsored project in the Institute and is admitted then to M.Tech Programme to work on a full-time or part-time basis. The remaining duration of the project at the time of admission should be at least one year. If the project gets completed before the student completes her/his M Tech Programme, her/his category will be converted to PART-TIME Category.

#### 1.4 PART-TIME

A student in this category is a professionally employed person (including the staff of IIT Patna), who pursues the M. Tech. Programme while continuing the duties of her/his service. The Institute does not provide any assistantship to such a student.

### 1.5 **QUALITY IMPROVEMENT PROGRAMME (QIP)**

This category refers to a student selected under the Quality Improvement Programme (QIP) of the AICTE. The student works full time in the M Tech Programme as per the rules and regulations of QIP.

#### 2. VISITING M. TECH. STUDENTS

Other than students mentioned under clause 1 above, a student of another university/institute in India or abroad may register for a few semesters as VISITING M. Tech. students. The Institute does not award any degree to such students.

#### 3. CHANGE OF CATEGORY

The change in category of student is not permitted in M. Tech. programme.

#### 5. ACADEMIC CALENDAR

- 4.1 Each academic session is divided into two semesters of approximately eighteen weeks duration (with at-least seventy working days for classes in each semester): an odd semester (July -- November) and an even semester (December -- April).
- 4.2 The Senate approved schedule of academic activities for a session, inclusive of dates for registration, mid-semester and end semester examinations, inter-semester breaks etc. shall be laid down in the academic calendar for the session.

# 6. ADMISSION

#### **5.1 ELIGIBILITY CRITERIA**

The details of the eligibility criteria for admission to various M Tech programmes are given in *Appendix-A*. These criteria are revised by the Senate from time to time.

### **5.2 ADMISSION PROCEDURE**

- 5.2.1 Admission to the M Tech Programme of the Institute normally takes place in July every year. Advertisements are issued in February/March/April.
- 5.2.2 Admission to all categories of students is granted on the basis of GATE Score/counseling/interview/admission test held usually during the month of May July every year.
- 5.2.3 The following documents are to be furnished along with the application by candidates falling under Sponsored, Project Staff and Part-time categories:

**Form I:** Sponsorship letter for Sponsored category.

Form II: No objection certificate from Dean (R&D), IIT Patna, for Project Staff category

Form III: No objection certificate from the employer for Part-time category.

#### 7. RESIDENCE

- 6.1 The institute is wholly residential and all students shall be required to reside in, and be members of a hostel to which they are assigned. However, students in Sponsored, Project Staff, and Part-time categories are exempted from residing in hostel.
- 6.2 Under special circumstances, the Director may permit a student to reside with her/his Parent/Guardian outside the Institute Campus within a reasonable distance from the Institute. However, this permission may be withdrawn at the discretion of the Institute, at any time considered appropriate by it, without assigning any reason.
- 6.3 All students must abide by the rules and regulations of the hostel as may be framed from time to time by the Hostel Affairs' Board.
- 6.4 Students not residing in hostels shall be attached to a hostel for extra-curricular activities.

#### 8. ATTENDANCE

- 7.1 All students in Regular, Sponsored and QIP categories shall be required to sign in attendance register in the department ever working day.
- 7.2 For registered courses:
- 7.2.1 Students are required to attend all the classes (Lectures, Tutorials, Practical, Seminar etc.);
- 7.2.2 A student will be debarred from appearing in an end-semester examination if her/his attendance in the courses falls below 75 percent and will be awarded an "F" grade in that course.

# 8. ASSISTANTSHIP

- 8.1 Institute assistantships will be available to eligible students as per prevailing norms.
- 8.2 Assistantships from external funding organizations will be available as per terms and conditions of the concerned funding organizations.
- 8.3 Students receiving assistantships from the Institute or fellowships from any other funding agencies are required to perform academic duties as per prevailing norms in force from time to time.
- 8.4 The continuation of the assistantship/fellowship is subject to satisfactory performance of the assigned duties and satisfactory progress of the student in the M Tech Programme.

# 9. LEAVE RULES

### 9.1 Ordinary Leave

A student is eligible for 30 days leave in a year. Saturdays, Sundays or holidays during the leave period are counted towards leave, except for prefixed or suffixed holidays.

Of the 30 days leave, a maximum of 15 days of leave is permitted in a semester. A maximum of 5 days of such leave is allowed avail at a stretch if student having any teaching assignment.

