

सैंतीसवीं सिनेट बैठक का कार्यवृत्त

MINUTES OF THE 37th SENATE MEETING OF
IIT MANDI

7th OCTOBER, 2022



भारतीय प्रौद्योगिकी संस्थान मण्डी
कमांद- 175075, हिमाचल प्रदेश

INDIAN INSTITUTE OF TECHNOLOGY MANDI
KAMAND – 175075, HIMACHAL PRADESH

**INDIAN INSTITUTE OF TECHNOLOGY MANDI
KAMAND, HIMACHAL PRADESH**



37th SENATE MEETING OF IIT MANDI

FRIDAY, 7th OCTOBER, 2022

Item No.	Agenda items	Page No.
PART – A		
37.1	To confirm the minutes of the 36 th Senate meeting held on 15 th September, 2022.	3
37.2	To receive a report on the actions taken for the decisions taken in the 36 th Senate meeting held on 15 th September, 2022.	3
37.3	To consider the revision of Teacher Course Feedback (TCF) and Class Committee Meeting (CCM).	3-4
37.4	To consider the guidelines for JRF to SRF and issues related to monthly scholarship for M.Tech.(By Research)/M.Tech./I-Ph.D./Ph.D. scholars.	5-6
37.5	To consider the proposal of MoU for Joint Ph.D./M.Tech./M.Sc degrees and early admission in IIT Mandi for students of CFTIs and top 100 overall NIRF ranked Institutes.	6
37.6	To consider the revision in the Ordinances & Regulations of the M.Tech. (By Research)/Ph.D. programme.	6-7
37.7	To consider revision in the curriculum of I-Ph.D. (Physics) programme.	7-9
37.8	To consider the recommendations for updating the list of courses for CSE Minor.	9
37.9	To consider revision in the curriculum of MBA programme and calendar.	9-11
37.10	To consider the proposal of Academic Calendar (AY 2022-23) for B.Tech. first year 2022.	11-12
37.11	To consider the revision in the B.Tech. curriculum.	12
37.12	To consider the minor modification in Grading System.	13
37.13	To consider a policy across the Institute regarding Academic Ethics Policy.	13-16
37.14	To consider the proposal for Academic Structure.	16
37.15	To consider the proposal of Academic Calendar (AY 2022-23) Even Semester and (AY 2023-24) Odd semester.	16-19
37.16	To consider the proposal for Dual M.Tech. + Ph.D. programme.	19
37.17	Any other agenda item with the permission of the Chairman, Senate.	19
37.18	To report decisions/action taken by the Chairman, Senate.	20
PART – B		
37.19	Issues to be discussed by the Senate without Student Members being present.	20

INDIAN INSTITUTE OF TECHNOLOGY MANDI

Minutes of the 37th Senate Meeting of IIT Mandi held on 7th October, 2022 at 10:00 AM in Conference Room, C.V. Raman Guest House, IIT Mandi, Kamand.

The following were present:

In the Chair

Prof. Laxmidhar Behera, Director, IIT Mandi

Members:

Prof. Binay Kumar Pattnaik, Dept. of HSS, IIT Kanpur
Prof. Sandeep Verma, Dept. of Chemistry, IIT Kanpur & Secretary (SERB)
Prof. Subrata Ghosh, Professor, SBS, IIT Mandi
Prof. Suman Kalyan Pal, Professor and Chairperson SBS, IIT Mandi
Prof. Pradeep C. Parameswaran, Professor, SBS, IIT Mandi
Prof. Rajeev Kumar, Professor, SE and Dean (I&S), IIT Mandi
Prof. Rahul Vaish, Professor, SE and Dean (Academics), IIT Mandi
Dr. Viswanath Balakrishnan, Associate Professor, Erstwhile SE and Dean (F&A), IIT Mandi
Dr. Venkata Krishnan, Dean (SRIC & IR), IIT Mandi
Dr. Hitesh Shrimali, Dean (Students), IIT Mandi
Prof. Chayan K. Nandi, Professor, Erstwhile SBS, and Dean (Resource Gen. & Alumni Relation), IIT Mandi
Dr. Samar, Chairperson, SCEE, IIT Mandi
Dr. Atul Dhar, Chairperson, Erstwhile SE, IIT Mandi
Dr. Shyamasree Dasgupta, Chairperson, SHSS, IIT Mandi
Dr. C.S. Yadav, Co-ordinator, AMRC, IIT Mandi
Dr. Prosenjit Mondal, Co-ordinator, Bio-X Centre, IIT Mandi
Dr. Deepak Swami, Associate Professor, SE, IIT Mandi
Dr. Satyajit Thakor, Associate Professor, SCEE, IIT Mandi
Dr. Arti Kashyap, Associate Professor, SBS, IIT Mandi
Dr. Shyam Kumar Masakpalli, Associate Professor, SBS, IIT Mandi
Dr. Surya Prakash Upadhyay, Assistant Professor, SHSS, IIT Mandi
Mr. Rajesh Sinha, Chief Scientist & Head - Smart Machines Research Program, TCS
Dr. P. Anil Kishan, Associate Dean (Courses), IIT Mandi
Dr. Rajanish Giri, Associate Dean (Research), IIT Mandi
Dr. Tushar Jain, Head, CCE, IIT Mandi
Mr. Naresh Singh Bhandari, Deputy Librarian, IIT Mandi
Mr. Vivek Tiwari, Assistant Registrar (Academics), IIT Mandi
Prof. Satinder K. Sharma, Professor, Dean (Faculty), Co-ordinator C4DFED, Registrar I/c & Secretary, Senate, IIT Mandi.

Invitees:

Dr. Sarita Azad, Associate Professor, SHSS, IIT Mandi.
Dr. Parmod Kumar, Assistant Professor, SMME, IIT Mandi.
Dr. Rahul Shrestha, Associate Professor, SCEE, IIT Mandi.
Dr. Manoj Thakur, Chairperson, SoM, IIT Mandi.
Mr. Naveen Saisreenivas Thota, Student Academic Affairs Secretary, IIT Mandi (Special Invitee).
Mr. Shubham Ranjan, Student Research Affairs Secretary, IIT Mandi (Special Invitee).

Following Senate members/invitees could not attend the meeting due to prior commitments:

Prof. Siddhartha Mukhopadhyay, Dept. of Electrical Engineering, IIT Kharagpur.
Mr. Hemachandra Bhat, General Manager and Practice Head, Robotics Platforms, Wipro.
Prof. Prem Felix Siril, Professor, SBS, IIT Mandi.

Dr. Rajeshwari Dutt, Associate Professor, SHSS, IIT Mandi.
Prof. Bharat Singh Rajpurohit, Professor, SCEE, IIT Mandi.
Student General Secretary, IIT Mandi (Special Invitee).

The Chairman Senate extended a warm welcome to all the Senate members and Invitees attending the 37th Senate meeting of the Institute.

Thereafter, following agenda items were taken up.

Item No. 37.1: To confirm the minutes of the 36th Senate meeting held on 15th September, 2022.

The minutes of the 36th Senate meeting held on 15th September, 2022 at IIT Mandi were circulated to members of the Senate on 30th September, 2022 (through email) for comments, if any. No comments have been received on the minutes. Therefore, minutes of the 36th Senate meeting held on 15th September, 2022 were confirmed as circulated.

Item No. 37.2: To receive a report on the actions taken for the decisions taken in the 36th Senate meeting held on 15th September, 2022.

The Senate noted the actions taken on the decisions taken in its 36th meeting held on 15th September, 2022.

Item No. 37.3: To consider the revision of Teacher Course Feedback (TCF) and Class Committee Meeting (CCM).

On the recommendation of the Board of Academics, the Senate considered the proposal of revision in Teacher Course Feedback (TCF) and Class Committee Meeting (CCM) presented by Dr. Sarita Azad.

After detailed deliberation, the Senate resolved to approve the proposal, as placed below:

- There will be no CCM (except final CCM of grade finalization), but instead there will be two TCF including one at the time of mid sem.
- TCF questions will be different for lab and theory courses.
- The calculations of TCF for theory and tutorial courses will be statistical, based on two-level significance tests.
- Lab TCF will be more non-statistical and will be summarizing the feedback in pi-charts.
- Instead of comparing individual rating with the institute average, it will be now more statistically robust and will be based on class size.
- Students with a minimum attendance of 70% only will be eligible to submit TCF. Exceptions, if any, may be decided by Instructors.
- Pi-chart will be generated for mid-term assessment and will be available to faculty immediately.

- Final TCF will be collected preferably on hardcopy via other colleagues (nominated by school chairs/AD Courses in case of School Chair is the instructor). Dean Academic office will propose mechanism of the same.

