

# JHARKHAND UNIVERSITY OF TECHNOLOGY

(Established by Jharkhand University of Technology Act 2011, Jharkhand Act, 2015)

Ranchi, Jharkhand, India

# ACADEMIC ORDINANCES FOR M.TECH. PROGRAMMES

With effect from

**ACADEMIC YEAR 2021-22\*** 

<sup>\*</sup> These ordinances are made in exercise of the powers conferred upon by sections 34 (ii) & (iii) under the Chapter VI of the Jharkhand University of Technology Act 2011 (Jharkhand Act 18, 2015) by the Academic Council and duly approved by the Executive Council of the Jharkhand University of Technology, Ranchi. These shall come into force from the Academic Year 2021-22.



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ACADEMIC YEAR 2021-22\*

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#### 1. INTRODUCTION

The provisions contained in these Ordinances govern the conditions for policies and procedures for admission in M. Tech. programmes, course structure, conduct of examinations and evaluation of students' performance leading to the degree of Master of Technology (M. Tech.). These Ordinances may be revised, updated, amended or modified from time to time through appropriate approval from the Academic Council, Jharkhand University of Technology (JUT), Ranchi.

- 1.1 Disciplines: The specializations in which the courses of study are available and M. Tech. Degrees will be offered are
- 1. M. Tech. in Structural Engineering, Department of Civil Engineering
- 2.M.Tech in Soil Mechanics and Foundation Engineering, Department of Civil Engineering
- 3. M.Tech. in CAD/CAM, Department of Mechanical Engineering
- 4. M. Tech. in Heat Power, Department of Mechanical Engineering
- 5. M. Tech. in Machine Design, Department of Mechanical Engineering
- 6. M. Tech. in Production Technology, Department of Mechanical Engineering
- 7. M. Tech. in Power System, Department of Electrical and Electronics Engineering
- 8. M. Tech. in Control System, Department of Electrical and Electronics Engineering
- 9. M.Tech. in Computer Science Engineering (CSE), Department of Computer Science Engineering (CSE)
- 10. M.Tech. in Process Metallurgy, Department of Metallurgical Engineering
- 11. M. Tech. in Physical Metallurgy, Department of Metallurgical Engineering
- 12.M.Tech. in Plant Design in Chemical Engineering, Department of Chemical Engineering.
- 13. M. Tech in Foundry-Forge Technology, Department of Foundry and Department of Forge Technology.
- 14. M Tech in Materials Science and Engineering, Department of Metallurgy and Material Engineering.
- 15.M. Tech in Manufacturing Engineering, Department of Manufacturing Engineering.
- 16.M. Tech in Environmental Engineering, Department of Applied Sciences and Humanities.
- 17. M. Tech in Rock Excavation Engineering, Department of Mining Engineering
- 18. M. Tech in Mine Safety Engineering, Department of Mining Engineering
- 19. M.Tech in Environmental Engineering and Management, Department of Mining Engineering
- 20. M. Pharma in Pharmaceutical Engineering, Department of Pharmaceutical Engineering, after requisite permission is obtained from the Pharmacy Council of India.
- 21. M. Tech. in Digital Engineering and Technical Services, an inter-disciplinary course, offered by Department of Electronics & Communication Engineering.
- 22. M. Tech. in Project Engineering, an inter-disciplinary course, offered by Department of Mechanical Engineering.

New disciplines may be added in future with the approval of Academic Council, Jharkhand University of Technology, Ranchi

1.2 The provisions of these Ordinances shall also be applicable to any new disciplines that will be introduced from time to time and added to the list in Section 1.1.



#### 2. DURATION OF THE PROGRAMME

2.1 Total duration of full and part time M.Tech. Programme shall be 2 and 3 years respectively, each year comprising of two semesters. Each semester shall normally have teaching and research work for 72 to 90 working days.

2.2 The student admitted to M.Tech. Programme shall complete the course within a period of four academic years from the date of first admission for Full Time and six academic

years for Part Time M.Tech. Programme.

2.3 The minimum credit requirement for M. Tech. degree is 68 credits.

#### 3. ELIGIBILITY

3.1 Eligibility for admission in the M. Tech. Programme shall be a Bachelors degree in Engineering/ Technology or equivalent in an appropriate branch of Engineering, or a graduate from the Institution of Engineers (AMIE), or a Masters degree in science. The candidates must have obtained minimum marks in the qualifying examination as per the AICTE guidelines.

3.2 The Academic Council of the Jharkhand University of Technology shall have power to

amend or repeal the eligibility criteria laid down at clause 3.1.

#### 4. ADMISSION

4.1 Jharkhand University of Technology shall permit admission to M. Tech. Programmes and award M. Tech. degree only to such courses that are duly approved by the AICTE or the Academic Council of the JUT.