The maximum number of carried-over leave, from one completed year to another, is 15 days. However, a student can avail accumulated leave up to a maximum of 30 days at a time in a year.

Head of the Department (HoD) sanctions leave on recommendation of the Supervisor/Faculty Advisor/DPPC Secretary.

#### 9.2 Academic leave

Academic leave is permitted on the following grounds:

9.2.1 To attend conferences/seminars/workshops/trainings/short-term courses. A maximum of 10 days of leave is permissible in a calendar year.

A maximum of 20 days of leave in a calendar year is permissible for field trips such as data collection, survey work, etc.

The Head of the Department sanctions academic leave on recommendation of the Thesis Supervisor/Faculty Advisor/DPPC Secretary.

Academic leave exceeding 20 days but up to a maximum of 30 days in a calendar year is approved by the Chairman, IPPC on recommendation of the Thesis Supervisor/Faculty Advisor/DPPC Secretary and the HoD.

- 9.2.2 Academic leave of more than 30 days is not allowed during the semester in which a student is registered for course work.
- 9.2.3 Academic leave of more than 60 days but up to a maximum of 12 months is also permissible to carry out part of the research/project work in another institute/R&D Lab/industry/scheme in India or abroad. For sanction of such a leave, a letter of consent from the host organization is required.

On recommendations of the Supervisor, the DPPC secretary, HoD, and Chairman, IPPC, the Chairman, Senate approves such an academic leave. Such cases are also to be reported to the Senate.

A student granted academic leave for one or more semesters, pays prescribed fees in every semester.

If a registration date falls during the period of academic leave, a student completes the registration procedures at the expiry of her/his academic leave.

# 10. CONDUCT AND DISCIPLINE

- 10.1 Students shall conduct themselves within and outside the precincts of the Institute in a manner befitting the students of an institution of national importance. The Institute has a separate ordinance **Code and Conduct of Students** which is applicable to all students of the Institute.
- 10.2 In addition, unauthorized absence for more than one month leads to disciplinary action, in the form of reduction of assistantship or even termination of studentship.

# 11. COURSE STRUCTURE

11.1 Teaching of the courses shall be reckoned in credits; Credits are assigned to the courses based on the following general pattern:

- Two credits for each lecture period,
- Two credits for each tutorial period,
- Two credits for each studio period,
- One credit per hour for each Laboratory or Practical, Seminar or Project/Thesis session.
- 11.2 In order to qualify for a M. Tech degree of the institute, a student is required to complete the credit requirement as prescribed in the curriculum for a particular programme. The credit requirements for a programme will be minimum 175 credits. Out of 175 credits, at least 90 credits shall be through course work and 85 credits through research.
- 11.3 A semester load for a full time M. Tech student per semester is at least 40 credits. A part-time student should have semester load 20 credits per semester.
- 11.4 Every M. Tech. Programme will have a curriculum and syllabi for the courses approved by the Senate. DPPC will discuss and recommend the syllabi of all the post graduate courses offered by the department from time to time before sending the same to the Institute Postgraduate Programme Committee (IPPC). The IPPC will consider the proposals from the departments and make recommendations to the Senate for consideration and approval. For all approved courses, the copyright will be with IIT Patna.

The composition, tenure and functions of DPPC and IPPC, are indicated at *Appendix-B*.

- 11.5 Medium of instruction, examination and project/thesis reports will be in English.
- 11.6 *Faculty Advisor:* To help the students in planning their courses of study and getting general advice on the academic programme, the concerned department will assign a Faculty Advisor for each batch of students admitted.
- 11.7 Thesis supervisor: Master's Project/Thesis supervisor (s) for a student will be appointed from amongst the faculty members of the IIT Patna.
- 11.7.1 Departments will evolve modalities for appointing of supervisors keeping in view of the students' aspirations and faculty interest. The DPPC will co-ordinate this activity.
- 11.7.2 No student will have more than two supervisors.
- 11.7.3 No student once registered for thesis/project units will be allowed to continue the programme without a Thesis Supervisor having been appointed by the DPPC.
- 11.7.4 No change in thesis supervisor(s) will be allowed without the consent of the DPPC.
- 11.7.5 No change/addition of Supervisor (s) is/are allowed after the thesis has been submitted to the academic section.
- 11.7.6 In case there has been change/addition in the Supervisor(s), the thesis will be submitted not earlier than three months from the date of such change/addition.
- 11.7.7 With prior approval of the Chairman, Senate on the recommendation of the Chairman DPPC and Chairman IPPC, a student may be allowed to have a co-supervisor from outside the institute, in exceptional cases.

