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भारतीय प्रौद्योगिकी संस्थान जोधपुर
INDIAN INSTITUTE OF TECHNOLOGY JODHPUR



अभिषद
Senate

42^{वीं} बैठक के कार्यवृत्त

**Minutes of 42nd Meeting
held on**

**24 July 2025 (8.00 am to 8.00 pm)
through online e-Senate webportal
and**

**25 July 2025 at 3.00 pm
in physical mode at Senate Room, Chanakya
Complex, Admin Wing
(West), IIT Jodhpur**

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Indian Institute of Technology Jodhpur



Minutes of 42nd Meeting

Senate

24th July, 2025 (e-Senate Portal) and
25th July, 2025 at 3:00 PM in physical mode at
Senate Room, Chanakya Complex, Admin Wing (West),
IIT Jodhpur

The following members participated in e-Senate meeting held on 24th July 2025 and/or Senate meeting held in physical mode on 25th July 2025:

1	Prof. Avinash Kumar Agarwal Director, IIT Jodhpur	Chairman
2	Prof. Bhabani Kumar Satapathy Deputy Director, IIT Jodhpur	Members
3	Prof. Munmun Jha Department of Humanities and Social Sciences IIT Kanpur	
4	Prof. Neeraj Jain Dean of Faculty Affairs (DOFA)	
5	Prof. Shree Prakash Tiwari Dean of Administration (DOAD)	
6	Prof. Samanwita Pal Dean of Research and Development (DORD)	
7	Prof. Atul Kumar Dean of Academic Affairs (DOAA)	
8	Prof. Kaushal A. Desai Dean of Resources & Alumni (DORA)	
9	Prof. Ram Prakash Dean of Infrastructure Planning (DOIP)	
10	Prof. Ankita Sharma Dean of Student Affairs (DOSA)	
11	Dr. Ankur Gupta Officiating Dean of International Relations (DOIR)	
12	Dr. Aashish Mathur Officiating Dean of Digital Infrastructure & Automation (DDIA)	
13	Prof. Mayank Vatsa, Deptt. of CS&E	
14	Prof. Richa Singh, Deptt. of CS&E	
15	Prof. Mitali Mukerji, Deptt. of BSBE	

16	Prof. Ajay Agarwal, Deptt. of EE
17	Prof. Gaurav Bhatnagar, Deptt. of Mathematics
18	Prof. Manikandan Paranjothy, Deptt. of Chemistry
19	Prof. Ananya Debnath, Deptt. of Chemistry
20	Prof. Rakesh Kumar Sharma, Deptt. of Chemistry
21	Prof. Mahesh Kumar, Deptt. of EE
22	Prof. Deepakkumar M. Fulwani, Deptt. of EE
23	Prof. B. Ravindra, Deptt. of ME
24	Prof. Anand Krishnan Plappally, Deptt. of ME
25	Prof. Prodyut Ranjan Chakraborty, Deptt. of ME
26	Prof. Rahul Chhibber, Deptt. of ME
27	Prof. Sushmita Jha, Deptt. of BSBE
28	Prof. Meenu Chhabra, Deptt. of BSBE
29	Prof. Asif Ekbal, SAIDE
30	Prof. Hari Narayanan V, SoLA
31	Prof. Sunil Kumar Khijwania, Deptt. of Physics
32	Prof. Bharat Singh Rajpurohit Head, Deptt. of EE
33	Prof. Suril Shah Head, Deptt. of ME
34	Dr. Avinash Sharma, <i>On behalf of Head, Deptt. of CS&E</i>
35	Prof. Amit Mishra Head, Deptt. of BSBE
36	Prof. Parag Arvind Deshpande Head, Deptt. of Chem. Engg.
37	Prof. Ravi K R Head, Materials Engg.
38	Prof. Anil Kumar Tiwari Head, SAIDE
39	Dr. Reetanjali Moharana Head, Deptt. of Physics