4.2 Admission to M. Tech. programme shall be permitted in the Institutes/ Colleges affiliated to the JUT to the candidates having the eligibility as per clause 3.1. The candidates with a valid GATE score in their respective discipline shall be given preference. The process of counseling shall be carried out at the individual Institutes/Colleges. Institutes/colleges are permitted to admit candidates directly through CCMT.

4.3 The individual Institutes/ Colleges may also admit candidates in Full Time or Part Time M. Tech. programme who are sponsored by an Industry or an R&D organisation.

4.4 The individual Institutes/ Colleges may also admit working professionals in Part Time M. Tech. programme who are in continuous service in the relevant field for not less than 2 years. Such candidates shall attend classes for completing the course work in the evening and/or during the weekends, as arranged by the respective colleges. They shall carry out their dissertation work at their workplace/industry only and his co-supervisor shall also be from his workplace/industry. A No Objection Certificate from his employer shall be submitted by the candidate with his application for admission.

4.5 Reservation in admission to an M.Tech. Programme shall be governed by the State Government rules. Where such rules are at variance with each other, the decision of

Academic Council of the University shall be final.

4.6 Inter-College transfer of students in the M. Tech. programme may be permitted as per AICTE guidelines.

4.7 The Institute reserves the right to cancel the admission of any student at any stage on grounds of unsatisfactory academic performance, irregular attendance or individual time.

indiscipline. See Annexure - I for Rules regarding Conduct and Discipline.

4.8 At the time of admission, the student is required to submit certified copies of the Course Completion Certificate of the qualifying examination, valid GATE score (if any), recent Reserved Category Certificate (SC/ST/OBC/EWS/Differently-Abled), etc. and Matriculation Certificate as proof of the date of birth. The Course

Completion Certificate of the qualifying examination may be submitted within three months from the date of admission, but before registration for the First Semester Examination.

4.9 The students shall be required to register in each semester.

#### 5. ATTENDANCE

5.1 Every student is required to attend all the lectures, tutorials, practicals and other curricular and co-curricular activities. Upto 25% attendance can be condoned on medical grounds or other genuine reasons, beyond the control of the student.

5.2 A further relaxation of attendance upto 10% can be given by Head of Institution/College provided the student was absent with prior permission of the Head of the

institution/College.

5.3 A student shall not be permitted to appear in the End Semester Examination if he does not satisfy the minimum attendance requirements given in clause 5.1 and 5.2. Such students shall be treated as having failed.

5.4 The attendance shall be counted from the date of admission in the college or start of

academic session whichever is later.

#### 6. COURSE STRUCTURE

There will be four types of courses. A minimum total of 68 credits must be earned for award of the M. Tech. degree.

Core Courses (12 credits): This is the course which is to be compulsorily studied by a student in his discipline of study in order to complete the M. Tech. program.

Programme Elective Courses (15 credits): The student can choose this course from

a set of elective courses that pertain to his discipline of study.

Open Elective Courses (3 credits): The student can choose this course from a set of 111. elective courses that are open to students of all disciplines. It may be supportive to the student's discipline of study/ provide extended scope/ enable exposure to some other discipline of study/ domain / which is of interest to the student and help nurturing the student's proficiency skills.

Mini-Project (2 credits): This is a course in which the student will have to solve a live problem using software/analytical/computational tools and/or laboratory/field experiments. This shall be taken up in the 2<sup>nd</sup> semester. Industrial training may also be

permitted in place of Mini-Project.

- Dissertation (10+16=26 credits): In the Third and the Fourth semester the student will have to have work on a research topic under the guidance of a supervisor(s), write a dissertation report and make a presentation of the research work carried out in each of the semester for the dissertation, Dissertation work, either wholly or partly, could also be carried out in an industry or in collaboration with an industry. However, the industrial work shall be pertinent to the research topic.
- γi, Labs (8 credits)

Research Methodology (2 credits) vii

Audit Courses (non-credit): These courses are mandatory and the students must viii. obtain minimum pass marks in these subjects. However these are non-credit courses.

Semester-wise credit requirement is as follows -1X.



Semester	Credits			
so for the lates Sentess	Full Time	Part Time		
First Semester	21	11		
Second Semester	21	minima as ingue Habine as		
Third Semester	10	10		
Fourth Semester	16	10		
Fifth Semester		10		
Sixth Semester	-	16		
Total Credits	68	68		

- 6.1 Normally an Elective Course shall not be offered if less than five students have registered for the course. However, in exceptional cases, where there are sufficient number of faculties are available, an elective course could be offered even if less than five students have registered for the course.
- 6.2 A student shall register for the elective courses in the beginning of the concerned semester. He may, however, change his option within 15 days from the date of commencement of the semester.