Courses are divided into three categories for estimation of institute average and

1. Feedback sizes ≥ 100
2. Feedback sizes $\geq 30 < 100$
3. Feedback sizes > 5 and < 30

Calculation steps:

1. Procedure for estimation of final TCF

Sample calculation to estimate the TCF

Table 1 depicts a TCF where 10 questions are judged at the scale of 5 where

1 poor	2 Average	3 Good	4 Very good	5 excellent						
	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Q5</u>	<u>Q6</u>	<u>Q7</u>	<u>Q8</u>	<u>Q9</u>	<u>Q10</u>
<u>Poor (1)</u>										
<u>Average (2)</u>										
<u>Good(3)</u>										
<u>Very good (4)</u>										
<u>Excellent (5)</u>										

Table 1: Sample TCF format

Over all mean will be (Q1 weighted mean + Q2 weighted mean + Q3 weighted mean + + Q10 weighted mean) / 10
 Faculty performance can be assessed based on the below mentioned table

Feedback size	Poor	Below average	Average	Good	Very Good	Excellent	Exceptional
5-30	≤ 1.4	$1.4 < \text{and} \leq 1.8$	$1.8 < \text{and} \leq 2.2$	$2.2 < \text{and} \leq 3.2$	$3.2 < \text{and} \leq \text{all courses average of same size}$	All course average $<$ and $<$ Maxima of all courses of same size	\approx Maxima of all courses of same size
31-100	≤ 1.3	$1.3 < \text{and} \leq 1.7$	$1.7 < \text{and} \leq 2.2$	$2.2 < \text{and} \leq 2.7$	$2.7 < \text{and} \leq \text{all courses average of same size}$	All course average $<$ and $<$ Maxima of all courses of same size	\approx Maxima of all courses of same size
> 100	≤ 1.3	$1.3 < \text{and} \leq 1.6$	$1.6 < \text{and} \leq 2.0$	$2.0 < \text{and} \leq 2.6$	$2.6 < \text{and} \leq \text{all courses average of same size}$	Course average $<$ and $<$ Maxima of all courses of same size	\approx Maxima of all courses of same size

Item No. 37.4: To consider the guidelines for JRF to SRF and issues related to monthly scholarship for M.Tech. (By Research) /M.Tech./ I-Ph.D./Ph.D. scholars.

On the recommendation of the Board of Academics, the Senate considered the proposal of guidelines for JRF to SRF and issues related to monthly scholarship for M.Tech. (By Research)/M.Tech./I-Ph.D./Ph.D. scholars presented by Dr. Parmod Kumar.

After detailed deliberation, the Senate resolved to approve the proposal, as placed below:

Sl. No.		Recommendations
1	Duty Leave	Duty leave is permissible for performing experiments, attending Schools/Seminars /Conferences/ Workshops/Meetings/Collaborative Research etc. in India or abroad involving an active participation or field trips such as data collection, survey work, visit to industries and institutes (for dissertation work) etc. on recommendation of the concerned supervisor(s), /DC/APC forwarded by the School chairs/coordinator /Associate Dean (Research/Courses) on a case-to-case basis. This kind of leave is also permissible for institute related activities (e.g., sports, cultural fests, technical fests, etc.) on recommendation of the concerned supervisor(s), forwarded by the concerned Faculty-in-Charge / Officer for the particular activity and subsequent approval by school chairs on a case-to-case basis. Before forwarding the application, the concerned faculty in charge must ensure that TA duties have been taken care of. Duty leave up to a maximum period of one year (M.Tech.) and 1.5 yrs (Ph.D./I-Ph.D) in the entire duration of the programme is recommended. Such leave will be finally approved by the Dean Academics.
2	Fellowship of PhD/ MTech (R) (HTRA funded) students after thesis submission	On the recommendation of DC/APC, monthly fellowship may be continued till the completion of viva-voce or maximum period of 5 yrs (for Ph.D.), 6 yrs (i-PhD) and 3 yrs (M.Tech.(R)) students (whichever is earliest).
3	JRF to SRF conversion of PhD/I-Ph.D. students (All categories of full time)	If a PhD/i-PhD student has completed the comprehensive exam with satisfactory grade or above, then the student will be promoted to SRF (on the basis of satisfactory performance in the comprehensive examination) with effect from the day he/she completed 2 years (for PhD students) and 3 years (for i-PhD students) from date of registration.
4	Process of releasing monthly fellowship	The monthly scholarship of PhD/i-PhD/M.Tech. students (All categories of full time) will be released based on the attendance record of the student every month. Therefore, students must mark the attendance on all working days. Based on the absence of the student in a month, commensurate amount from the monthly fellowship will be deducted. If a thesis supervisor or TA supervisor is not satisfied with the performance of the student in any month, he/she must

		explicitly communicate his/her recommendation for unsatisfactory performance to academic section by the end of the month, otherwise it will be considered satisfactory by default.
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Item No. 37.5: To consider the proposal of MoU for Joint Ph.D./M.Tech./M.Sc degrees and early admission in IIT Mandi for students of CFTIs and top 100 overall NIRF ranked Institutes.

On the recommendation of the Board of Academics, the Senate considered the proposal of MoU for Joint Ph.D./M.Tech./M.Sc degrees and early admission in IIT Mandi for students of CFTIs and top 100 overall NIRF ranked Institutes, presented by Prof. Rahul Vaish, Dean (Academics).

After detailed deliberation, the Senate resolved to approve the proposal.

Item No. 37.6: To consider the revision in the Ordinances & Regulations of the M.Tech. (By Research)/Ph.D. programme.

On the recommendation of the Board of Academics, the Senate considered the proposal of revision in the Ordinances & Regulations of the M.Tech. (By Research)/Ph.D. programme presented by Prof. Rahul Vaish, Dean (Academics).

After detailed deliberation, the Senate resolved to approve the proposal, as placed below:

(a) Conversion from full time to part time PhD/M.Tech (R) programme to take up job:

1. If they have completed their a) Minimum residential requirement b) Course work c) Passed the comprehensive examination.
2. The candidate must produce the offer letter from the institution/organization which he/she proposes to join.
3. The candidate has to produce a "No Objection Certificate" from the Head of the institution/organization, which he/she proposes to join.
4. DC/APC recommendation on proposal of PhD/M.Tech (Res) completion plan.
5. To avail this option, candidate is expected to complete majority of dissertation work (endorsed by the DC/APC) during his/her stay in the institute.

(b) R.11(b)Course Work:

The Senate has withdrawn this clause that "*Doctoral committee may allow transfer of credit for courses already undergone by the research scholar in this Institute or other Institutions, provided they are the same or equivalent to those prescribed, and the performance level of the scholar in them meets the minimum requirements. The Senate, also recommended that students are not allowed to credit courses which are already credited/audited in his/her previous degree from IIT Mandi. Similar amendments/provisions be applicable on M.Tech(R) also.*

(c) R.21.2 of O& R International Students (MS/PhD/PG admissions)

Candidates who are not citizens of India (by birth or naturalized) and /or are OCI/PIO card holders will be treated as foreign national and will consume the seats of foreign nationals. For fellowship, they should fulfil the requirement of the sponsoring agency/authority. They must meet minimum education requirements applicable for regular

students. International students are expected to have working knowledge of English.

(d) R.21 of O&R Panel of Examiners: M.Tech (By Research)

The thesis of the research scholars shall be referred to two examiners chosen by the Chairman, Senate or his nominee from among the panel of examiners recommended by the Academic Progress Committee at its synopsis meeting

(e) Termination clause in MA/MSc/M.Tech

If a student fails to secure CGPA of less than 5.5 then he/she will be terminated.

(f) R.2.1 Eligibility criteria for M.Tech. admissions

After brief discussion, the Senate rejected the proposal and advised to follow the existing norms.

Item No. 37.7: To consider revision in the curriculum of I-Ph.D. (Physics) programme.

On the recommendation of the Board of Academics, the Senate considered the proposal of revision in the curriculum of I-Ph.D. (Physics) programme presented by Dr. C. S. Yadav.

After detailed deliberation, the Senate resolved to approve the proposal, as placed below:

- **The modification in the ordinance and regulation of the program**
 - Students are required to complete minimum 6 credits from the electives outside physics discipline and minimum 6 credits from physics elective.
 - Candidates who have qualified for the award of a three/four year Bachelor degree (B.Sc. or equivalent, after 10+2 or equivalent schooling) with Physics and Mathematics as two of the subjects, from a recognized university or Institute with at least 55 % marks (or 6.0 CGPA on a scale 10), and a valid JAM (Joint Admission test for Master program) or JEST (Joint Entrance Screening Test) score are eligible to apply for admission to the program.
 - For admission to I-PhD program, the concerned School shall adopt qualifying criteria for short-listing for written and/or interview and prepare a merit list of selected candidates. Reservation in the admission for the candidates belonging to the OBC/SC/ST/PWD candidates will be applicable as per the institute norms.
- **Temporary Withdrawal from the Program**

Student may be permitted by the Institute to withdraw from the program for a semester or longer due to ill health or on other valid grounds. Normally student will be permitted to discontinue from the program only for a maximum continuous period of two semesters. The period of leave shall be counted towards the duration of the program.
- **Minimum Requirement to continue in the Program**

A student must maintain a minimum CGPA of 7.0 at the end of first two semesters to continue in the I-PhD program. If the CGPA of any student falls below the required CGPA, the student will be placed in academic probation and an advisory note will be issued. If the CGPA continues to be less than 7.0 in the following semester also, then he/she shall be terminated from the I-PhD program. Such student may be allowed to exit

the program with M.Sc. (Physics) degree. Candidates continuing with I-PhD program, need to maintain the minimum CGPA of 7.0 through out the course in order to appear in the comprehensive exam.

➤ **Eligibility for the Award of M.Sc. Degree**

Student who is not able to maintain minimum CGPA will be required to fulfil following criteria to be eligible for the award of M.Sc. (Physics) degree, while exiting the program:

- Student has registered and successfully completed all the academic requirements of M. Sc. degree including prescribed courses and credits etc.
- Student has successfully acquired the minimum number of CGPA (5.0) for M.Sc. program, vide R.13 prescribed in the regulation of M.Sc. curriculum within the stipulated time.
- Student has submitted no dues to the Institute, Library and Hostels.
- Student has no disciplinary action pending against him/her.

➤ **Guide Allocation**

Guide allocation to the I-PhD students would be done by the course coordinator in consultation with the faculty advisor, at the beginning of the second academic year. Thereafter a doctoral committee will be formed for the student, which will monitor the progress of student's research work in line with the same guidelines as for the regular PhD students.