40	Dr. V.V. M.S. Chandramouli Head, Deptt. of Mathematics
41	Dr. Deepika Bhattu <i>Acting Head</i> , Deptt. of Civil & Infrastructure Engineering
42	Dr. Sandip Murarka Head, Deptt. of Chemistry
43	Dr. Deepak Saxena <i>Acting Head</i> , SME
44	Dr. Alok Ranjan Head, SoLA
45	Dr. Nimish Vohra Head, School of Design
46	Dr. Neha Jain Deptt. of BSBE
47	Dr. Vikky Anand Deptt. of Chem. Engg.
48	Dr. Rohan Diliprao Erande Deptt. of Chemistry
49	Dr. Saran Aadhar Deptt. of C&IE
50	Dr. Angshuman Paul Deptt. of C&SE
51	Dr. Saakshi Dhanekar Deptt. of EE
52	Dr. Dilpreet Kaur Deptt. of Mathematics
53	Dr. Arun Kumar R Deptt. of ME
54	Dr. Jaiveer Singh Deptt. of Materials Engg.
55	Dr. Santosh Mogurampelly Deptt. of Physics
56	Dr. Ramesh Metre, IDRD
57	Dr. Anuj Pal Kapoor SME
58	Dr. Bhivraj Suthar SAIDE
59	Dr. Farhat Naz SoLA

60	Dr. Gaurav Vinod Vaidya School of Design	
61	Chairman, Senate Under Graduate Committee (SUGC)	Permanent Invitees
62	Chairman, Senate Post Graduate Committee (SPGC)	
63	Chairman, Senate Online Education Committee (SOEC)	
64	Prof. S. R. Vadera, Advisor to the Director	Special Invitee
65	General Secretary, ACAC	Student Representatives
66	General Secretary, Student Senate	
67	Dr. Ankur Gupta, <i>Offg.</i> Registrar	Secretary to the Senate

The following members could not participate in the Meeting	
1.	Prof. Manoj K. Tiwari, Director, Indian Institute of Management, Mumbai
2.	Prof. Vinod K. Singh, Department of Chemistry, IIT Kanpur
3.	Dr. Goverdhan Dutt Puri, Executive Director, AIIMS Jodhpur
4.	Prof. Krishna P. Kaliappan, Department of Chemistry, IIT Bombay
5.	Prof. Surajit Ghosh, Deptt. of BB
6.	Prof. Subhashish Banerjee, Deptt. of Physics
7.	Prof. Ambesh Dixit, Deptt. of Physics
8.	Prof. Sandeep Kumar Yadav, Deptt. of EE

The following were the outcomes of the Senate Meeting:

S. No.	Items
42.1	Welcome by the Chairman, Senate
	<p>The Chairman welcomed all Senate members to the 42nd meeting, extending a special acknowledgment to the external members for their continued engagement and valuable contributions to the e-Senate proceedings. The Chairman also welcomed Prof. Sunil Kumar Khijwania from the Department of Physics to his first Senate meeting and acknowledged the significant contributions of the outgoing member, Prof. Somitra Kumar Sanadhya.</p> <p>He informed the Senate that, based on the feedback and inputs received from the Senators on the agenda items of the 42nd e-Senate meeting (held via the web portal on 24 July 2025), a ruling had been issued. The Registrar subsequently communicated this ruling to all Senators. Following this, the Registrar informed the members that the following agenda items would be discussed during the physical meeting:</p> <ul style="list-style-type: none"> A. Revised Concept Note for the new M.Des. Program in Smart Product Design from the School of Design. B. Revised Concept Note for a new M.Tech. Program in Bridge Engineering from the Department of Civil and Infrastructure Engineering. C. Revised Concept Note for a new M.Tech. Program in Drone and Anti-Drone Technologies from the Department of Mechanical Engineering. <p>The Chairman highlighted the Institute's recent progress and emphasized the importance of fostering a supportive academic environment, along with providing targeted mentorship to enable the professional growth of young faculty members. He concluded by encouraging all Senate members to actively participate and provide their inputs on each agenda item in future meetings through the e-Senate platform.</p>
42.1.1	Confirmation of Minutes of the 41st Meeting of the Senate held on 18-19 June 2025
	<p>The Senate confirmed the Minutes of the 41st Senate Meeting, as circulated.</p> <p>Following this, the Dean of Academic Affairs (DOAA) provided an update on procedural item no. 41.3.1: the "Recommendations to confer the Award of B.Tech., B.Tech. Minor/Specialization, M.Sc., M.Tech., MBA, MBA-Technology, MBA Double Degree, Masters (Medical Technologies), M.Sc.-M.Tech., and Ph.D. Degrees, PG Diploma/Certificate to students, who meet the various academic requirements.," which was approved in the 41st Senate meeting. He informed the Senate that the one M.Tech. student Roll No. (M23EEI008) had completed the graduation requirement, and he was added in the proceeding of the 11th convocation.</p> <p>The Senate took note of the update.</p>