#### 7. REGISTRATION

- 7.1 Every student registering for an M. Tech. programme is required to be physically present on the campus in the concerned Institute/ College/ JUT on the first day of the First semester, pay the required fees and select courses/subjects to be studied.
- 7.2 Registration of students in each semester will be organized by the Academic Section of the concerned Institute/ College/ JUT. An appropriate semester registration form will be used for the purpose. The subject details will be verified by the faculty members of the respective Institute. Payment of dues shall be verified by the Academic Section and the Account Section of the concerned Institute. A list of registered students along with subject details and any other relevant information shall be forwarded by the Director/ Principal of the Institute/ College to the Academic Section of the JUT.
- 7.3 A student who does not register on the first day of the semester due to reasons beyond his control, may be permitted to register by the Director/ Principal of the concerned Institute within next 5 working days, on payment of prescribed late fee. Thereafter, late registration shall not be permitted, except in special cases, e.g. a serious medical problem, a family calamity, etc., with approval of the Director/ Principal. Late registration beyond 15 calendar days from the scheduled date of registration shall normally not be permitted.
- 7.4 Only those students will be permitted to register in the subsequent semesters who have
  - i. Cleared all Institute and Hostel dues of the previous semesters, and paid all required prescribed fees for the current semester,
  - ii. Not been debarred from registering for a specified period on disciplinary or any other grounds.
- 7.5 The classes of all semesters will start from the day following the registration, or any other date decided by the Director/ Principal of the concerned Institute/ College.

# 8. CRITERION FOR PROMOTION TO THE NEXT SEMESTER AND COMPLETION OF M.TECH. DEGREE (FULL TIME/PART TIME)

8.1 The following shall be criteria for promotion to the next semester and completion of M.Tech. programme:

- i. To pass in a subject a student must secure at least 40% marks. However, for promotion to next semester and/or to complete the M.Tech. programme a student must secure CGPA not less than 5.5 (at least 50% marks) in aggregate.
- ii. For promotion to the next semester, a student must obtain Cumulative Grade Point Average (CGPA) of not less than 5.5, considering all courses including those in which the student has secured an F (Fail) grade. The method for calculating SGPA and CGPA is illustrated in Clause12. If the CGPA at the end of the 2<sup>nd</sup> semester is less than 5.5, the student will not be allowed to register in the 3<sup>rd</sup> semester. Similarly, for registration in the in 4<sup>th</sup> semester (Full Time/Part Time) and 5<sup>th</sup> semesters (Part Time), a student must have obtained a CGPA not less than 5.5 in the 3<sup>rd</sup> (Full Time/Part Time) and 4<sup>th</sup> (Part Time) semesters respectively. In such a case, he/she will not be allowed to register in the 4<sup>th</sup> and 5<sup>th</sup> semester respectively. S/he may resume it in the following year along with the next batch of students. In the repeat year, s/he must attend classes and be treated at par with the fresh batch of students.
- iii. A student failed/failed due to shortage of attendance in a subject shall be eligible to register in the summer semester.
- iv. A student who is failed due to the shortage of attendance, shall be awarded Incomplete Grade (I grade).
- v. A student who is unable to pass in a subject in a semester shall get two chances to clear the examination, one in summer semester and another along with the next batch.
- vi. A student admitted to M. Tech. Programme shall be required to complete the course within a period of Four and Six academic years from the date of first admission for Full time and Part time programme respectively, failing which s/he has to discontinue the M. Tech. Programme (clause2.2).
- vii. Students who remains absent in the End semester examination will be awarded "I" Grade in that subject. In that case, student will be allowed to register in the Summer Semester.
- viii. If a student fails in more than three papers then he will be considered to have failed even if his/her SGPA/CGPA is more than 5.5 and shall be governed by clause 8.1(ii).
- ix. A student must obtain at least 'B' grade in the final project viva examination for the eligibility to complete M. Tech. degree.
- x. A candidate may be awarded grace marks upto a maximum of total 10 marks, in maximum four subjects, but not more than 3 marks in a subject, including theory papers, practicals, project, seminar, industrial training and/ or aggregate marks in each academic year; provided he/she can be declared to have passed the academic year by the award of these marks.
- xi. In case a student fails to complete the project work in fourth semester (Full Time) or in sixth semester (Part Time), he may be permitted to complete his project work in the next six months. The M.Tech. Degree shall be awarded only after completing the project.
- xii. For continuation of the fellowship, if available with the institute, shall have to secure minimum SGPA/CGPA 6.0 with no paper pending to complete in the previous semester(s).
- 8.2 A student who has been debarred from appearing at an examination either as a measure of disciplinary action or for adopting malpractice at an examination, may register for the subject (s) as backlog papers in the following semester and attend classes and examinations as per schedule. Such students shall not be permitted to register in the summer semester.
- 8.3 The JUT shall publish the result within 21 days of the last end semester examination.