➤ **Exit option from the Program**

The students who are admitted to I-PhD program may be allowed to exit the program (if they wish to), as per the following guidelines:

- Such students are required to intimate about their choice of exit from I-PhD program before the end of first academic year.
- Student who wants to take exit from the I-PhD program are allowed to convert their program to Master of Science (MS) by Research. Student exercising this option will continue with their course work for the second academic year, followed by one-year additional research work. These students will have to comply with the norms of MS by Research. Such students will be allotted the research supervisor before the start of second academic year in the same manner as the regular I-PhD student, who will guide him/her for the second and third year research work. Such students will be required to complete their 'MS by Research' thesis work.

➤ **Fellowship norm**

The fellowship guideline for the students registered in the program will be as per the following:

- i. The students joining the I-PhD program would be given the fellowship of Rs 8,000 per month for the first year. The fellowship will be converted to HTRA fellowship (JRF) from the second academic year, subject to the fulfillment of the

all requirements such as CGPA, guide allocation, etc. The I-PhD students will be given fellowship for a maximum of 6 years from the date of registration.

- ii. Students who opt to exit from the program with 'MS by Research' will get a fellowship equivalent to the fellowship of MS by Research program (which is 12,400 per month currently) for the maximum of two more academic years only.
- iii. Students who have failed to achieve the minimum CGPA at the end of first academic year and are being terminated with MSc degree will not get any fellowship from second year onward.

➤ **Degree and Transcripts**

- i. The students would be awarded a single transcript for the program and two separate degrees (Master of Science in Physics and Doctor of Philosophy) after the completion of the program.
- ii. The students who are voluntarily opting for the exit from the program will be awarded a single transcript and the degree of Master of Science by Research after the completion of program.
- iii. The students who failed to achieve minimum required CGPA to continue the I-PhD program, will be given one transcript and degree of Master of Science in Physics if they fulfill all the requirements of the same.

The above-mentioned modification in curriculum will be effective from the 2022 batch.

Item No. 37.8: To consider the recommendations for updating the list of courses for CSE Minor.

On the recommendation of the Board of Academics, the Senate considered and approved the list of courses for Minor in CSE:

Foundation courses:

Data Structures and Algorithms (CS202)
System Practicum (CS307)

List of suggested courses:

CS207 Applied Database Practicum
CS208 Mathematical Foundations of Computer Science
CS201 Computer Organization (along with CS201P)
CS201P Computer Organization Lab (along with CS201)
CS304 Formal Languages and Automata Theory
CS309 Information and Database systems
CS310 Introduction to Computing and Distributed processes
CS302 Paradigms of Programming
CS514 Data Structures and Algorithms-II

Item No. 37.9: To consider revision in the curriculum of MBA programme and calendar.

On the recommendation of the Board of Academics, the Senate considered the proposal of revision in the curriculum of MBA programme and calendar presented by Dr. Manoj Thakur.

After detailed deliberation, the Senate resolved to approve the proposal, as placed below:

MBA Program in Data Science & Artificial Intelligence

Sl. No.	Semester I	Break	Semester II	Break	Semester III	Break	Semester IV	
1	Principles of Management	Social Immersion (0 credits)	Qualitative Research	Industry Internship (2 credits)	Ethical and Legal Aspects of Business		Entrepreneurship	
2	Communication Skills for Managers		Fundamentals of Data and Analytics		Neural Networks fundamentals for Business			
3	Financial Statement Analysis		Organizational Behavior		Digital Business Strategy, Models and Transformations			
4	Mathematical Foundations for DS and AI		Disruptive Technologies For Data Science		Electives (2 – 6 credits)		Management Project I (4 credits)	Electives (6 – 10 credits)
5	Managerial Economics		Strategic Management					
6	Marketing Management		Machine Learning for Business		Management Project II (6 credits)			
7	Decision Analysis		Introduction to AI and Automation					
8	Probability and Statistics		Financial Management					
9	Python Programming		Human Resource Management					
10	Creative Thinking, Problem Solving and Decision Making							
Credits	20		18	2	12-16		16 - 20	
Summary	20 credits compulsory		18 credits compulsory		10 credits compulsory		6 credits compulsory	
Total Credits Completed	20		38	40	52-56		70	

Academic Calendar for Odd Semester of the AY 2022-23				
(MBA DS & AI 2021 Batch Semester I)				
Day	September	October	November	December
Saturday		1 (Monday Schedule)		31
Sunday		2 Mahatma Gandhi's Birthday		
Monday		3		
Tuesday		4	1	
Wednesday		5 Dussehra	2	
Thursday	1	6	3	1

Friday	2	7	4	2
Saturday	3	8 (Tuesday Schedule)	5 (Monday Schedule)	3 (Wednesday Schedule)
Sunday	4	9 Milad-un-Nabi or Ide-Milad	6 (Wednesday Schedule)	4
Monday	5	10	7 Q1 Exams A	5
Tuesday	6	11	8 Guru Nanak's Birthday	6
Wednesday	7	12	9 Q1 Exams B	7
Thursday	8	13	10 Q1 Exams C	8
Friday	9	14	11 Q1 Exams D	9
Saturday	10	15 (Wednesday Schedule)	12 Q1 Exams E	10 (Thursday Schedule)
Sunday	11	16	13	11
Monday	12	17	14 Q2 Classes begin	12
Tuesday	13	18	15	13
Wednesday	14	19	16	14
Thursday	15	20	17	15
Friday	16	21	18	16
Saturday	17	22 (Thursday Schedule)	19 (Monday Schedule)	17 (Friday Schedule)
Sunday	18	23	20	18
Monday	19 Orientation Program begins	24 Deepawali	21	19
Tuesday	20	25	22	20
Wednesday	21	26	23	21
Thursday	22	27	24	22
Friday	23	28	25	23
Saturday	24	29 (Monday Schedule)	26 (Tuesday Schedule)	24
Sunday	25 Q1 Classes begin: Students report to FA (Friday Schedule)	30	27	25 Christmas Day
Monday	26	31	28	26 Q2 Exams A
Tuesday	27		29	27 Q2 Exams B
Wednesday	28		30	28 Q2 Exams C
Thursday	29			29 Q2 Exams D
Friday	30			30 Q2 Exams E

Item No. 37.10: To consider the proposal of Academic Calendar (AY 2022-23) for B.Tech. first year 2022.

On the recommendation of the Board of Academics, the Senate considered the proposal of Academic Calendar (AY 2022-23) for B.Tech. first year 2022 presented by Dr. P Anil Kishan, Associate Dean (Courses).

After detailed deliberation, the Senate resolved to approve the proposal, as placed below:

Academic Calender for Odd Semester of the AY 2022-23 (B.Tech 2022 Batch)					
Day	October	November	December	January	February
Monday	31			30	
Tuesday		1 (Classes Start)		31	
Wednesday		2			1
Thursday		3	1		2
Friday		4	2		3
Saturday	1	5	3		4
Sunday	2	6	4	1	5
Monday	3	7	5 CCM Week	2	6 Classes Start)
Tuesday	4	8 (Guru Nanak Birthday)	6	3	7
Wednesday	5	9	7	4	8
Thursday	6	10	8	5	9
Friday	7	11	9	6	10
Saturday	8	12	10	7	11
Sunday	9	13	11	8	12
Monday	10	14	12	9 TCF Week	13
Tuesday	11	15	13	10	14
Wednesday	12	16	14 (Midsem A & B)	11	15
Thursday	13	17	15 (Midsem C & D)	12	16
Friday	14	18	16 (Midsem E & F)	13	17
Saturday	15	19	17	14	18
Sunday	16	20	18	15	19
Monday	17	21	19	16 (Endsem A)	20
Tuesday	18	22	20	17 (Endsem B)	21
Wednesday	19	23	21	18 (Endsem C)	22
Thursday	20	24	22	19 (Endsem D)	23
Friday	21	25	23	20 (Endsem E)	24
Saturday	22	26	24	21 (Endsem F)	25
Sunday	23	27	25 (Christmas Day)	22 (Vacation starts for students)	26
Monday	24	28	26	23	27
Tuesday	25	29	27	24	28
Wednesday	26	30	28	25 Final CCM	
Thursday	27		29	26 (Republic Day)	
Friday	28		30	27 (Grade Submission)	
Saturday	29		31	28	
Sunday	30			29	
		21 Days	19 Days	10 Days	

Item No. 37.11: To consider the revision in the B.Tech. curriculum.

On the recommendation of the Board of Academics, the Senate considered the revision in the B.Tech. curriculum presented by Prof. Rahul Vaish, Dean (Academics).

After detailed deliberation, the Senate resolved to approve the proposal, as placed at **Annexure - A; Page No. 21 to 30.**

Item No. 37.12: To consider the minor modification in Grading System.

On the recommendation of the Board of Academics, the Senate considered the minor modification in Grading System presented by Mr. Naveen Saisreenivas Thota, Academic Affairs Secretary.

After detailed deliberation, the Senate resolved to approve the proposal, as placed at **Annexure - B; Page No. 31 to 32.**

Item No. 37.13: To consider a policy across the Institute regarding Academic Ethics Policy.

The Senate considered the modified policy across the Institute regarding Academic Ethics Policy presented by Dr. P Anil Kishan, Associate Dean (Courses).

After detailed deliberation, the Senate resolved to approve the proposal, as placed below:

What is not Academic Dishonesty?

- A student submitting the work done alone or in the knowledge of Course Instructor.
- Submitting a single group project wherever permitted.
- Students discussing the methodology of solution.
- Students discussing the course material for understanding.