42.1.2	Report on Action Taken on decisions of the 41st Meeting of the Senate held on 18-19 June 2025						
	<p>The Senate noted the Action Taken Report (ATR) on the decisions of the 41st Meeting of the Senate held on 18-19 June 2025 and noted that the following matter which is under process:</p> <table border="1" data-bbox="384 277 1453 517"> <thead> <tr> <th data-bbox="384 277 517 383">Item</th> <th data-bbox="517 277 1203 383">Discussion Item</th> <th data-bbox="1203 277 1453 383">Action Taken</th> </tr> </thead> <tbody> <tr> <td data-bbox="384 383 517 517">14.2.7</td> <td data-bbox="517 383 1203 517">Concept Note for a new B.Tech. Program in Electronics Engineering from the Department of Electrical Engineering</td> <td data-bbox="1203 383 1453 517">Under process</td> </tr> </tbody> </table>	Item	Discussion Item	Action Taken	14.2.7	Concept Note for a new B.Tech. Program in Electronics Engineering from the Department of Electrical Engineering	Under process
Item	Discussion Item	Action Taken					
14.2.7	Concept Note for a new B.Tech. Program in Electronics Engineering from the Department of Electrical Engineering	Under process					
42.2	Discussion Items						
42.2.1	Revised concept Note for New M.Des. Program in Smart Product Design from School of Design						
	<p>Dr. Gaurav Vinodrao Vaidya, from the School of Design, presented the revised concept note of new M.Des. Program in Smart Product Design from the School of Design in detail. He shared that the Master of Design (M.Des.) in Smart Product Design is crafted to meet the growing demand for professionals who can create innovative, user-centric products that harness the power of smart technology. This program is designed to bridge the gap between cutting-edge technologies, user experience (UX) principles, and design methodology. The curriculum aims to delve into the world of smart products, from connected devices to AI-powered systems, learning to design seamless interactions that not only leverage the power of technology but also enrich lives of people.</p> <p>Objectives of the Program</p> <p>The M.Des. in Smart Product Design aims to cultivate a new breed of design professionals who can:</p> <ul style="list-style-type: none"> • Translate user needs and market trends into intelligent product concepts with a comprehensive understanding of the interplay between technology and design. • Integrate hardware, software, and user interfaces (UIs) seamlessly into product development. • Apply design methodologies to create user-centered smart products. • Understand and utilize emerging technologies like AI, machine learning, XR (Extended Reality), and the Internet of Things (IoT) in product design. • Develop strong communication and collaboration skills to work effectively with cross-functional teams. <p>This program prepares graduates to lead the design of smart products that are not only technologically advanced but also intuitive, user-friendly, and solve real-world problems.</p> <p>Eligibility for Admission</p> <ol style="list-style-type: none"> 1. A valid CEED scorecard (mandatory only for institute-sponsored seats). 2. A passing grade in any one of the following qualifying degrees: <ol style="list-style-type: none"> a. For institute-sponsored seats: Four or more years of Bachelor's Degree completed on or before AY 2025. b. For self-sponsored seats: Three years of Bachelor's degree completed on or before 2024, or four or more years of Bachelor's degree completed on or before 2025. 3. Professional Diploma in Design: 10+2+4 years (minimum four-year diploma program). 						

4. GD Art (4-year program after 1-year foundation. Minimum entry requirement 10th pass) Additionally, one year of professional experience in design areas is required.

5. Master's Degree, or an equivalent degree as decided by IIT Jodhpur.

Program Structure

Semester 1	Type 1	Type 2	L	T	P	Credits
Design Thinking*	Compulsory	Graded	3	0	0	3 Credit
Interaction Design	Compulsory	Graded	3	0	0	3 Credit
Studies in Form and Aesthetics	Compulsory	Graded	3	0	0	3 Credit
Nature of Materials and Processes	Compulsory	Graded	3	0	0	3 Credit
Non-Graded I	Compulsory	Non-graded				0 Credit
Total						12