# 9, TAKING A BREAK FROM THE M.TECH. (FT) PROGRAMME AFTER FIRST YEAR:

- i. Students are permitted take a break from the M.Tech. programme after the First year for taking up an employment or for any other reason, so however that they must complete the programme within a total duration of 4 years.
- ii. A student may be permitted to take the break provided s/he has completed all the courses i.e. theory, laboratory, seminar, workshop, etc. with CGPA not less than 6.0 and have no incomplete subjects.
- iii. Students desirous of taking the break from the course shall seek prior permission from the Head of the Department and the Dean (Academic) of the institute and inform the university prior to the admission to the third semester/fourth semester.
- iv. The student will have to register in each semester on time, during the break period too.
- v. Students who discontinue studies without prior permission or before completing the First Year or do not report the institute for 30 days shall be treated as deemed to have left the programme. Such students shall be debarred from completing the programme and their admission to M.Tech. programme shall be deemed to have been cancelled. Such students may, however, apply for fresh admission for the MTech programme in the First Semester, as a fresh student.

#### 10. EXAMINATIONS AND ASSESSMENT METHOD

10.1The End Semester Examinations shall be conducted by the Examination Section of Jharkhand University of Technology. The Internal Assessment consisting of Mid semester Examination, Class Tests, Quizzes and Assignments shall be conducted by the respective Institute/College.

10.2 In each semester the Theory marks of each subject shall be distributed as follows -

End Semester Examination	60 MARKS			
Internal Assessment	40 MARKS			
	SITS OF DAMES OUT THOSE STATES OF THE PROPERTY			

10.3 Internal Assessment in respect of Theory marks of each subject in each semester shall be distributed as follow —

evan linda antitizati eri: Internal Assessment wollet edi lo nortsumin	Marks
Mid Semester Exam	20
Class Test, Quizzes and Assignment	20
Total atte has research amounted and an regard and dead as I	40

summer semester.

#### 10.4 Practical/Viva-Voce examination marks shall be distributed as follows -

Internal Assessment	Marks
viva-voce examination by External Examiner	20
Practicals performed during the examination	0 203 00 30.51
Lab record/ Performance in practicals during the semester	50
Total	100

#### 10.5 Presentation at the end of Third Semester

100 marks

#### 10.6 Final presentation on the Dissertation at the end of the Fourth Semester

Evaluation by the External examiner	60 marks
Evaluation by the supervisor(s)	100 marks
Evaluation by other committee members	40 marks

#### 11. GRADING OF PERFORMANCE IN THE EXAMINATIONS

As a measure of student's performance, an 8-scale grading system using the following letter grades and corresponding grade points per credit shall be followed -

Performance	Letter Grade	Grade point
Excellent	A+	10
Very good	us of Technology Anii follow	Harkhael Univer
Good	B+	8
Fair	В	7
Average	C+	6
Pass	ter may register in ti <b>D</b> Summer	ne previous seme
Fail	mer Semester Such sZdents shal	nuz edi 0 ile Sun
Incomplete	nomenik wasan wasan da ad ilawa wa	311101100 0

# Method of Converting percentage marks to grades -

Percentage of Marks obtained	Letter Grade
90% and above	A+
80% to less than 90%	A
70% to less than 80%	B+
60% to less than 70%	В
50% to less than 60%	C+



40% to less than 50%	C
Less than 40 %	F
Failed due to shortage of attendance	I

#### 12. RECORDS OF ACADEMIC PROGRESS resents partially bearriefly already sold to the control of the

12.	1	Semester	Grade:	Point	Average	(SGPA)	shall	be	calculated	as	under:
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∑Semester (Course credits x Grade point)					
SGPA =					
	∑Semester (Course credits)				

12.2 The academic progress of the students in each semester shall be maintained in a grade card or transcript, wherein the Letter Grades awarded to students as well as the Grade Points secured by the students in the examinations, shall be entered. The transcript given to the students upon completion of their M. Tech. programme shall indicate the Cumulative Grade Point Average (CGPA) which shall be calculated as follows:

The CGPA shall be rounded off to one place of decimal.

In case a student was awarded an 'F' grade in a subject and subsequently the student again appeared in an examination for that subject and obtained a better grade, the earlier obtained 'F' grade shall be substituted with the better grade so obtained.

12.3 The Jharkhand University of Technology shall follow the following conversion between CGPA and percentage of marks.

Percentage marks =  $(CGPA - 0.5) \times 10$ 

#### 12.4 SUMMER SEMESTER

- i. Those students who were awarded an "F" or "T" Grade in upto three subjects in the previous semester may register in the Summer Semester. Those who have obtained "F" or "T" Grade in more than three subjects shall not be allowed to register in the Summer Semester. Such students shall repeat the subjects in the next corresponding semester.
- ii. The Summer Semester shall be of six weeks duration. Students registering in this semester shall attend classes, appear for the internal assessment, and in the End Semester Examination. Out of the marks obtained in the internal assessment in the previous semester and those in the summer semester, the better marks shall be considered for the result.
- iii. If the course happens to be an elective course, a student with "I/F" grade can substitute the same by another elective in the summer semester.