#### 12. REGISTRATION

- 12.1 Every student is required to register for approved courses through the assigned Faculty Advisor/Thesis Supervisor/Secretary DPPC at the commencement of each semester on the day fixed for such registration and notified in the Academic Calendar. The Dean Academic Affairs may cancel the registration of one or more courses if they are found to violate some rules or if there are restrictions imposed due to disciplinary reasons.
- 12.2 Only those students will be permitted to register who have :
- 12.2.1 cleared all Institute, Hostel and Library dues and fines (if any) of the previous semesters,
- 12.2.2 paid all required advance payments of Institute and Hostel dues for the current semester, and
- 12.2.3 not been debarred from registering on any specific ground.
- 12.3 A student who obtains a CPI lower than 6.00 with grade `DD' in some subjects or grade `F' in some subjects may be permitted by the Dean of Academic Affairs on the recommendations of the DPPC to repeat one or more DD graded subjects along with the failed subjects, provided, the subject(s) is /are being offered therein.
- 12.4 When a student re-registers for a subject, in accordance with clause 12.3 and clause above, her/his new grade will be used for SPI calculation, whereas for CPI calculation, the better of the two grades (the old and the new) of that subject will be considered.
- 12.5 Students may add and drop subject(s) with the concurrence of the Thesis Supervisor/Faculty Advisor/Secretary DPPC, and under intimation to the concerned course instructors and the academic section provided this is done within the date mentioned the Academic Calendar and as per the conditions given in clause 11.3.

#### 13. DURATION OF THE PROGRAMME

- 13.1 The duration of the M Tech programme is as follows:
- 13.1.1 The minimum duration of the M Tech programme (excluding dropped semester(s)) is 04 (four) semesters from the date of admission.
- 13.1.2 The maximum duration of the M Tech programme is 04 (four) years from the date of admission.

# 14. TEMPORARY WITHDRAWAL FROM THE INSTITUTE

- 14.1 A student who has been admitted to a M Tech programme of the Institute may be permitted to withdraw temporarily from the Institute on the grounds of prolonged illness or grave calamity in the family for a period of one semester or more, provided:
- 14.1.1 she/he applies to the Institute within at least 6 weeks of the commencement of the semester or from the date he last attended her/his classes whichever is later, stating fully the reasons for such withdrawal together with supporting documents and endorsement of her/his guardian;

- 14.1.2 the Institute is satisfied that, counting the period of withdrawal, the student is likely to complete her/his requirements of the M. Tech. Degree within the time limits specified in Clause 13.1.2 above;
- 14.1.3 there are no outstanding dues or demands in the Institute/ Hostel /Department/ Library.
- 14.2 A student who has been granted temporary withdrawal from the Institute under the provisions of Clause 14.1 will be required to pay fees/charges (except tuition fees and hostel dues) till such time as her/his name is on the Roll List. However, fees once paid will not be refunded.
- 14.3 A student will be permitted only one such temporary withdrawal during her/his tenure as a student of the M. Tech. programme.

# 15. TERMINATION FROM THE PROGRAMME

- 15.1 A student is required to leave the Institute on the following grounds:
- 15.1.1 If a student fails to secure a CPI of 6.0 at the end of any semester. However, a student securing a CPI below 6.0 may be allowed to continue in the following semester on the recommendation of DPPC and with the approval of IPPC. Subsequently, the student will be issued a warning. Students who secure a CPI below 6.0 in two consecutive semesters will not be allowed to continue in the M.Tech. programme.
- 15.1.2 If a student is absent for more than 6 (six) weeks in a semester without sanctioned leave her/his name will be struck off the rolls.
- 15.1.3 A student may also be required to leave the Institute on disciplinary grounds.
- 15.1.4 On having been found to have produced false documents or having made false declarations at the time of seeking admission.
- 15.1.5 On having been found to be pursuing regular studies and/or correspondence courses (leading to degree or diploma) in any other college, university or an educational institution.
- 15.1.6 For Regular and QIP categories students, on having found to be concurrently employed and performing duty or carrying out business.