Academic Dishonesty and Suggested Penalties:

Offense	Punishment
Cheating <ul style="list-style-type: none"> • Carrying <i>cheat sheets</i> or <i>chits</i> during exams. The student may or may not use the sheets during the exams. But possessing the chits will be treated as cheating [Severe]. • Keeping books/chits etc. in toilets [Severe]. • Possessing the electronic items/gadgets (smart phones, smart watches, tablets, similar items) during the exam. Calculators, wherever permitted, can be carried for the exam. • Using the electronic items/gadgets (smart phones, smart watches, tablets, similar items) during the exam. [Severe]. • Exchanging the answer books or question papers with some of the answers on it [Severe]. 	Cheating <ul style="list-style-type: none"> • Expel from the examination hall • Award 0 (zero marks) for the exam component. • No makeup Exam. • "F" grade for all offences. • Disciplinary action to be taken for severe issues, including semester drop.

<ul style="list-style-type: none"> • Sharing answers, soliciting answers, peeking into the answer sheets of others. • Any evaluation component such as assignment, project etc. if copied or plagiarised, will have the same serious consequence as that of copying in the exam. 	
<p>Information Falsification or Fabrication</p> <ul style="list-style-type: none"> • Falsification of data. [severe] • Date fabrication. [severe] 	<p>Information Falsification or Fabrication</p> <ul style="list-style-type: none"> • Students are warned and scholarship may be temporarily stopped for a period of time • Research students will be terminated. • These issues will be handled by Dean Academics separately.
<p>Facilitation of Academic Dishonesty (Applicable to TAs also)</p> <ul style="list-style-type: none"> • Providing the materials or others to the students without permission. • Providing the question papers or others to the students without permission. [severe] • Leakage of question papers 	<p>Facilitation of Academic Dishonesty (Applicable to TAs also)</p> <ul style="list-style-type: none"> • TAs are warned and their scholarship may be suspended for a 6 months of time. • The students (both student and TA) may be suspended for next semester, or the student is not allowed to register for the next semester. • If the TA is the main culprit, s/he may be terminated from the program. • For leakage of question papers, or attempting to leak the question papers, students will be terminated from the programs.
<p>On-line Cheating</p> <ul style="list-style-type: none"> • Creating instant <u>Whatsapp</u> or other groups and sharing the answers or solutions. [Severe] • Participating in Whatsapp or other groups while being aware that the group is used for dishonest academic purposes [Severe]. • Impersonation. [Severe] 	<p>On-line Cheating</p> <ul style="list-style-type: none"> • Award F grade for the whole group or class. • Disciplinary actions, including suspension, semester drop etc. may be taken. • Makeup Exam is not offered.

<ul style="list-style-type: none"> • Online screen sharing • Exchange answers with others. [Severe] • At the beginning, exchange <u>pdfs</u> to verify the sets. [severe] • Keeping phones, books <u>etc.</u> out of camera region. [severe] • Violations due to any other unforeseen or technological developments. 	
<p>Others</p> <ul style="list-style-type: none"> • Faking identities to get third party assistance. [severe] • Impersonation (both online and offline). [severe] 	<p>Others</p> <ul style="list-style-type: none"> • Disciplinary action will be taken • Exam component is cancelled • Suspension / stopping scholarship for a period of time
<p>Severe Issues</p> <ul style="list-style-type: none"> • Student impeding the investigation on academic dishonesty • More than one incidents • Forging signatures of a faculty/staff member • Tampering or modifying the evaluated answer sheets. • Leakage of Question Papers • Data Fabrication 	<p>Severe Issues</p> <ul style="list-style-type: none"> • Redoing/re-attending the course, in subsequent year. All the assignments, tests, quizzes <u>etc.</u> need to be submitted afresh. • For TAs, scholarship may be suspended for a period of time. • The student may be suspended for next semester, or the student is not allowed to register for the next semester. • Mandatory attendance in academic honesty workshop at the beginning of semester. • Academic and/or disciplinary probation • An intimation regarding the student's academic dishonesty will be sent to the parents. • "F" grade in all registered courses • Student is not allowed to fill the teacher and course feedback. • Barring from contesting in elections, applying for internships, placements etc.

Some More Comments:

- All the items with [severe] suffix are major issues.
- The appropriate authority / committee will deal any unforeseen violations due to technological advancements or others.
- Instructor needs to prove the offense.
- A workshop on the Academics need to organized at the beginning of the semester.
- The items mentioned are some general issues. List can be exhaustive. Faculty / committee will take the relevant action upon the incident.
- All the serious issues to be should be authorized or to be penalized by the concern committee appointed by Dean Academics.
- Serious issues attract disciplinary actions, in addition to the above-mentioned academic penalties.
- Issues related to Plagiarism related to external submissions, Data fabrication etc. should be handled by the Dean Academics through a different committee, specific to the case.
- All serious issues attract more than one punishment.
- Institute needs to sensitize the students about plagiarism, ethics, academic honesty etc., during the orientation programs. This document should be made available on the intranet.
- Student is allowed to present his/her points before being punished.
- Since the offences and violations are also criminal offences, the Institute may file a police complaint as per the IPC or provisions of the law.

Item No. 37.14: To consider the proposal for Academic Structure.

The Senate considered the proposal for Academic Structure presented by Prof. Rahul Vaish, Dean (Academics).

After detailed deliberation, the Senate resolved to approve the proposal, as placed at **Annexure - C; Page No. 33 to 34.**

Item No. 37.15: To consider the proposal of Academic Calendar (AY 2022-23) Even Semester and (AY 2023-24) Odd semester.

The Senate considered the proposal of Academic Calendar (AY 2022-23) for Even Semester and (AY 2023-24) Odd semester presented by Dr. P Anil Kishan, Associate Dean (Courses).

After detailed deliberation, the Senate resolved to approve the proposal, as placed below:

Academic Calendar for Even Semester (Feb-June, 2023) of AY 2022-23 (B.Tech 2022 Batch)						
Day	January	February	March	April	May	June
Monday	30				1	
Tuesday	31				2	
Wednesday		1	1 CCM Week		3	
Thursday		2	2		4	1 End Sem D
Friday		3	3 (No Instruction Day) EXPECTO		5 (Budha Purnima) EXODIA	2 End Sem E
Saturday		4	4 EXPECTO	1	6 EXODIA	3 End Sem F
Sunday	1	5	5 EXPECTO	2	7 EXODIA	4 End Sem G

Monday	2	6 Classes begin: Students report to FA (<i>Add/Drop of courses starts</i>)	6	3	8 (Friday Schedule)	5 End Sem H
Tuesday	3	7 Last date to submit Fees	7	4 (Mahavir Jayanti)	9	6 (Makeup Exam) Vacation begins for students
Wednesday	4	8	8 (Holi)	5	10	7 (Makeup Exam)
Thursday	5	9	9	6 (Friday Schedule)	11	8
Friday	6	10	10	7 (Good Friday)	12	9 Final CCM
Saturday	7	11	11	8	13	10 Grade Submission
Sunday	8	12	12	9	14	11 Vacation begins for Faculty
Monday	9	13	13	10	15 TCF Starts	12
Tuesday	10	14	14	11	16	13
Wednesday	11	15	15	12	17	14
Thursday	12	16	16	13	18	15
Friday	13	17	17	14	19	16
Saturday	14	18 (Maha Shivratri)	18	15	20	17
Sunday	15	19	19	16	21	18
Monday	16	20 Last date to add/drop courses	20	17	22	19
Tuesday	17	21	21	18	23	20
Wednesday	18	22	22	19	24	21
Thursday	19	23	23	20	25 Last day of teaching	22
Friday	20	24 Foundation Day	24	21	26	23
Saturday	21	25	25	22 (Id-ul-Fitr)	27	24
Sunday	22	26	26	23	28	25
Monday	23	27	27 Mid Sem A&B	24	29 End Sem A	26
Tuesday	24	28	28 Mid Sem C&D	25	30 End Sem B	27
Wednesday	25		29 Mid Sem E&F	26	31 End Sem C	28
Thursday	26 Republic Day		30 Mid Sem G&H	27		29 (Id-ul-Zuha)
Friday	27		31	28		30
Saturday	28			29		
Sunday	29			30		

Academic Calendar for Even Semester (Feb-June, 2023) of AY 2022-23						
Day	January	February	March	April	May	June
Monday	30 Classes begin: Students report to FA (<i>Add/Drop of courses starts</i>)				1	
Tuesday	31 Last date to submit Fees				2	
Wednesday		1	1		3	
Thursday		2	2		4	1 Final CCM
Friday		3	3 (No Instruction Day) EXPECTO		5 (Budha Purnima) EXODIA	2 Grade Submission

Saturday		4	4 EXPECTO	1	6 EXODIA	3 Vacation begins for Faculty
Sunday	1	5	5 EXPECTO	2	7 EXODIA	4
Monday	2	6	6	3	8 (Friday Schedule)	5
Tuesday	3	7	7	4 (Mahavir Jayanti)	9	6
Wednesday	4	8	8 (Holi)	5	10	7
Thursday	5	9	9	6 (Friday Schedule)	11	8
Friday	6	10	10	7 (Good Friday)	12	9
Saturday	7	11	11	8	13	10
Sunday	8	12	12	9	14	11
Monday	9	13	13	10	15 TCF Starts	12
Tuesday	10	14	14	11	16	13
Wednesday	11	15	15	12	17	14
Thursday	12	16 Last date to add/drop courses	16	13	18 Last day of teaching	15
Friday	13	17	17	14	19	16
Saturday	14	18 (Maha Shivratri)	18	15	20	17
Sunday	15	19	19	16	21 End Sem A	18
Monday	16	20 CCM Week	20 Mid Sem A&B	17	22 End Sem B	19
Tuesday	17	21	21 Mid Sem C&D	18	23 End Sem C	20
Wednesday	18	22	22 Mid Sem E&F	19	24 End Sem D	21
Thursday	19	23	23 Mid Sem G&H	20	25 End Sem E	22
Friday	20 Announcement of Comprehensive Exam Results	24 Foundation Day	24	21	26 End Sem F	23
Saturday	21	25	25	22 (Id-ul-Fitr)	27 End Sem G	24
Sunday	22	26	26	23	28 End Sem H	25
Monday	23 Last date to submit APC/DC Report	27	27	24	29 (Makeup Exam) Vacation begins for students	26
Tuesday	24	28	28	25	30 (Makeup Exam)	27
Wednesday	25		29	26	31	28
Thursday	26 Republic Day		30	27		29 (Id-ul-Zuha)
Friday	27		31	28		30
Saturday	28			29		
Sunday	29			30		