## 13.PRE-REQUISITES FOR QUALIFYING FOR AWARD OF M. TECH. DEGREE

In order to qualify for obtaining the M. Tech. degree a student must have secured an overall CGPA of 5.5 or more.

#### 14. AWARD OF CLASS AFTER COMPLETION OF COURSE

Marks/ CGPA	Class 1 201 to 1119 h 2010 m 10 00 3 10 100
75% and above (CGPA 8.0 and more)	First class with Honours
	First class base and samme program in a large and a second base and add to a because and
50% to less than 60% (CGPA 5.5 to less than 6.5)	Second class

#### 15. DISSERTATION SUBMISSION AND EVALUATION

15.1 The medium of expression for the dissertation shall be English language. In case it is proposed to submit the dissertation in any other language, approval from the Academic Council shall be obtained prior to admission in the M.Tech programme.

15.2 Selection of Topic and Appointment of Supervisor(s):

Every student shall carry out dissertation work in the third and fourth semester for full time M.Tech. program. For M.Tech. part time candidates, project work shall be carried out in the 5<sup>th</sup> and 6<sup>th</sup> semester. At the end of the second (FT)/third (PT) semester students shall apply in writing to the project coordinator in the concerned department for allotment of a suitable topic for carrying out the dissertation work. The student may propose a topic of dissertation, giving a synopsis of the proposal, along with names of the supervisors, for approval of the coordinator. In case he is not able to propose a topic, he may also select a topic proposed by the coordinator and work under the supervisor appointed for him. Final decision for allotment of supervisor shall be of the Department.

No person, other than a teacher of the Institute/ College, shall be permitted to supervise an M. Tech. dissertation work.

In order to promote interdisciplinary research co-supervisor(s) may be appointed from the same or other departments from within the concerned college/institute or from any other institute/R&D organisation/industry.

If a part of the dissertation work is required to be carried out at an external research center/laboratory/ or industry an external co-supervisor may be appointed in addition to the internal supervisor to facilitate the research work of the candidate. Such a person must have an M.Tech. Degree in the concerned discipline and a minimum of 2 years of industrial/R&D laboratory experience. No such condition shall apply for a supervisor from within the concerned institute/college.

In case the dissertation work is of interdisciplinary nature, a teacher from the sister



department, R&D organisation/lab or industry may be allowed to be appointed as a co-supervisor.

The Coordinator shall prepare a list comprising the names of the students, the topic allotted to each of them and name of the supervisor(s) allotted to each of the student. The list duly approved by the concerned Head of the Department shall be sent to the Academic Section of the JUT before commencement of the third semester.

# 15.3 Submission of Progress Report at the end of the Third Semester (Full Time)/Fifth Semester (Part Time):

At the end of the Third Semester for full time M. Tech, programme and Fifth semester for Part time M. Tech, programme, the students shall submit a brief progress report of the research work being carried out by him and deliver a seminar for the purpose.

The evaluation of the progress at the end of the Third Semester (Full Time) shall not be carried out unless he has put in not less than 75% of the working days in the institute/ or the place of work for the purpose of carrying out the project work. A relaxation of 10% may be permitted by the Head of the Department on medical grounds or other valid reason. A certificate of attendance shall be issued by the supervisor and forwarded to the coordinator.

In case a student is working outside the institute for project work, the concerned cosupervisor shall endorse the attendance of the candidate and submit to the supervisor. The same shall apply for submission of dissertation at the end of the fourth semester.

15.4 Evaluation of presentation on the project work at the end of the Third Semester: The Coordinator shall, in consultation with the Head concerned, notify the date of the presentation by the student on the project work. The performance of the student in the seminar shall be evaluated and the viva-voce shall be conducted by a committee.

The Evaluation Committee for evaluation of the presentation at the end of the Third Semester shall comprise of the following —

- i. Head of the concerned Department Chairman
- ii. One member of faculty from a Sister Department/Centre (to be nominated by the Director/Principal of the Institute/ College) Member
- iii. An internal examiner from the Department Member
- iv. Concerned Supervisor(s)

Presence of a minimum of three members of the committee shall be necessary for evaluating presentation. The presentation shall be open to all the faculty members and other students, so as to obtain their feedback and comments. These feedbacks and comments may be suitably incorporated into the dissertation under the advice of the supervisor.

The Committee shall evaluate and award separate marks for the presentation at the end of third semester. The marks so awarded shall be submitted to Examination Section of the concerned college/institute.



#### 15.5 Submission of the Dissertation:

At the end of the Fourth Semester for Full Time students and the Sixth Semester for Part time, the students shall be required to submit three typewritten or printed bound copies of the final dissertation and three copies of the Abstract/ Synopsis in about 500 words, to the coordinator through the supervisor, deliver a presentation and appear in a viva-voce examination on the same.