### 16. GRADING SYSTEM

16.1 Based on the performance of a student, each student is awarded a final letter grade in each subject at the end of the semester . The letter grades and the corresponding grade points are as follows :

Grade	Grade Point
AA	10
AB	9
BB	8
BC	7
CC	6
CD	5
DD	4
F	0

*In addition, there shall be two transitional grades I and X used by the instructors.* 

- 16.2 Based on the performance of a student, each student is awarded a final letter grade in each subject at the end of the semester. The letter grades and the corresponding grade points are as follows:
- 16.3 A student is considered to have completed a subject successfully and earned the credits if he secures a letter grade other than I, X or F in that subject. A letter grade F in any subject implies a failure in that subject.

#### 16.4 The Transitional Grades I and X

- 16.4.1 The teacher of a subject may award the grade T' to a student if the latter was compelled to absent herself/himself from the end semester examination on account of:
- (i) illness or accident which disabled him from appearing at the examination.
- (ii) a calamity in the family at the time of the examination, which, in the opinion of the Institute, required the student to be away from the campus.

A student will be eligible for the award of grade T only if her/his attendance at classes and performance in other components of assessment are complete and satisfactory.

- 16.4.2 The teacher of a subject may award the grade 'X' to a student if the overall performance of the student in the course is good, but is likely to get grade 'F' based on her/his end semester examination.
- 16.4.3 All T' and 'X' grades awarded by teachers must be converted by them to appropriate letter grades and communicated to the Academic Section (through HoD) within two days of the respective make up examination. Any outstanding 'T' and 'X' grades two days after the last scheduled make up examination will be automatically converted to an 'F' grade.
- 16.5 A Semester Performance Index (SPI) will be computed for each semester. The SPI will be calculated as follows:

A Semester Performance Index (SPI) will be computed for each semester. The SPI will be calculated as follows:

$$SPI = (C1*G1 + C2*G2 + C3*G3 + ... + Cn*Gn) / (C1 + C2 + C3 + ... + Cn)$$

where, n is the number of courses registered during the semester,

Ci is the number of credits allotted to a particular course, and

Gi is the grade points corresponding to the grade awarded for the course.

**16.6** A Cumulative Performance Index (CPI) will be computed at the end of each semester and communicated to the students along with the SPI and the grades obtained by them for that semester. The CPI gives the cumulative performance of the student from the first semester up to the end of the semester to which it refers, and will be calculated as follows:

$$CPI = (C1*G1 + C2*G2 + C3*G3 + ... + Cm*Gm) / (C1 + C2 + C3 + ... + Cm)$$

where, m is the number of courses registered upto that semester,

Ci is the number of credits allotted to a particular course, and

Gi is the grade points corresponding to the grade awarded for the course.

Whenever a student repeats or substitutes a course in any semester, the lower grade(s) obtained by her/him in the course is to be ignored in the computation of CPI from that semester onwards.

- **16.7** Both SPI and CPI will be rounded off to the second place of decimal and recorded as such. Whenever these CPI are to be used for the purpose of determining the merit ranking of a group of students, only the rounded off values will be used.
- 16.8 When a student gets the grade T' or 'X' for any course during a semester, the SPI for that semester and the CPI at the end of that semester will be tentatively calculated ignoring T' and 'X' graded course(s). After conversion of T' and 'X' grade(s) to appropriate grade(s), the SPI and CPI for that semester will finally be recalculated after taking the converted grade(s) into account.
- 16.9 The Faculty Advisor/ Secretary DPPC/Thesis Supervisor may permit a student to register for an audit course provided the course instructor allows auditing a course. The word "AU" shall be written alongside the Course Name in the Grade Card. The audit course & the grade "AU" shall not carry any credits and grade points. Pass or fail status will be shown in the grade card as "PP" for passed and "NP" for not passed. However, a student is not required to register again for passing a failed audit course.