Academic Calendar for ODD Semester (Aug-Dec, 2023) of AY 2023-24						
Day	July	August	September	October	November	December
Monday	31			30		
Tuesday		1 Announcement of Comprehensive Exam Results		31		
Wednesday		2 Last date to submit APC/DC Report			1	
Thursday		3			2	
Friday		4	1		3	1 End Sem D
Saturday	1	5	2		4	2 End Sem E
Sunday	2	6	3	1	5	3 End Sem F

Monday	3	7 Classes begin: Students report to FA (Add/Drop of courses starts)	4	2 (Mahatma Gandhi's Birthday)	6	4 End Sem G
Tuesday	4	8 Last date to submit Fees	5	3	7	5 End Sem H
Wednesday	5	9	6	4	8	6 (Makeup Exam) Vacation begins for students
Thursday	6	10	7 (Janmashtami)	5	9	7 (Makeup Exam)
Friday	7	11	8	6	10	8 Final CCM
Saturday	8	12	9	7	11	9 Grade Submission
Sunday	9	13	10	8	12 (Diwali)	10 Vacation begins for Faculty
Monday	10	14	11	9	13	11
Tuesday	11	15 (Independence Day)	12	10	14	12
Wednesday	12	16	13	11	15	13
Thursday	13	17	14	12	16	14
Friday	14	18	15	13 (No Instruction Day) RANN NEETI	17	15
Saturday	15	19	16	14 RANN NEETI	18	16
Sunday	16	20	17	15 RANN NEETI	19	17
Monday	17	21 Last date to add/drop courses	18	16	20 TCF Starts	18
Tuesday	18	22	19	17	21	19
Wednesday	19	23	20	18	22	20
Thursday	20	24	21	19	23	21
Friday	21	25	22	20	24 Last day of teaching	22
Saturday	22	26	23	21	25	23
Sunday	23	27	24	22	26	24
Monday	24	28 CCM Week	25 Mid Sem A&B	23	27 (Guru Nanak's Birthday)	25 (Christmas Day)
Tuesday	25	29	26 Mid Sem C&D	24 (Dussehra)	28 End Sem A	26
Wednesday	26	30	27 Mid Sem E&F	25 (Tuesday Schedule)	29 End Sem B	27
Thursday	27	31	28 (Milad-un- Nabi)	26	30 End Sem C	28
Friday	28		29 Mid Sem G&H	27		29

Item No. 37.16: To consider the proposal for Dual M.Tech + Ph.D. programme.

The Senate considered the proposal for Dual M.Tech. + Ph.D. programme presented by Prof. Rahul Vaish, Dean (Academics).

After detailed deliberation, the Senate resolved to approve the proposal, as placed at **Annexure - D; Page No. 35.**

Item No. 37.17: Any other agenda item with the permission of the Chairman, Senate.

None.

Item No. 37.18: To report decisions/action taken by the Chairman, Senate.

The Senate noted the decisions taken by the Chairman, Senate on behalf of the Senate, as given in the agenda.

Item No. 37.19: Issues to be discussed by the Senate without Student Members being present.

None.

The meeting concluded with a vote of thanks to the Chair and to the Members.


Chairman, Senate


Registrar I/c & Secretary-Senate

Curriculum Review

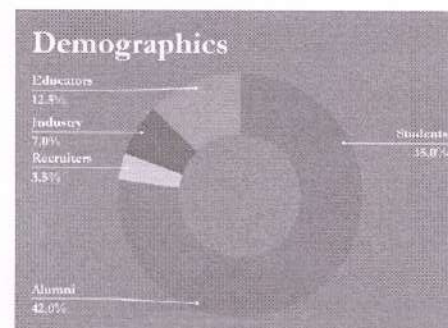
Dr. Subrata Ghosh - Curriculum Review Committee Chair
 Dr. Rahul Vaish - Dean Academics
 Dr. Anil Kishan - AD Courses
 Mr. Naveen Sai - Academic Affairs Secretary

Why Curriculum Review?

- ❑ No major revision of curriculum since the start of the institute 13 years ago
- ❑ Changing requirements in the industry
- ❑ Need to include up-and-coming topics in the curriculum
- ❑ Course correction for existing courses based on feedback given by faculty, students, alumni and industry personnel
- ❑ Removal of obsolete courses

Progress So Far

- ❑ Committee formed in October 2020
- ❑ **Mandate:** Tasked with reviewing current credit distribution and submit recommendations on required revision
- ❑ **Feedback:** Collected by Feedback Committee -
 - ❑ From academia, students, alumni, recruiters and industry personnel
 - ❑ A total of 200 responses were received
- ❑ Careful analysis of the feedback by Academic Secretaries, AD Courses and Dean Academics in conjunction with committee and sub-committee chairs

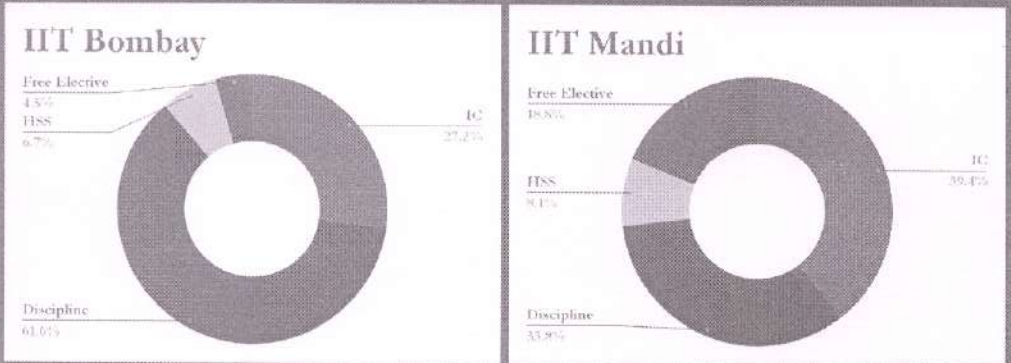


Observations

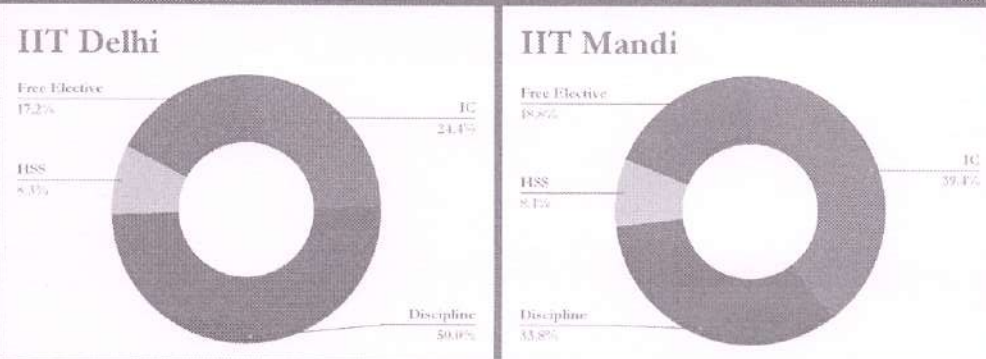
- ❑ General consensus was that IC courses constituted a larger portion of the BTech credits
- ❑ Necessity for discipline courses to have a greater proportion of credits
- ❑ Re-structuring RE and DP based on feedback
- ❑ Changes in core courses for various branches based on feedback and reviewing curriculum of other higher education institutes