The Head of the Department shall propose names of three external examiners to the Director/Principal, who shall nominate one of these to act as the external examiner in the evaluation committee.

The evaluation committee shall comprise of the following -

- i. Head of the concerned Department Chairman
- ii. One external examiner nominated by director out of the proposal by the Head of the Department.
- iii. One member of faculty from a Sister Department/Centre (to be nominated by the Director/Principal of the Institute/ College) Member
- iv. An internal examiner from the Department Member
- v. Concerned Supervisor(s) 30 1136 das L.M. self-bab is wholed for the leader and because behavior

In respect of every dissertation a certificate shall be given by the supervisor to the effect that the dissertation is a record of work done by the student himself/ herself.

No dissertation shall be processed for examination unless it is accompanied by the prescribed fee.

15.6 The dissertation shall satisfy the following conditions —

- (i) The dissertation shall -
  - (a) be composed on the problem stated in the student's application made under Rule 15.3;
  - (b) embody the result of studies carried out by him/her;
  - (c) show evidence of the student's capacity for critical examination and judgment; and,
- (d) be satisfactory in presentation so far as language, style and form are concerned.
- (e) be accompanied by a certificate from the supervisor to the effect that the dissertation is a record of work done by the student himself/ herself.
  - (f) include a suitable abstract/synopsis of the work presented.
- (ii) The student shall indicate clearly and extensively in the preface to his/her dissertation and specially in notes
  - (a) the source from which referred information is taken;
  - (b) the extent to which he/she has availed himself/ herself of the work of others and the portion of the dissertation he/she claims to be his/ her original; and
  - (c) whether his/ her dissertation work has been conducted independently or in collaboration with others.



(iii) Plagiarism Check: Every student shall submit his dissertation to the Librarian of the concerned college library for plagiarism check. The librarian shall check the dissertation using an official licensed Anti-Plagiarism software provided by the University/ College/Institute and issue a Plagiarism Evaluation Certificate, stating the percentage of similarity. This certificate shall be attached with the Dissertation thesis.

Not more than 10% similarity shall be accepted.

- (iv) Students shall be encouraged to submit/publish a paper on his research work, such that it is published in a reputed journal or proceedings of a conference. Due weightage shall be given to such candidates by the evaluation committee.
- (v) The dissertation shall be typed as per the prescribed format and specifications as per the guidelines given in the Annexure II.
- 15.7 If a student fails in the presentation and the viva-voce examination on dissertation in the fourth semester (for Full Time students) or sixth semester (for Part Time students), he/she may be allowed to resubmit the dissertation and appear again for the presentation/viva-voce within a period of next six months. If the student fails to submit the dissertation within this extended period, he shall not be awarded the M.Tech. degree.

#### 16. AWARD OF DISSERTATION MARKS

The award of dissertation marks has been specified in clause 10.6 of these Regulations.

### 17. INTERPRETATION OF ORDINANCES

In case of any dispute, difference of opinion in interpretation of these Ordinances or any other matter not covered in these Ordinances, the decision of the Academic Council/ Executive Council shall be final and binding on all the matters.

Any reference to He/His shall also mean She/Her.

## 18. LEAVE RULES a manufacture of the state o

18.1 A student may avail a maximum of 30 days personal leave, including medical leave, in an academic year, such that not more than 20 days of leave are taken during a semester. No summer/winter vacation or any other kind of break shall be applicable for the M.Tech. students.

Leave not availed in during an academic year will not be carried over to the next academic year. Prefixing and suffixing of the statutory holidays will be as per the existing leave rules of the University.

Absence without obtaining prior sanction of the leave will entail loss of financial assistanceship for the period of absence, and may result in the termination of the student's admission in the M.Tech. programme on the recommendation of the supervisor/Head of the Department.

If a student is absent without permission for more than one month his/her admission to the M.Tech programme shall be cancelled.

- 18.2 GATE qualified students will not be eligible for the financial assistance/scholarship for the period of absence in case of personal leave.
- 18.3 Students may, however, obtain permitted leave for carrying out field work/laboratory work or for attending conferences, seminars etc.
- 18.4 The concerned Heads of the Department shall ensure that an attendance register is maintained in respect of M.Tech. students. At the end of every month, they will send a report of leave of all students to the Coordinator of the M.Tech. programme.