#### 17. ASSESSMENT OF PERFORMANCE

- 17.1 There will be continuous assessment of a student's performance throughout the semester and grades will be awarded by the teacher concerned or the appropriate committee appointed for this purpose on the following basis:
- 17.1.1 In case of
- 17.1.1.1 theoretical subjects, the evaluation will be based on instructors assessment, quizzes, mid semester examination and end semester examination, and
- 17.1.1.2 sessional subjects (Laboratory etc.), the evaluation will be on the basis of attendance, assessment of the task assigned and end semester test/viva.
- 17.1.2 The evaluation of the project/thesis work will be based on sessional work assigned by the thesis supervisor; seminar, project/thesis report and project/thesis evaluation committees' assessment (mentioned in Clause 17.2 below).
- 17.1.3 In case of other requirements such as seminar, etc., evaluation will be as determined by the grade awarding authority.
- 17.1.4 The mid-semester and end-semester examination will be conducted centrally by the Academic Section of the Institute every semester. Every theory course must have a mid-semester and an end-semester examination. The durations of the examinations will be 2 hours and 3 hours respectively. No course can have an examination of shorter durations. The class-tests or quizzes will be organized by the instructor concerned. However, mid-semester examination can be a take home examination for M. Tech./M.Des./PhD student only courses.
- 17.1.5 The weightage assigned to different components of assessment will be announced by the concerned instructor(s) in the beginning of the semester.

- 17.1.6 The results of performance of the students in the mid-semester examination shall be announced by the instructors. The instructors should workout following points for returning evaluated mid-semester answer scripts:
- 17.1.6.1 for spot verification by students, the evaluated answer scripts shall be made available during one of the lecture classes/lab classes/tutorials or during a special session, as may deemed fit by the instructor;
- 17.1.6.2 at least a week ahead of the notified time-schedule for verification of answer scripts by the students, individual course instructor(s) may display the model answers relating to the question paper, through website for information to the students;
- 17.1.6.3 students shall point out discrepancies in the evaluation by the instructor, if any, on the spot;
- 17.1.6.4 after conclusion of the spot verification of answer scripts, the students shall be allowed to carry their answer scripts; and no claim whatsoever shall be entertained afterwards
- 17.1.6.5 All instructors should report to their respective HoDs about showing of evaluated answer scripts to the concerned students by the stipulated date set for the purpose in the academic calendar.
- 17.1.6.6 The concerned HoD in turn shall send their respective reports on the subject to the Dean of Academic Affairs, within 7 (seven) days from the scheduled last date for showing evaluated answer scripts to the students.
- 17.1.7 The final grades for a subject must be submitted after the end-semester examination by the concerned instructor(s) to their HoD for onward transmission to the Assistant Registrar (Academic) within the date stipulated in the academic calendar.

# 17.2 Evaluation of M Tech Project/Thesis:

- 17.2.1 The project/thesis work is in two/three stages, each spread over a semester. At the end of the every stages (excluding final stage), the student is required to submit a report of her/his work by a prescribed date to the Secretary, DPPC and present it to an Internal Project/Thesis valuation Committee. After passing of any stage, the subsequent stage of the work is continued in the following semester.
- 17.2.2 Those who fail in any stage assessment will be required to re-register for that stage in the following semester.
- 17.2.3 The procedure for submission of M Tech *last stage* Project/Thesis and conduct of oral examination are as follows:
- 17.2.3.1 The thesis supervisor(s) shall be satisfied that the work has been completed. The supervisor(s) shall forward a list of examiners (comprising of at least two faculty members from the department, in addition to the supervisor(s) and one member from outside the department or an external expert) through the Secretary, DPPC to HoD.
- 17.2.3.2 The HoD will then forward the list of examiners to the Chairman IPPC for the approval at least 15 days before submission of the thesis.
- 17.2.3.3 Following the approval, unbound copies of the thesis (one each for every examiner) shall be submitted to the Department at least one week before probable date of the examination.

- 17.2.3.4 The supervisor(s) will fix the date of oral examination; make an announcement (through notices nd e-mail) and forward unbound copies of thesis to the examiners. The date of oral examination shall be communicated to the academic section.
- 17.2.3.5 The oral examination of a M. Tech. Project/Thesis shall be held as per announced schedule and it shall be an open one.
- 17.2.3.6 The Supervisor/Secretary, DPPC (if Supervisor is not available at the time of oral examination) shall be the convener of the oral examination committee. The committee shall evaluate the project/thesis of the candidate on the basis of presentation of the report, originality of the contents therein, demonstration of equipment model/hardware/software developed, the oral presentation and oral examination. In case the committee recommends a major revision and recommends a re-examination of the project/thesis, Grade "I" shall be awarded and the student shall be required to continue the project/thesis and resubmit the thesis within a period of two months. In case the committee rejects the thesis, Grade "F" shall be awarded and the student shall be required to re-register for the last stage project/thesis in the subsequent semester. The grade to be awarded to a student shall be evolved be the committee by consensus. The report of the oral examination committee including the grade shall be submitted to the Secretary, DPPC by the committee.
- 17.2.3.7 On successful completion of Oral Examination, each student shall submit bound copies of the thesis making corrections, if any, suggested by the examiners (one each to the supervisor(s) and the department) and an electronic copy to the department.