Comparison

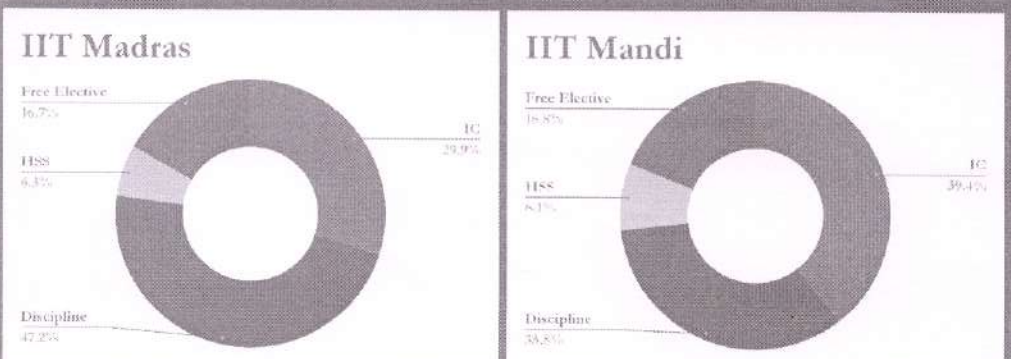
Credit Distribution - Comparison



Credit Distribution - Comparison

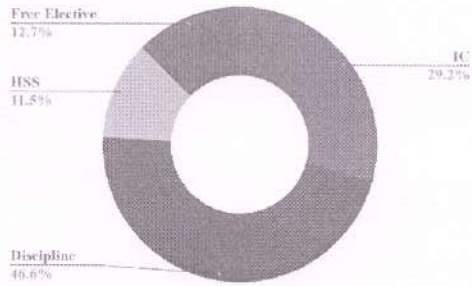


Credit Distribution - Comparison

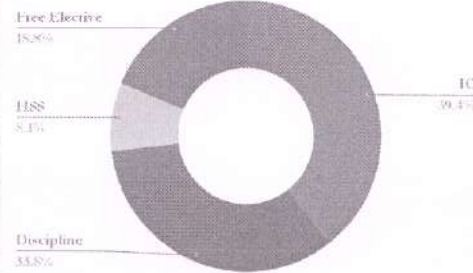


Credit Distribution - Comparison

IIT Kanpur

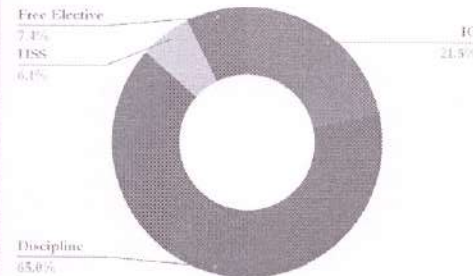


IIT Mandi

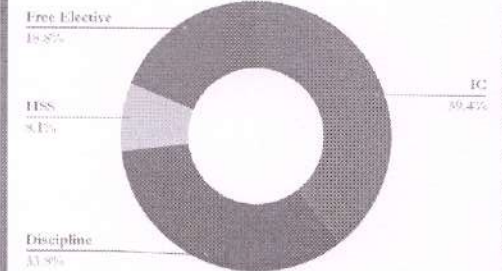


Credit Distribution - Comparison

IIT Roorkee

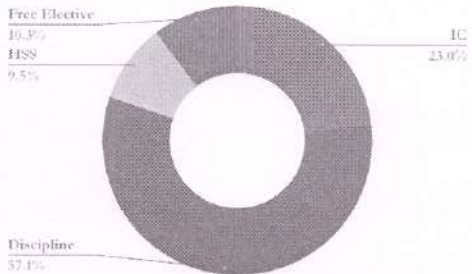


IIT Mandi

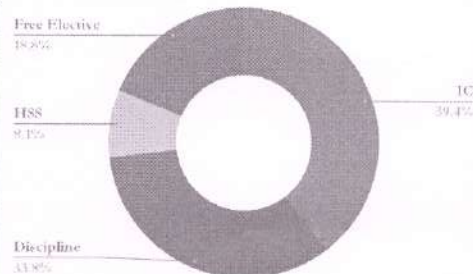


Credit Distribution - Comparison

IIT Hyderabad



IIT Mandi



Changes in IC

Suggested Changes in IC Courses

- Move discipline specific courses to DC of particular branches
- Change restrictions for internships
- Reorganize existing baskets
- Design Basket - Modifications in RE and DP

Move to DC

Curriculum of 5 different IITs was studied and we felt that the following courses would be better suited if they are part of DC than IC -

- IC141 and IC141P - Product Realization Theory
- IC142 - Engineering Thermodynamics
- IC160 and IC160P - Electrical Systems Around Us
- IC221 - Electrodynamics

School chairs of respective branches can decide whether these courses will be part of DC/DE/FE

Internship Rules

- IC010 - Internship (2 P/F credits)
 - Allow research, academic and industrial internships in/outside India
 - Helpful for any student (especially from EP and BioE) since they go towards research
- DP399P - Semester Internship (9 P/F credits)
 - Allow semester internship in final semester
 - Simplify the process of approval for on-campus semester internships
 - For on-campus internship, no approval required similar to 2 month internship
 - For off-campus internship, approval from FA, AD Courses and CnP Advisor

No change in credits is proposed

Reorganization of Baskets

- Remove the Engg. basket and move the courses in it to DC/DE/FE
- Mathematics courses are not covering enough topics that are useful for students later on in other courses
- Based on the recommendation from IC Mathematics Committee, we shall have 4 IC mathematics courses (each of 2 credits), covering the following topics -
 - Calculus
 - Complex Variables & Vector Calculus
 - Linear Algebra
 - ODE & Integral Transforms

Design Basket

Reverse Engineering

- ❑ Current RE course doesn't contain "reverse engineering" a product
- ❑ Doesn't cover other domains like software RE, neural network attacks, etc
- ❑ Introduce a branch-specific RE course in DC covering reverse engineering principles of respective branch
- ❑ Reduce the course to 1 credit (L-T-P-C : 0-0-2-1)

Design Practicum

- ❑ Now that FDP has been introduced, DP would not have any lecture component
- ❑ Hence, it can be reduced to a 3 credit course

Proposed Credit Distribution

Changes Summarized

Division	Sub-division	Credits
Institute Core	IC Compulsory	54
	IC Baskets	9
	HSS	13
Discipline	Discipline Core	33
	Discipline Electives	12
Electives	Free Electives	27
	MTP + ISTP or Equivalent	12
TOTAL		160



Division	Sub-division	Credits
Institute Core	IC Compulsory	39
	IC Baskets	6
	HSS	12
	IKS	3
Discipline	Discipline Core*	46
	Discipline Electives*	20
Electives	Free Electives	22
	MTP + ISTP or Equivalent	12
TOTAL		160

*The split between DC and DE is only suggested. Schools can decide the split for various branches. However, each branch must have at least 33 DC and 12 DE.

Changes Summarized

Division	Sub-division	Credits
Institute Core	IC Compulsory	39
	IC Baskets	6
	HSS	12
Discipline	Discipline Core*	12
	Discipline Electives*	20
Electives	Free Electives	22
	MTP + ISTP or Equivalent	12
TOTAL		160

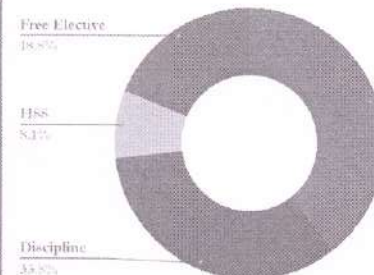


Division	Sub-division	Credits
Institute Core	IC Compulsory	39
	IC Baskets	6
	HSS + IKS	12
Discipline	Discipline Core*	12
	Discipline Electives*	20
Electives	Free Electives	22
	MTP + ISTP or Equivalent	12
TOTAL		160

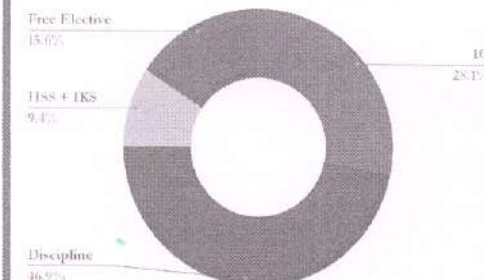
*The split between DC and DE is only suggested. Schools can decide the split for various branches. However, each branch must have at least 33 DC and 12 DE.

Credit Distribution - Comparison

IIT Mandi



IIT Mandi (Proposed Changes)



Final List of IC Courses

IC Compulsory Courses

Course Code	Course Name	Credits	Course Code	Course Name	Credits
ICXXX	Calculus	2	ICXXX	Linear Algebra	2
ICXXX	Complex Variables and Vector Calculus	2	ICXXX	ODE & Integral Transforms	2
IC140	Graphics for Design	4	ICXXX	Foundations of Design Practicum	4
IC152	Computing and Data Science	4	IC201P	Design Practicum	3
IC252	Data Science II	4	IC161	Applied Electronics	3
IC272	Data Science III	3	IC161P	Applied Electronics Lab	2
IC010	Internship	2	IC222P	Physics Practicum	2
TOTAL					39

IC Baskets

Basket	Course Code	Course Name	Course Credits	Basket Credits
IC - I	IC131	Applied Chemistry for Engineers	3	3
	IC136	Understanding Biotechnology and its Applications	3	
	IC230	Environmental Science	3	
IC - II	IC121	Mechanics of Particles and Waves	3	3
	IC240	Mechanics of Rigid Bodies	3	
	IC241	Materials Science for Engineers	3	
	CS202	Data Structures and Algorithms	3	

IC Baskets - Compulsion

Branch	Basket	Course Code	Course Name
BioE	IC - I	IC136	Understanding Biotechnology and its Applications
	IC - II	IC240	Mechanics of Rigid Bodies
CE	IC - I	IC230	Environmental Science
	IC - II	IC240	Mechanics of Rigid Bodies
CSE/DSE	IC - I	-	No Compulsion
	IC - II	CS202	Data Structures and Algorithms
EE	IC - I	-	No Compulsion
	IC - II	-	No Compulsion
EP	IC - I	IC230	Environmental Science
	IC - II	IC121	Mechanics of Particles and Waves
ME	IC - I	-	No Compulsion
	IC - II	IC240	Mechanics of Rigid Bodies

Renaming Courses

Course Code	Course Name	New Course Name
IC141	Product Realization Theory	Product Manufacturing
IC140	Graphics for Design	Engineering Graphics
IC152	Computing and Data Science	Introduction to Python and Data Science
IC252	Data Science II	Probability and Statistics
IC273	Data Science III	Machine Learning

Core Courses

DC-DE Split

Discipline	BioE	Civil	CSE	DSE	EE	EP	ME
DC (Min: 33)	42	49	39	38	51	37	51
DE (Min: 12)	24	17	27	28	15	29	15
Discipline Total: 66							