Semester 2	Type 1	Type 2	L	T	P	Credits
Elective - 1	Elective	Graded				3 Credit
Elective - 2	Elective	Graded				3 Credit
Elective - 3	Elective	Graded				3 Credit
Elective - 4	Elective	Graded				3 Credit
Total						12

Semester 3	Type 1	Type 2	L	T	P	Credits
SPD Thesis (Phase I)	Thesis	Graded	0	0	32	16 Credit
Non-Graded II	Compulsory	Non-graded				0 Credit
Total						16

Semester 4	Type 1	Type 2	L	T	P	Credits
SPD Thesis (Phase II)	Thesis	Graded	0	0	32	16 Credit
Total						16

*Existing course; if more than 30 students register for this course, the class will be split into two sections, with different instructors teaching each section concurrently. In this case, each instructor will be assigned 3 credits. This provision will be available for any future course (that is expected to have an immersive, studio-based pedagogy), as recommended by the SFB.

Electives

Course	L-T-P	Credits
Product Visualisation and Ideation	3-0-0	3 Credit
Introduction to IoT and Mechatronic Systems	3-0-0	3 Credit
ML and PR for Smart Product Design	3-0-0	3 Credit
Interactive Data Visualization	3-0-0	3 Credit
Computer Aided Design	3-0-0	3 Credit
Product Semantics	3-0-0	3 Credit
Nature-inspired Design	3-0-0	3 Credit
Product Ergonomics	3-0-0	3 Credit
Advanced CMF Strategies for Smart Product Design	3-0-0	3 Credit
Special Topics in Smart Product Design	3-0-0	3 Credit

Credit distribution

Course type	Total Courses	Credits
Compulsory	4	12
Electives	4	12
Non Graded	2	0
Thesis	2 (16+16)	32
Total		56

The Senate discussed the revised concept note in detail and recommended the following:

- (a) A three-year B.Sc. degree shall not be considered even for sponsored candidates. The eligibility criteria should be a four-year undergraduate degree;
- (b) The list of elective courses should be expanded to provide greater flexibility and academic breadth;
- (c) A practical component must be incorporated into the L-T-P structure, in alignment with the applied nature of the program; and
- (d) The course should not be offered in a modular format; it must follow the standard L-T-P structure as approved by the Senate.

The Senate emphasized that the School must adhere to the L-T-P structure approved by the Senate for both existing and newly proposed programs. Any deviation from this structure- such as offering courses in a modular format or adopting an alternative L-T-P structure- must receive prior approval from the Senate before implementation in the teaching-learning process.

	<p>In light of the above comments, the Senate further recommended that the teaching of the four core courses scheduled for the first semester of this programme may commence for the admitted students. The revised L-T-P structure must be communicated to the Senate and strictly adhered to as approved. Additionally, the Senate advised that the proposal be revisited and a revised version be presented at the upcoming Senate meeting through the Senate Postgraduate Committee (SPGC).</p> <p style="text-align: right;">Action: Head School of Design</p>
<p>42.2.2</p>	<p>Revised Concept Note for a new M.Tech. Program in Bridge Engineering from the department of Civil and Infrastructure Engineering</p>
	<p>Dr. Deepika Bhattu from the Department of Civil and Infrastructure Engineering presented the proposal for a new M.Tech. Program in Bridge Engineering. She shared that all the inputs of the 40th Senate Meeting have been incorporated in the revised Concept Note and Curriculum.</p> <p>Objective of the program</p> <p>This program aims to impart in-depth knowledge of bridge structure design, construction, materials, failure, protection, and maintenance. This program is tailored for civil engineering graduates and working professionals who wish to pursue a career in the area of bridge engineering. The postgraduate program is composed of coursework and a thesis component.</p> <p>The coursework aims to provide the necessary fundamentals in the areas of bridge materials, construction practices, codal provisions, analysis, design, and durability. Advanced topics such as computational modeling, predictive maintenance, health monitoring, and condition assessment are also included. Besides, the course covers the topics of the bridge scour and protective measures. The thesis component aims to provide hands-on experience in the aforementioned topics, based on the mutual interest of the student and faculty. There is a provision to involve the industry experts in a few of the teaching modules. It can provide valuable insights into a few practical implementation aspects.</p> <p>Expected Graduate Attributes</p> <ul style="list-style-type: none"> • Strong foundation in the analytical, experimental, and computational methods to study various aspects of bridge engineering. • Thorough coverage of the various design philosophies used for bridge design and to develop novel bridge designs. • Thorough coverage of various construction materials and technologies used in bridge engineering. • Detained exposure on the various real-world problems and distresses associated with bridges. • Comprehensive background on various deterioration mechanisms and protective measures associated with bridge structures.