Student shall obtain approval of the supervisor(s) before submitting the corrected version of the bound thesis.

Secretary, DPPC shall forward the report of the oral examination committee along with the grade to the Dean of Academic Affairs only on receipt of the bound thesis and an electronic copy from a student. All M. Tech Project/Thesis reports of a batch of students will be copied on a CD for archival purpose and deposited to the Central Library.

- 17.2.4 The last stage project/thesis work can be extend upto last date for I and X graders conversion as mentioned in the academic calendar of that semester.
- 17.2.5 Non-evaluation of any stage project/thesis within stipulated time, "F" grade will be awarded automatically and the student shall be required to re-register for that stage of project/thesis in the subsequent semester.

### 18. METHOD OF AWARDING LETTER GRADES

- 18.1 The instructor(s) shall submit two copies of letter grades to the concerned HoD by the due date specified in the Academic Calendar. The HoD will forward all grades to the Academic Section by the due date specified in the Academic Calendar.
- 18.2 End-semester examination answer scripts and the sheet containing details of marks converted to grades shall be preserved by the instructor(s) concerned for a period of one semester.
- 18.3 Changes in **Grades Already Awarded:** If a student feels that he/she has not been awarded a deserving grade in a course, he/she may request the instructor of the course within one week of the start of the next semester, to show him/her the endsemester answer script in order to ensure that all the questions have been evaluated properly. In case of any change in grade the same with due justification has to be

communicated by the Instructor to the Dean of Academic Affairs through the HoD. However, M Tech/M Des project/thesis grades change are not permitted.

#### 19. EXAMINATION

- 19.1 In assessing the student's attainment in subjects (Theory, Laboratory, Studio and Sessional), seminars, project/thesis work etc., the system of continuous assessment is adopted by the Institute. In conformity with this practice, there will be one mid semester examination and an end semester examination for every theoretical subject -- in addition to the instructors' assessment and quizzes etc.
- 19.2 A student may be debarred from appearing in the end semester examination due to the following reasons:
- 19.2.1 If any disciplinary action is taken against her/him.
- 19.2.2 On recommendation of a instructor, if
- 19.2.2.1 her/his attendance in the Lecture/Studio/Practical classes has not been satisfactory during the semester, and/or,
- 19.2.2.2 her/his performance in the sessional work done during the semester has been unsatisfactory.

#### 20. MAKE-UP EXAMINATIONS

- 20.1 Students who have missed an end-semester examination on valid reasons and have been awarded "I" grade are eligible for a make-up examination. They should make an application to the Dean of Academic Affairs through the Instructor/HoD within seven days from the date of the examination missed explaining the reasons for their absence.
- 20.2 Official permission to take a make-up examination will be given under exceptional circumstances such as admission to a hospital due to illness and a calamity in the family at the time of examination. Students residing in the hostels should produce a medical certificate issued by the Institute Medical Officer only. Students who are permitted to stay outside the campus or who have been authorised to be away from the Institute should produce a medical certificate from a Medical Officer not below the rank of a Civil Surgeon and endorsed by the Institute Medical Officer. Certificates from private medical practitioners will not be accepted. The Dean of Academic Affairs can use her/his discretion in giving permission to a student to take a make-up examination.
- 20.3 No make-up examination will be scheduled for the mid-semester examination and quizzes. It is entirely upto the instructor to ascertain the proficiency of the student by whatever means considered appropriate to her/him if she/he is satisfied of the bonafides of the case.
- 20.4 Students who are awarded "X" grade by the teachers are also eligible for the make-up examination.
- 20.5 Make-up examination will be held as per dates notified in the Academic Calendar. Make-up examinations at any other time can be held only with the permission of the Dean of Academic Affairs.

#### 21. WITHHOLDING OF GRADES

21.1 Grades shall be withheld when the student has not paid her/his dues or when there is a disciplinary action pending against her/him.