Bioengineering

Course Code	Course Name	Credits	Course Code	Course Name	Credits
BE201	Cell Biology	3-0-2-4	BE304	Bioinformatics	3-0-2-4
BE202	Biochemistry & Molecular Biology	3-0-2-4	BE305	Bioethics & Regulatory Affairs	1-0-0-1
BE203	Enzymology & Bioprocessing	3-0-2-4	BE3XX	Genetic Engineering	3-1-0-4
BE301	Biomechanics	3-0-2-4	BE3XX	Biosensing & Bioinstrumentation	3-0-2-4
BE302	Bioelectric Systems Modelling	3-0-2-4	BE3XX	Biomaterials	3-0-2-4
BE303	Applied Biostatistics	3-0-2-4	BEXXX	Reverse Engineering	0-0-2-1
TOTAL					12

Civil Engineering

Course Code	Course Name	Credits	Course Code	Course Name	Credits
CE201	Surveying Traditional and Digital	2-0-4-4	CE352	Transportation Engineering	3-0-0-3
CE251	Hydraulics Engineering	3-0-0-3	CE352P	Transporting Bgg. Lab	0-0-2-1
CE252	Geology and Geomorphology	2-0-2-3	CE354P	Construction Materials Lab	0-0-2-1
CE2XX	Introduction to Civil Engineering Profession	1-0-0-1	CE401	Design of Steel Structures	2-1-0-3
CE2XX	Construction materials	3-0-0-3	CE403	Water and Wastewater Engineering	3-0-0-3
CE301	Strength of Materials and Structures	3-0-0-3	CE4XX	Analysis of Structures	3-0-0-3
CE301P	Strength of Materials and Structures Lab	0-0-2-1	CE402	Geotechnical Engg. II	3-0-0-3
CE302	Geotechnical Engineering I	3-0-0-3	CE303	Water Resources Engineering	3-0-0-3
CE302P	Geotechnical Engineering Lab	0-0-2-1	CE351	Design of Reinforced Concrete Structures	2-1-0-3
CE304P	Hydraulics Engineering Lab	0-0-2-1	CE353P	Civil Engineering Drawing	0-0-2-1
CE305P	Environmental Engineering lab	0-0-2-1	CEXXX	Reverse Engineering	0-0-2-1
TOTAL					19

Computer Science and Engineering

Course Code	Course Name	Credits	Course Code	Course Name	Credits
CS201	Computer Organization	3-0-2-4	CS502	Compiler Design	3-0-2-4
CS208	Mathematical Foundations of Computer Science	3-1-0-4	CS562	Artificial Intelligence	3-0-0-3
CS302	Paradigms of Programming	3-0-2-4	CSXXX	Computer Networks	3-0-2-4
CS304	Formal Languages and Automata Theory	3-0-0-3	CSXXX	Design of Algorithms	3-0-2-4
CS309	Information Systems and Databases	3-0-2-4	CSXXX	Operating Systems	3-0-2-4
CSXXX	Reverse Engineering	0-0-2-1			
TOTAL					39

Data Science and Engineering

Course Code	Course Name	Credits	Course Code	Course Name	Credits
DS201	Data Handling and Visualization	2-0-2-3	DS402	Matrix Computations for Data Science	3-0-2-4
DS301	Mathematical Foundations of Data Science	3-1-0-4	DS403	Introduction to Statistical Learning	3-0-2-4
DS302	Computing Systems for Data Processing	3-0-2-4	DS404	Information Security and Privacy	3-0-0-3
DS303	Statistical Foundations of Data Science	3-0-2-4	DSXXX	Big Data: Management and Analytics	3-0-2-4
DS401	Optimization for Data Science	3-0-2-4	DSXXX	Times Series Analysis and Applications / Bayesian Data Analysis and Applications	2-0-2-3
DSXXX	Reverse Engineering	0-0-2-1			
TOTAL					35

Electrical Engineering

Course Code	Course Name	Credits	Course Code	Course Name	Credits
EEXXX	Electrical Systems Around Us	3-0-2-4	EE211	Analog Circuit Design	3-0-2-4
EEXXX	Signal & Systems	2.5-0.5-0-3	EEXXX	Communication Systems	3-0-2-4
EE210	Digital System Design	3-0-2-4	EE301	Control Systems	3-0-2-4
EE203	Network Theory	2.5-0.5-0-3	EEXXX	Power Electronics & Systems	3-0-2-4
EE311	Device Electronics for Integrated Circuits	3-0-0-3	EEXXX	Digital Signal Processing	3-0-0-3
EEXXX	Electromagnetic Theory	3-0-0-3	EEXXX	Computer Organization & Processor Architecture Design	3-2-0-4
EEXXX	Measurement and Instrumentation	2-0-2-3	EEXXX	Reverse Engineering	0-0-2-1
EE201	Electro-mechanics	2.5-0.5-2-4	TOTAL		51

Engineering Physics

Course Code	Course Name	Credits	Course Code	Course Name	Credits
EPXXX	Foundations of Electrodynamics	3-0-0-3	EP402P	Engineering Physics Practicum	1-0-5-4
EP301	Engineering Mathematics-2	3-1-0-4	PH502	Photonics	3-0-0-3
PH301	Quantum Mechanics and Applications	3-0-0-3	EP403	Physics of Atoms and Molecules	3-0-0-3
PH302	Introduction to Statistical Mechanics	3-0-0-3	EP401P	Engineering of Instrumentation	1-0-5-4
EE311	Device Electronics for Integrated Circuits	3-0-0-3	PH501	Solid State Physics	3-0-0-3
EP302	Computational Methods for Engineering	2-1-0-3	EPXXX	Reverse Engineering	0-0-2-1
TOTAL					37

Mechanical Engineering

Course Code	Course Name	Credits	Course Code	Course Name	Credits
ICXXX	Electrical Systems Around Us	3-0-2-4	ME308	Manufacturing Engineering 1	3-0-0-3
ME2XX	Product Manufacturing Technologies	2-0-2-3	ME309	Theory of Machines	4-0-0-4
ME2XX	Engineering Thermodynamics	3-1-0-4	ME310	System Dynamics and Control	3-0-0-3
ME205	Machine Drawing	1-0-3-3	ME311P	Design Lab 1	0-0-2-1
ME206	Mechanics of Solids	3-0-0-3	ME312P	Design lab 2	0-0-2-1
ME210	Fluid Mechanics	3-0-0-3	MEXXXP	Fluid Mechanics Lab	0-0-2-1
ME303	Heat Transfer	3-0-0-3	MEXXX	Manufacturing Engineering 2	3-0-0-3
ME305	Design of Machine Elements	3-1-0-4	MEXXXP	Heat Transfer Lab	0-0-2-1
ME307	Energy Conversion Devices	3-0-0-3	MEXXX	Reverse Engineering	0-0-2-1
IC241	Materials Science for Engineers	3-0-0-3			
TOTAL					51

Appendix

Benefits of Semester Internship in Final Semester

There are many benefits for students who wish to do semester-long internship in the final semester -

- ❑ In the curriculum of EE, ME and other branches, the main core courses are generally in the 3rd year. So, the students are not well prepared during the internship drives for the 6th semester. After the permission of the 8th-semester internship, students will be able to complete all the core courses and can perform well in the company's drive.
- ❑ Companies are preferring final semester internship since they can offer them both an internship in final semester and then hire them as full-time employees immediately after graduation.
- ❑ Most of the core companies prefer internships in the last semester. So it will be advantageous to core students.
- ❑ Many reputed companies have approached the CnP Cell specifically for final semester internship. Some notable among these are **Amazon, Samsung, Siemens, Qualcomm, NVIDIA, TI, STMicroelectronics**, etc.

❑ Curriculum Review Notification

❑ Curriculum of various IITs -

- ❑ IIT Bombay
- ❑ IIT Delhi
- ❑ IIT Madras
- ❑ IIT Hyderabad
- ❑ IIT Roorkee

❑ Internship Rules at IITs

Grading System

Mr. Naveen Sai - Academic Affairs Secretary
 Dr. Rahul Vaish - Dean Academics
 Dr. Anil Kishan - AD Courses

Current Grading System

Letter Grade	Grade Point Value	Interpretation	Distribution
O	10	Outstanding	5%
A	9	Very Good	15%
B	8	Good	30%
C	7	Average	30%
D	6	Below Average	15%
E	4	Pass	5%
F	0	Fail	-
I	0	Incomplete	-

Concerns in Grading System

- No 5 grade point, i.e. 'D' to 'E' is a jump from 6 to 4
- No separate grade for "Fail due to Short attendance"
- No provision for Audit courses

Proposed Grading System

Letter Grade	Grade Point Value	Interpretation
A ⁺	10	Outstanding
A	10	Excellent
A ⁻	9	Very Good
B	8	Good
B ⁻	7	Above Average
C	6	Average
C ⁻	5	Below Average
D	4	Marginal

Proposed Grading System

Letter Grade	Grade Point Value	Interpretation
I	0	Incomplete
P	0	Pass
F	0	Fail
FS	0	Fail due to Short attendance
AP	0	Audit Pass
AF	0	Audit Fail

Outstanding is rarely given and will be awarded only to students who have performed exceptionally well as compared to other students

Proposed Distribution of Grades

Letter Grade	Grade Point Value	Interpretation	Distribution
A ⁺	10	Outstanding	10%
A	10	Excellent	
A ⁻	9	Very Good	15%
B	8	Good	20 - 25%
B ⁻	7	Above Average	20 - 25%
C	6	Average	15 - 20%
C ⁻	5	Below Average	5 - 10%
D	4	Marginal	5%