Learning Outcomes

- Achieve proficiency in the analytical, experimental, and computational modeling aspects of bridge engineering.
- Detailed understanding of structural analysis, design, and maintenance of bridges.
- Understanding of various construction materials and technologies used for bridge structures.
- Understanding of possible failure and deterioration mechanisms in bridge structures.
- Ability to analyze real-world problems, distresses, and condition assessment methodologies associated with bridges

Program Structure

Semester-wise course and credit distribution

Cat.	Course Title		L-T-P	Credits	Cat.	Course Title		L-T-P	Credits
Semester I					Semester II				
PC	CIL7xxx	Mathematics for Civil Engineering	3-0-0	3	PC	CIL7320	Design of Bridge Structures	3-0-0	3
PC	CIL7xxx	Advanced Solid and Fluid Mechanics	3-0-0	3	PE	CIL7xxx	Program Elective - 2	3-0-0	3
PC	CIL7xxx	Analysis of Bridge Structures	3-0-0	3	PE	CIL7xxx	Program Elective - 3	3-0-0	3
PE	CIL7xxx	Program Elective - 1	3-0-0	3	PE	CIL7xxx	Program Elective - 4	3-0-0	3
NG1	HSN7xxx	Non-Graded I	1-0-0	S/X	NG2	HSN7xxx	Non-Graded II	1-0-0	S/X
Total				12	Total				12
Semester III					Semester IV				
MT	CIT8xxx	M.Tech. Thesis	0-0-32	16	MT	CIT8xxx	M.Tech. Thesis	0-0-32	16
Total				16	Total				16

List of Program Core

S. No.	Course Number	Course Title	L-T-P	Credits
1.	CIL7xxx	Mathematics for Civil Engineering	3-0-0	3
2.	CIL7xxx	Advanced Solid and Fluid Mechanics	3-0-0	3
3.	CIL7xxx	Analysis of Bridge Structures	3-0-0	3
4.	CIL7xxx	Design of Bridge Structures	3-0-0	3

List of Program Electives

S. No.	Course Number	Course Title	L-T-P	Credits
1.	CIL7xxx	Bridge Site Selection, Protections and Foundation Safety	3-0-0	3
2.	CIP7xxx	Bridge Materials, Construction and Evaluation	3-0-0	3
3.	CIL7630	Finite Element Method	3-0-0	3
4.	CIL7460	Structural Dynamics	3-0-0	3
5.	CIL7xxx	Advanced Concrete Technology	3-0-0	3
6.	CIL7670	Prestressed Concrete Structures	3-0-0	3
7.	CIL7xxx	Cable Supported Bridges	3-0-0	3
8.	CIL7xxx	Bridge Foundations	3-0-0	3
9.	CIL7770	Introduction to Structural Health Monitoring	3-0-0	3

Overall Structure (M. Tech. in Bridge Engineering)

S. No.	Category	Course Title	Total Courses	Total Credits
1	PC	Program Core	4	12
2	PE	Program Elective	4	12
3	NG	Non-Graded	2	0
4	MT	M.Tech. Thesis	2 (16+16)	32
Total				56

The Senate discussed the revised concept note in detail and approved the program, while commending the efforts of the Department of Civil and Infrastructure Engineering. The Chairman Senate suggested removing the adjective "Introduction" from all course titles of the program to improve clarity and consistency. The Senate also recommended inclusion of practical/laboratory components in relevant courses to enhance the applied learning experience. All Heads of Departments were reminded that a minimum of 56 graded credits is required for an M.Tech. program; however, this may exceed slightly based on program-specific requirements. Furthermore, the Senate authorized the Chairman to approve any additions or modifications to the courses, if proposed by the department through the Senate Postgraduate Committee (SPGC).

The detailed revised concept note is placed as **Annexure - 1**.