# 22.ELIGIBILITY FOR THE AWARD OF M. TECH. DEGREE

- 22.1 A student shall be declared to be eligible for the award of M. Tech. / M. Des. degree, if he/she has:
- 22.1.1 completed all the credit requirements for the degree with grade a "DD" or higher grade in each of the subjects (Theoretical, Laboratory, Workshop, Sessional etc), Seminar, Project/Thesis etc;
- 22.1.2 obtained a CPI of 6.00 or more at the end of the semester in which she/he completes all the requirements for the degree;
- 22.1.3 no dues to the Institute, Department, Hostels; and
- 22.1.4 no disciplinary action is pending against him.
- 22.2 The award of M. Tech. degree must be recommended by the Senate and approved by the Board of Governors of the Institute.

#### APPENDIX - A

# ELIGIBILITY CRITERIA FOR ADMISSION INTO M. TECH. PROGRAMME

The details of the eligibility criteria (i.e. minimum qualifications and experience) for admission to various M.Tech. programmes are given in this appendix. The Senate reviews the same for admission to the .Tech. programme from time to time. Relaxation in academic qualification for reserved categories of students is as per Government of India guidelines.

# MINIMUM QUALIFICATIONS

# A.1 Minimum qualifications for M. Tech. Programme

A.1.1 Minimum CPI of 6.5 or 60% of marks or First Class in the qualifying degree, fulfilling specific requirements for different disciplines, as indicated below:

#### A.1.1.1

M.Tech. in Mechatronics	B.Tech./B.E. degree in Mechanical / Production /Aerospace/ Electrical/ Electronics & Communication/ Instrumentation
	Engineering or MSc in Electronics and Instrumentation and valid GATE score in ME, PI, AE, EE, EC, IN, PH, XE.
M.Tech. in Mathematics and Computing	MSc in Mathematics or B.Tech./B.E. degree in Electrical/
	Electronic/ Computer Science/ Mechanical/ Civil/ IT/
	Aerospace/ Instrumentation Engineering or Equivalent and a
	valid GATE score in MA, EE, EC, CS, ME, CE, AE, IN.
M.Tech. in Nanoscience and	MSc/Equivalent in [Nanoscience, Chemistry (Pure/
Taskaslassa	Applied), Physics, Applied Physics/ Solid State Physics/
Technology	Engineering Physics/ Biophysics/ Polymer Science/ Material
	Science] or <b>B.Tech./Equivalent</b> degree in [Engineering
	Physics/ Polymer Engineering/ Materials &
	Metallurgical/Materials/Mechanical/Electronics/Electrical
	Engineering] and a valid GATE score in CY, PH, MT, ME,
	EC, EE, XE (with Material Science or Polymer Science &
	Engineering)

# Admission to M.Tech. Programme

The programme is open to candidates of all categories with Bachelor's Degree in Engineering / Technology / M Sc or equivalent professional degrees (AMIE, etc.) and having a valid GATE score. Note: All regular category candidates (except those having B.Tech. degrees from an IIT with a minimum CPI of 8.0) must possess a valid score of Graduate Aptitude Test in Engineering (GATE). Candidates seeking admission to M.Tech. Programme of the Institute shall have to possess a minimum of 60% marks (or a CGPA of 6.5 in 10 point scale) for General/OBC categories and 55% marks (or a CGPA of 6.0 in 10 point scale) for SC/ST categories in the final qualifying examination. All selected candidates have to produce the certificate with regard to the marks secured in the final qualifying examination by 31st October of that year of admission. Reservation of Seats for SC, ST, OBC (including OBC Minorities) (Non-creamy layer) and PD categories: As per Govt. of India rules. OBC (including OBC Minorities)

(Non-creamy layer) candidates will have to enclose certificate and self-declaration statement as per prescribed format in annexure I, II and III (as applicable) available with the Application form.

Additional Conditions For Candidates Still To Appear In Qualifying Examinations

Candidates still to appear in their qualifying degree examinations may also apply, provided they appear in all their qualifying degree examinations and complete all requirements for their degrees before 1st week prior to commencement of the Autumn Semester. If selected, such candidates shall be admitted provisionally, and they will have to furnish the results of their qualifying degree examinations latest 31<sup>st</sup> October of that year of admission. Further, they must fulfil the minimum requirements of marks/CGPA/CPI, and other conditions like valid GATE score etc., as mentioned under eligibility criteria for respective programmes. Failure to fulfil any of these requirements, shall automatically result in cancellation of admission.