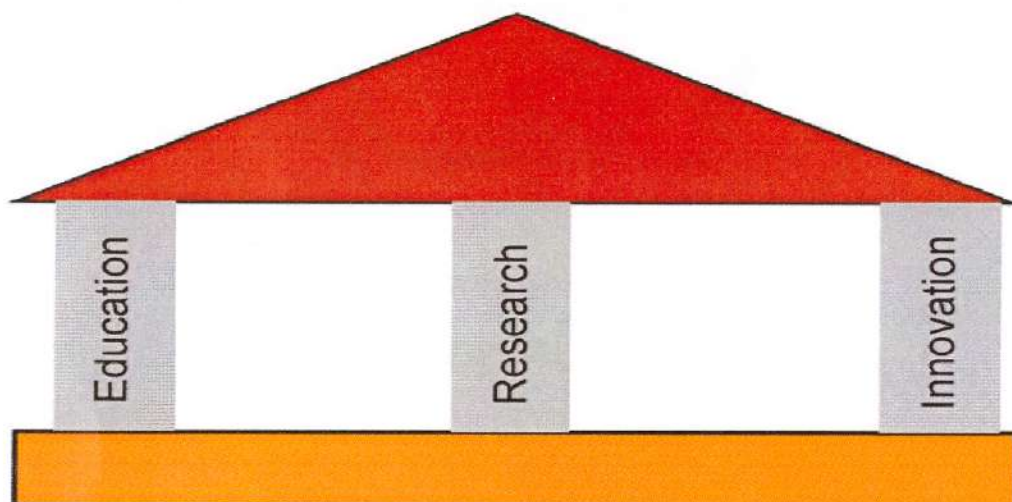
NOTE: This distribution is only indicative. Instructor has freedom to deviate from this distribution with proper justification during grade submission.

Audit Courses


Audit courses are different from Pass/Fail in the following aspects -

- Audit courses will not have any credits counted
- Students will have the option to Add/Drop an audit course upto 2 weeks after the normal Add/Drop date for the semester
- For courses with a cap on number of students, instructors can include some supernumerary seats for audit students
- AP will be awarded only if student clears the minimum criteria for a course (i.e at grade point 4)
- AF would be awarded if the student doesn't clear the minimum criteria for the course

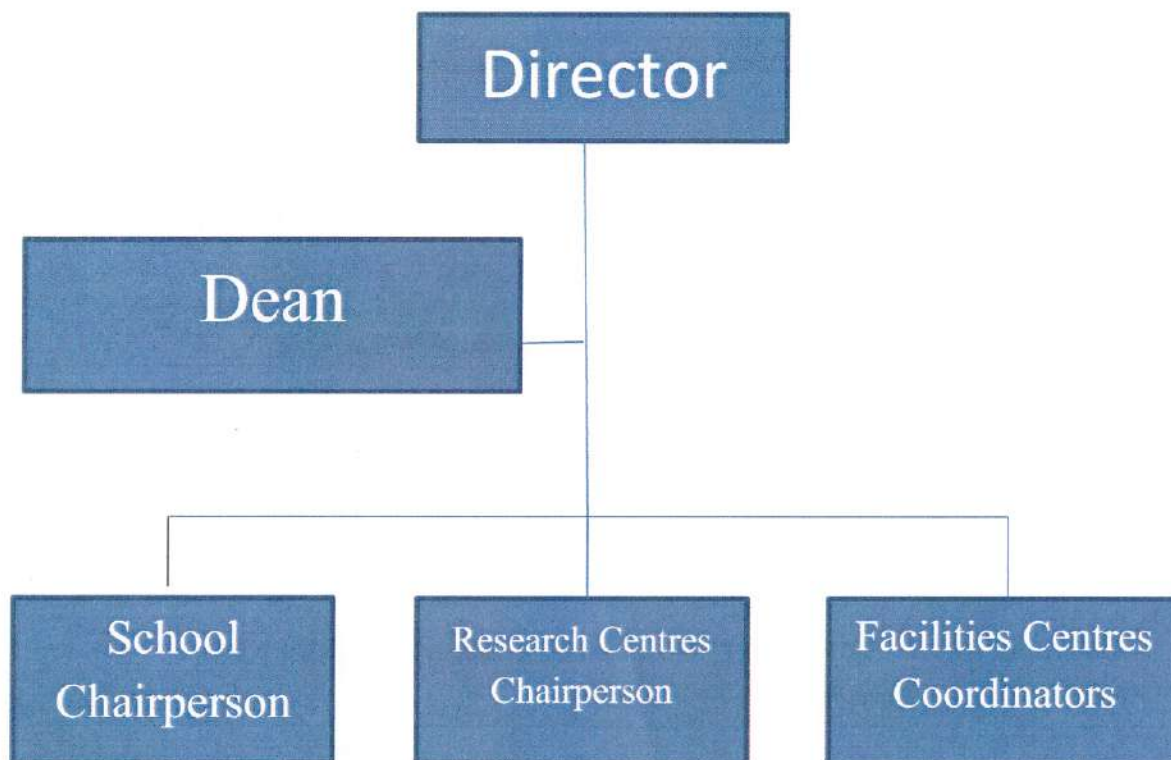
Academic Governance of IIT Mandi



SCHOOLS	
GOALS:	Excellence in teaching and research of specialized disciplines. Technology leadership in select areas. Streamline course offerings across various academic units in the institute.
Schools:	<ol style="list-style-type: none"> 1. School of Computing and Electrical Engineering (SCEE) 2. School of Humanities and Social Sciences (SHSS) 3. School of Civil and Environmental Engineering (SCENE) 4. School of Mechanical and Materials Engineering (SMME) 5. School of Physical Sciences (SPS) 6. School of Chemical Sciences (SCS) 7. School of Mathematical and Statistical Sciences (SMSS) 8. School of Biosciences and Bioengineering (SBBE) 9. School of Management (SM) 10.
Role and Responsibilities	Managed by School Chairperson Own specialized UG, PG and PhD programs. Offer all requisite courses as per the requirements of owned UG/PG/PhD programs Host core and affiliated faculty
INTERDISCIPLINARY RESEARCH CENTRES	
GOALS:	Foster interdisciplinary research. Focused on solving pressing societal problems. Breaking down school barriers & bringing together faculty from diverse disciplines.
Research Centres	<ol style="list-style-type: none"> 1. IKSHMA 2. Robotics and AI 3. 4.....5.....6.....7.....
Role and Responsibilities	Managed by Centre Chairperson Own PG and PhD programs. Offer all requisite courses as per the requirements of owned PG/PhD programs. Host core and affiliated faculty. Support UG programs Desirable to affiliate each faculty member with atleast 1 centre to foster Interdisciplinary research

FACILITY CENTRES	
GOALS:	Create a one-stop shop for researchers and faculty
Centres	1. BioX Center (BioX) 2. Advanced Materials Research Center (AMRC) 3. Center for Design and Fabrication of Electronic Devices (C4DFED) 4. Center for Continuing Education (CCE). 5.....
Role and Responsibilities	Managed by Coordinators Raise fund for maintenance and operations Academic programs Core faculty 

HIERARCHY



Major Changes and Recommendations

- Induction of Interdisciplinary Research Centres
- PFG has been dissolved
- Interdisciplinary courses will be offered by selected school/centre which will be decided by Dean Academics/Associate Dean (Courses) every year.
- Specialized Institute UG Core (IC) courses will be offered by respective school/Centre.

M.TECH. (R) +Ph.D. (DUAL DEGREE) PROGRAMMES

1. Categories of Admission

Candidates will be admitted to the M.TECH. (R) + Ph.D. (DUAL DEGREE) Programme in Engineering in full time regular mode.

2. Eligibility and Minimum Educational Qualifications

- (a) Candidate with B.Tech/BE degree from Centrally Funded Technical Institutes (CFTIs), with GATE qualification. In case CGPA \geq 8 on a 10.0 point scale (or equivalent), GATE is waived off.
- (b) Candidates with B.Tech/BE/M.Sc. degree with valid GATE score.

3. Admission procedure

As per existing regulations of M.Tech (by Res.)

4. Course work requirements

The scholar would need to complete a total of 24 credits of course work and other mandatory courses (e.g. Research Methodology) of PG level. It is mandatory to complete course work within one after admission. Minimum 7.0 CGPA is required to continue for dual degree programme. Grading will be done as same as UG programmes.

5. Comprehensive examination

Scholars are necessary to complete comprehensive examination within two years after the registration.

6. JRF/SRF conversion

Scholars are eligible for SRF after two years and successful completion of comprehensive examination (in line with PhD regulations)

7. Minimum and Maximum duration

Minimum duration is 3 years and fellowship will be continued for the maximum period of 5 years. DC may recommend further extension of 2 more years (without fellowship) as per existing PhD regulations.

8. Fellowship

Scholars will be awarding fellowship as per funding agency criteria and norms. For e.g. for HTRA fellowship, candidate should have qualified national level examination.

First year	31,000/- p.m
Second year	31,000/- p.m.
Third year	35,000/- p.m. (upon SRF conversion)
Fourth Year	35,000/- p.m.
Fifth Year	35,000/- p.m.

9. Exit option

- 1. Exit from the dual degree to single degree is not right of the student. However, DC can recommend such conversion only based on student academic performance.
- 2. In case of CGPA $<$ 7.0 in minimum 24 credits (After first year), student can be converted for M.Tech (by Res) from dual degree programme.
- 3. No fellowship will be granted after conversion to M.Tech (by Res.) programme.

Dual degrees will be awarded after successful completion of the programme.

Regulations which are not mentioned above will be considered as same as PhD/M.Tech (by Res.) O & R.