Students are required to develop a mendity relationship with fellow students. In particular, they are expected to show knowes and consideration to the new students and in the new students and to the logitude every year. Law hans ragging in any form to methody Any act of physical or mental pressurgation. At innor students, individually or in group, will be considered as an act of ragging. Kargeng viso includes foreing process students to meet seniors outside instante premises, or in places where a student has no valid reason to be present asking uncleared from the present and will be severely oest with, which may must considered as gross indirections and will be severely oest with, which may must exposite the mainture. Any incident of ragging mode or outside the campus must be reported to a Hostel Superintendent, the chief warden or a fletilly member designated no look after ragging issues by any student sentor or besker, who less witnessed an incident. Failure to report a ragging meident will be considered, a serious offence, even if noted. Failure to report a ragging meident will be considered, a rather offence even if sentor students and does not information at an enquary of ragging moderat, the matter will be to those against ragging uself. Willful withholding of complaint by a junce student does not anticontribution.

3 The following acts of omession and or commission and comparable offences shall constitute grees-violation of the code or conduct and are liable to invoke disciplinary, measures.

Furnishing false statement of any kind in the form of application for admission or for award of scholarship or prizes etc.

Furnishing take statement to the Disciplinary Committee, or willfully withholding information relevant to an enquiry

Organizing or participating in any activity that has perential for driving fellow students along lines of religion, caste, horse state, and batch of admission or any other unhealthy criterion.

Physical or mental barassment of fresher's through physical contact or oral abuse v. Getting involved in a brawl or fight with persons outside the Institute, either along or

in a group, irrespective or whom initiated the conflict.

I Willfully damaging or steakhily removing any property belongings of the

Adoption of anilar means in the assummations.

vite Possession, consumption or distribution of alcoholic drinks or any kind of

ix. Organizing or participating in any group activity except purely academic and scientific programmes in company with others in or outside the campus without orior



## **CONDUCT AND DISCIPLINE RULES**

Following rules shall govern the conduct and discipline of all students enrolled in M. Tech. programme:

- 1. Students shall show due respect to the teachers of the Institute, the Wardens and Hostel Superintendent of the Hostels, the Sports Officers and the Officers of the National Cadet Crops; proper courtesy should also be extended to the employees of the Institute and of the Hostels. They shall also pay due attention and courtesy to visitors.
- 2. Students are required to develop a friendly relationship with fellow students. In particular, they are expected to show kindness and consideration to the new students admitted to the Institute every year. Law bans ragging in any form to anybody. Any act of physical or mental pressurization of junior students, individually or in group, will be considered as an act of ragging. Ragging also includes forcing junior students to meet seniors outside institute premises, or in places where a student has no valid reason to be present, asking irrelevant questions or using abusive language. Ragging will be considered as gross indiscipline and will be severely dealt with, which may include expulsion from the institute. Any incident of ragging inside or outside the campus must be reported to a Hostel Superintendent, the chief warden or a faculty member designated to look after ragging issues by any student, senior or fresher, who has witnessed an incident. Failure to report a ragging incident will be considered a serious offence, even if one is not personally involved in it. If a junior student yields to any form of ragging by senior students and does not inform the Institute or Hostel Superintendents, or willfully withholds the information in an enquiry of ragging incident, the matter will be treated as indiscipline on the part of the junior student and invite punishment comparable to those against ragging itself. Willful withholding of complaint by a junior student does not automatically exempt a senior from punishment.
- 3. The following acts of omission and/or commission and comparable offences shall constitute gress violation of the code of conduct and are liable to invoke disciplinary measures:
- i. Furnishing false statement of any kind in the form of application for admission or for award of scholarship or prizes etc.
- ii. Furnishing false statement to the Disciplinary Committee, or willfully withholding information relevant to an enquiry.
- iii. Organizing or participating in any activity that has potential for driving fellow students along lines of religion, caste, home state, and batch of admission or any other unhealthy criterion.
- iv. Physical or mental harassment of fresher's through physical contact or oral abuse.
- v. Getting involved in a brawl or fight with persons outside the Institute, either alone or in a group, irrespective of whom initiated the conflict.
- vi. Willfully damaging or stealthily removing any property belongings of the Institute, Hostels or fellow students.
- vii. Adoption of unfair means in the examinations.
- viii. Possession, consumption or distribution of alcoholic drinks or any kind of hallucinogenic drugs.
- ix. Organizing or participating in any group activity except purely academic and scientific programmes in company with others in or outside the campus without prior