# **Sponsored Candidates**

An applicant employed in an industry or any other recognized organisation/institution with at least two years of experience is eligible for admission to the M.Tech. programmes provided the applicant is sponsored by the employer. The applicant should have scored at least 60% marks (or a CGPA/CPI of 6.5 in 10 point scale) for GN/OBC Categories and 55% marks (or a CGPA/CPI of 6.0 in 10 point scale) for SC/ST Categories in the qualifying degree examination. For sponsored applicants GATE score is not mandatory and they are not eligible for assistantship. Candidate applying for Sponsored Full-Time categories must be a regular employee of the sponsoring organisation with at least 02 (two) years of professional experience in the respective field. Selection of these candidates is based on performance in Written Test and Personal Interview of short-listed candidates. Performance in Written test and in Personal interview will be the basis for the selection in M.Tech. programmes.

# Form I

# No Objection Certificate

(This should be typed on the letter head of the relieving organization)

	Reference No.
	Date:
То,	
The Director	
Indian Institute of Technology Patna	
Sub: NOC to an Employee for M.Tech	. Programme
Dear Sir,	
We hereby sponsor the candidature of Ms./Mrs./Mremployee in our organization, for joining M.Tech. prograyour Institute as a full-time student.	
We shall relieve her/him from her/his duties in the programme.	organization for two years of the M.Tech.
	Signature and Seal of the
	Sponsoring Authority

# Form II - No-Objection Certificate for IIT Patna Project Employee

Indian Institute of Technology Patna

	Reference No.:
	Date:
The Director Indian Institute of Technology Patna	
Sub: No-Objection Certificate  Dear Sir,	
We have no objection if Mrs./Mran employee in out the M. Tech. Programme inat your Institute as a part-t	•
We shall give her/him leave of absence to attend class work at IIT- Patna d	uring M.Tech. Programme.
D	esignated Authority Signature & Seal

<u>Form III - No-Objection Certificate for Part-time category</u> (This should be typed on the letter head of the sponsoring organisation)

Reference No .. Date:

The Director Indian Institute of Technology Patna

**Sub: No-Objection Certificate** 

Dear Sir,
We have no objection if Mrs./Mr
We shall give her/him leave of absence to attend class work at IIT- Patna during two years of the M. Tech. Programme.

Signature and seal of the Sponsoring Authority

# **APPENDIX - B**

# DEPARTMENTAL POSTGRADUATE PROGRAMME COMMITTEE (DPPC)

# **Composition:**

(i)	Head of the Department*	Chairman
(ii)	Six faculty members to be nominated by the Head of which one will be	Members
	nominated by the Head as the member secretary	
(iii)	One faculty member from outside department. The department will be chosen by the committee. The faculty member from the chosen department will be nominated by the HOD of that department.	Member
(iv)	For a department, one student with CPI not less than 7.5 to be elected by the M Tech. students and one student to be elected by the Ph D students of the 2 <sup>nd</sup> years (or higher).	Members

<sup>\*</sup>In case of interdisciplinary programme, Head of Coordinating department will be the Chairman of the committee.

#### Tenure:

Two years for faculty members and one year for student members.

# **Functions:**

(i)	To oversee the conduct of all postgraduate courses of the department.	
(ii)	To ensure academic standard and excellence of the courses offered by the department.	
(iii)	To discuss and recommend the syllabi of all the postgraduate courses offered by department	
	from time to time before sending the same to the Institute Postgraduate Programme	
	Committee (IPPC).	
(iv)	To consider any matter related to the postgraduate programme of the department.	

# INSTITUTE POSTGRADUATE PROGRAMME COMMITTEE (IPPC)

# **Composition:**

(i)	Dean of Academic Affairs (ex-officio)	Chairman
(ii)	DPPC Secretaries of all departments.	Members
(iii)	DR (Academic) or AR (Academic)	Non-Member
		secretary

# Tenure

Two years.

# **Functions:**

(i)	To oversee the conduct of all postgraduate courses of the Institute.
(ii)	To consider the proposals from the departments/academic centres and make
	recommendations to the Senate for consideration and approval.
(iii)	To issue guidelines to various departments/academic centres on evaluation pattern of the
	courses/projects/thesis to maintain uniformity.
(iv)	To consider and recommend the assessment procedure to be adopted by various
	departments/academic centres.
(v)	To consider and recommend any other matter concerning the postgraduate programme of
	the Institute.