Action: Head, Civil and Infrastructure Engineering

42.2.3**Revised Concept Note for a new M.Tech. Program in Drone and Anti-Drone Technologies from the Department of Mechanical Engineering**

Dr. Arun Kumar R from the Department of Mechanical Engineering presented the Concept Note for a new M.Tech. Program in Drone and Anti Drone Technologies before the Senate. He shared that Drone technologies have rapidly advanced and established themselves as transformative tools across a wide range of military and civilian applications. These include precision aerial strikes, logistics and package delivery, agricultural monitoring and spraying, surveillance in both urban and remote settings, support for disaster relief and search-and-rescue operations, as well as aerial imaging and videography for public gatherings, infrastructure inspection, and sporting or cultural events. The adaptability and versatility of drones have led to their widespread adoption across government agencies, industries, and research institutions, creating a thriving ecosystem of innovation and deployment. However, the increasing ubiquity of drones has also introduced new security challenges, necessitating the parallel development of robust Anti-Drone Technologies.

Overall Program Philosophy

M. Tech. Program in Drone and Anti-Drone Technologies at IIT Jodhpur is designed to have a unique character such that it focuses on content that has practical relevance and on imparting skills that help in developing technologies and products in order to provide solutions for the current and future needs of the country. This is planned to be enabled through (1) the core program to provide breadth and basic hands-on skills and (2) electives to provide depth and application-oriented hands-on experience.

Objectives of the Core Program

The core program is designed to provide students with not only an understanding of basic principles but also a deeper understanding of the design, development, and operation of Drone and Anti-Drone technologies. This is achieved through 4 theory courses, as listed below.

Graduate Attributes:

1. Graduates are expected to possess a deep understanding of principles and specialized expertise in Drone and Anti-Drone Technologies.
2. Graduates are expected to be equipped with analytical and critical thinking skills to solve complex engineering challenges in the design and development of such systems.
3. Graduates are expected to demonstrate the ability to think creatively and develop innovative solutions in the context of Drone and Anti-Drone Technologies.

Semester	Title	L-T-P	Credits
I	Drone Technologies	2-0-2	3
	Anti-Drone Technologies	3-0-0	3
	Estimation, Navigation, and Guidance	3-0-0	3
	Total	10 Hours	9
II	Flight Dynamics and Control	3-0-0	3
	Total	3 Hours	3

The electives are grouped under four specialized domains:
Structures and Propulsion Systems, Autonomy and Control, Avionics Systems, and Counter Drone Systems.

List of Electives

Aero-Structural Mechanics and Propulsion Systems				
S. No	Courses	L-T-P	Credits	Course Code
1	Aerodynamics and Hydrodynamics of UAVs	3-1-0	4	MEL7600
2	Finite Element Methods in Engineering	3-0-0	3	MEL7xxx
3	Aero and Hydro Acoustics	3-0-0	3	MEL7xxx
4	Computational Fluid Dynamics and Heat Transfer	3-0-0	3	MEL7xxx
5	Propulsion Systems for UAVs	3-0-0	3	MEL7xxx
6	Advanced Engineering Mathematics	3-0-0	3	MEL7xxx
7	Foundations of ML	2-0-2	3	MEL7xxx
8	Advanced Mechanics of Solids	3-0-0	3	MEL7xxx
9	Fatigue and Fracture	3-0-0	3	MTL7xxx

Avionics and Control				
Sl.No				
1	Wireless Communications	3-0-0	3	EEL7xxx
2	Embedded System Design	2-0-2	3	EEL 7xxx
3	Computer Vision	3-0-0	3	CSL 7xx0
4	Advanced Control Systems	3-0-0	3	EEL7xxx
5	Sensors and Actuators for UAV's	2-0-2	3	MEL7xxx
6	Foundations of ML	3-0-0	3	MEL7xxx
7	Advanced Engineering Mathematics	3-0-0	3	MEL7xxx

Counter-Drone Systems				
Sl.No	Courses	L-T-P	Credits	Course Code
1	Wireless Communications	3-0-0	3	EEL7xxx
2	Embedded System Design	2-0-2	3	EEL 7xxx
3	Computer Vision	3-0-0	3	CSL 7xxx
4	Radar Engineering	3-0-0	3	EEL7xxx
5	Ballistics and Ammunition Technologies	3-0-0	3	MEL 7xxx
6	Foundation of ML	3-0-0	3	MEL7xxx
7	Advanced Engineering Mathematics	3-0-0	3	MEL7xxx

Program's Structure

S.N.	Course Type	Credits
1	Core	12
2	Program Electives	12
4	M. Tech. Thesis I (MTP I)	16
5	M. Tech. Thesis II (MTP II)	16
Graded		56
6	Non-Graded Courses	2
Total		56

The Senate, after detailed discussion, approved the revised concept note and appreciated the efforts of the Department of Mechanical Engineering. The Chairman suggested revising the title of the course "Foundations of ML" for better clarity. Furthermore, the Senate authorized the Chairman to approve any additions or modifications to the courses (in case the Department proposes) through the Senate Postgraduate Committee (SPGC).