- permission of the Principal of the Institute.
- x. Mutilation or unauthorized possession of library books.
- xi. Not cooperating with faculty, officers investigating a potential disciplinary issue.
- xii. Resorting to no isy and unseemly behaviour, disturbing studies of fellow students.
- xiii. Disturbing in drunken state or otherwise an incident an academic or student function or any other public event.
- xiv. Not obeying traffic rules on campus, not following safety practices or causing potential danger to oneself or other persons in any way.
- xv. Displaying lack of courtesy and decorum, resorting to indecent behaviour anywhere within or outside the campus.
- xvi. Not intimating his/her absence to the Hostel Superintendent before leaving campus.
- xvii. Getting involved in an activity that violates state or national laws.
  - 4. Commensurate with the gravity of the offence, the punishment for an act of indiscipline may be
    - i. Reprimand, impose fine or take any other suitable measure.
    - ii. Debarment from medals and prizes.
    - iii. For economic offences (either misappropriation of money or damage to Institute property), the cost to the damage done will be recovered along with a penalty which
    - iv. may be up to ten times of the cost recovered.
    - v. Partial (one month or one semester) or complete debarment from campus placement,
    - vi. Reduction in grade in one or more courses.
  - vii. Expulsion from the Hostel.
  - viii. Rustication for a specified period, or outright expulsion from the Institute.
  - 5. All major acts of indiscipline, which may have serious repercussion on the students in general and/or which may warrant a uniform and more formalized nature of investigation, shall be handled by the Institute Disciplinary Committee appointed by Director/ Principal of the respective Institutes/ Colleges. The Disciplinary Committee shall investigate complaints; examine available evidence and award punishment. Recommendation of the committee, which will include the suggested punishment in case of guilt proven, will be forwarded to the Chairman of the Governing Body of the Colleges for necessary action. A copy of detailed report and action taken shall also be forwarded to the Academic Council and the Vice Chancellor, JUT.
  - 6. Proof of guilt need not necessarily be at the same level as necessary in a court of law. The committee, in order to protect the academic rights of a greater body of students, may award disciplinary measures if it is reasonably satisfied that such measures are in the greater interest of the students.
  - 7. Director/ Principal of the respective Institutes/ Colleges, at his discretion may take additional measures keeping in mind long term issues and impact on other aspects of Institute management. The Director/ Principal may make minor changes in the nature of punishment awarded or reduce the level and/or quantum of punishment if he feels appropriate.
  - 8. Acts which may be classified as 'crimes' rather than acts of indiscipline, will be reported to the state authorities; they include such acts as causing serious injury to fellow students or others, causing major damage to Institute property, being involved in



activities prejudicial to national security or to that maintaining communal harmony etc.

9. Cases of adoption of unfair means in an examination shall be dealt with by the Examination Disciplinary Committee of Jharkhand University of Technology. If adoption of unfair means is proved, the punishment may be, depending on the quantum of the offence and prior record, reduction of grade, de-registration of a course, expulsion for one or more semesters or outright expulsion from the Institute.

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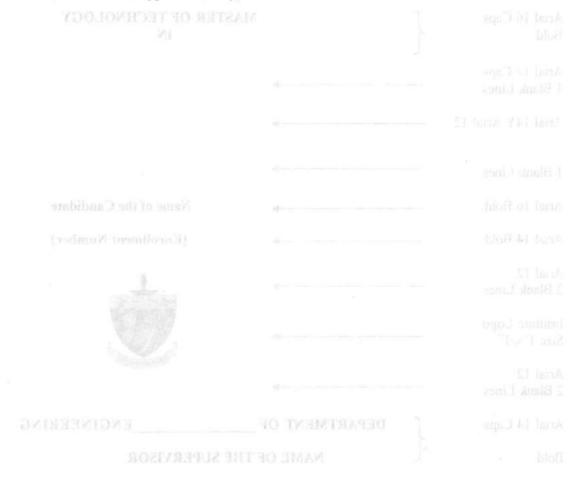
8 Acts which may be classified as crimes rather than acts of indiscipline, will be reported to the state authorities; they include such acts as causing serious injury to fellow students or others, causing major damage to institute property, being involved in

## ANNEXURE - II

## GUIDELINES FOR ARRANGEMENT OF CERTIFICATES AND TEXT IN M. TECH. DISSERTATION

- Cover Page (In prescribed colour and format) 1.
- 2. Inside Cover Page (Identical to Cover Page)
- 3. Declaration Certificate of Guide(s)
- 4. Certificate of Approval
- 5. Acknowledgments
- 6. Abstract
- Abstract
  Nomenclature (if any)
  Contents 7.
- 8

Main text of thesis should be typed on A4 size paper in Font Times New Roman (Size 12) with margin: Left 1.5", Right: 1", Top: 1", Bottom: 1" in 1.5 line spacing and arranged in suitable sections like introduction, Problem Definition, Literature Review, Computational / Design/ Experimental work/Case study, Results and Discussion, Conclusion, Future Scope of Work, References, Appendix (if any). The Thesis must be hard cover bound.





### ANNEXURE - III

# PROFORMA FOR THE COVER AND INSIDE PAGE

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The foregoing dissertation entitled "", is hereby approved as a creditable study of research topic and has been presented in satisfactory manner to warrant its acceptance as prerequisite to the degree for which it has been submitted.

Arial 14

It is understood that by this approval, the undersigned do not necessarily endorse any conclusion drawn or opinion expressed therein, but approve the thesis for the purpose for which it is submitted.

(Internal Examiner)

(External Examiner)

(Chairman)

Head of the Department

Colour scheme for cover page of post graduate thesis/project: M.Tech ->Light Blue