The Chairman also emphasized that each academic program is an institutional responsibility, and therefore, all departments are expected to extend support to a program when requested by the parent department.

The detailed revised concept note is placed as **Annexure - 2**.

Action: Head, ME

42.2.4 Proposal for revising the first year curriculum of MBA Program

Dr. Deepak Kumar Saxena, Head of the School of Management and Entrepreneurship (SME), presented a proposal through the e-Senate seeking approval for the revised first-year curriculum of the MBA Program. He explained that the existing curriculum comprises multiple 1- or 2-credit courses, which, while providing broad exposure to various subjects, pose challenges related to in-depth learning, scheduling, and coherence in course delivery. This structure had resulted in 21 core courses being taught over two semesters.

In response, the School Faculty Board recommended a transition to a standardized 3-credit course structure. This change aims to align the MBA program with the broader curriculum framework of IIT Jodhpur, while enhancing academic rigor, streamlining the learning process, and improving student outcomes. The proposed restructuring will result in 14 core courses spread across the two semesters.

The following are courses for first year curriculum of MBA Program:

S. No.	Course Type	Course Title	Credits Structure
1	PC	Fundamentals of Marketing	3-0-0
2	PC	Business Economics-I	3-0-0
3	PC	Fundamentals in Accounting	3-0-0
4	PC	Corporate Finance	3-0-0
5	PC	Business Statistics	3-0-0
6	PC	Operations Research for Managers	3-0-0
7	PC	Human Behavior and Organization Dynamics	3-0-0
8	NG	Business Communication [Existing Course]	1-0-0

Semester 2			
9	PC	Marketing Frameworks and Practice	3-0-0
10	PC	Business Economics-II	3-0-0
11	PC	Strategic Management	3-0-0
12	PC	New Venture Planning	3-0-0
13	PC	Introduction to Operations Management	3-0-0
14	PC	Digital Enterprise Management	3-0-0
15	PC	Legal and Taxation Aspects of Business	3-0-0
16	NG	Corporate Communication [Existing Course]	1-0-0

The detailed course content is placed as Annexure-3.

The e-Senate recommended the proposal for revising the first year curriculum of MBA Program and the Chairman, Senate approved the same.

Action: Head, SME

42.2.5 Proposal to change the name of various PG Programs

The Chairperson, SPGC, presented the proposal to change the name of the following M.Tech. Programs during the e-Senate meeting. Additionally the senate also approved the necessary revision in the Curriculum of M.Tech. Robotics and Mobility Systems (RMS) program.

S. No.	Department/School/Centre/ID RP	Earlier Name of Program	New name of the Program from A.Y. 2025-26
1.	Department of Civil and Infrastructure Engineering	M.Tech. in Civil and Infrastructure Engineering with Specialization in Energy	M.Tech. in Energy Infrastructure
		M.Tech. in Civil and Infrastructure Engineering with Specialization in Environmental Engineering	M.Tech. in Environmental Engineering
2	Department of Electrical Engineering	M.Tech. in Sensors and Internet of Things	Discontinue M.Tech. SIOT from A.Y. 2026-27 <u>Justification</u>
		M.Tech. in Intelligent Communication Systems	M.Tech. in Communication Systems <u>Justification</u>
		M.Tech. in Intelligent VLSI systems	M.Tech. in Microelectronics and VLSI <u>Justification</u>
3	IDRD-Robotics and Mobility Systems (RMS)	M.Tech. in Robotics and Mobility Systems	M.Tech. in Robotics A new program titled M.Tech. in Drone and Anti Drone Technologies

			<p>has been started in the Mechanical Engineering Department. Therefore the overlapping aspect on Mobility has been removed from the Robotics and Mobility Systems curriculum. Additionally to ensure greater focus on robotics preparing the students to do MTech thesis for 32 credits, M.Tech. program has been restructured and consequently renamed as M.Tech. in Robotics.</p>
<p>The e-senate recommended to change the name of the following programs:</p> <ol style="list-style-type: none"> 1. M.Tech. in Civil and Infrastructure Engineering with Specialization in Energy renamed as "M.Tech. in Energy Infrastructure" 2. M.Tech. in Civil and Infrastructure Engineering with Specialization in Environmental Engineering renamed as "M.Tech. in Environmental Engineering" 3. M.Tech. in Intelligent Communication Systems renamed as "M.Tech. in Communication Systems" 4. M.Tech. in Intelligent VLSI systems renamed as "M.Tech. in Microelectronics and VLSI" 5. M.Tech. in Robotics and Mobility Systems renamed as "M.Tech. in Robotics" <p>The e-senate also recommended the discontinuation of the M.Tech. in Sensors and Internet of Things from A.Y. 2026-27. On the recommendations/inputs of the Senators, Permanent Invitees/Special Invitees during the e-Senate Meeting, the Chairman, Senate approved the same.</p> <p style="text-align: right;">Action: Head, EE, Civil and IDR</p>			
<p>42.2.6</p>	<p>Proposal for Revised M.Tech. and Ph.D. Curriculum from Departments/Schools/Centres</p>		
	<p>The Chairperson, SPGC, presented the proposal for Revised M.Tech. and Ph.D. Curriculum from Departments/Schools/Centres during the e-Senate meeting. He shared that the Senate in its 40th meeting held on 6th and 7th March 2025 approved the revised structure of all M.Tech. programs from Academic Year 2025-26. The Senate also approved the revised course structure for Ph.D. students to register for fundamental courses offered by the respective academic units. These courses will not only help Ph.D. students strengthen their understanding of the minimum fundamental aspects of their academic units but will also provide a broad spectrum of translational research in their areas of interest.</p> <p>In view of the above the revised course structure/ curriculum from the respective department/school/centre for respective is received is placed in the below table:</p>		

S. No.	School/Department/Centre	Name of the program	Course/Curriculum Structure
1	Bioscience and Bioengineering	M.Tech. in Bioscience and Bioengineering	<u>Curriculum</u>
		Ph.D. in Bioscience and Bioengineering	
2	Computer Science and Engineering	M.Tech. in Artificial Intelligence	<u>Curriculum*</u> The course content of 1 core course is under process (Mathematical Foundations for Computer Science).
		M.Tech. in Computer Science and Engineering	<u>Curriculum*</u> The course content of 1 core course is under process (Mathematical Foundations for Computer Science).
		Ph.D. in Computer Science and Engineering	
3	Electrical Engineering	M.Tech. in Sensors and Internet of Things	<u>Curriculum</u> <u>Justification for discontinuing the program</u>
		Additional note for M. Tech. SIoT: Recently, the department has undergone PG curriculum restructuring where the majority of the courses are included in M. Tech Micro. & VLSI. The existing course structure appears to be a subset or application side of the broad domain of Microelectronics and VLSI. In this reference, the DFB prefers to offer core domain related courses compared to interdisciplinary field e.g. IoT program. Therefore DFB concluded that the course will run only for this session and may be discontinued from the next session.	<u>Eligibility criteria</u>
		M.Tech. in Cyber Physical Systems	<u>Curriculum</u> <u>Eligibility criteria</u> <u>Linear System Theory</u> <u>comment</u>
		M.Tech. in Intelligent Communication Systems New name: M. Tech in Communication Systems	<u>Curriculum</u> <u>External Feedback</u> <u>Justification for name change of the program</u> <u>Eligibility criteria</u>
M.Tech. in Intelligent VLSI systems New name: M. Tech in Microelectronics and VLSI	<u>Curriculum</u> <u>Comment Solid State Devices</u> <u>Justification for name change of the program</u> <u>Eligibility criteria</u>		

		Ph.D. in Electrical Engineering	<u>Curriculum</u> <u>Optimization Techniques for Signal Representation and Processing new course for Ph.D.</u>
4	Mathematics	M.Tech. in Data and Computational Sciences	<u>Curriculum</u>
		Ph.D. in Mathematics	<u>Curriculum</u>
5	Mechanical Engineering	M.Tech. in Advanced Manufacturing and Design	<u>Curriculum</u>
		M.Tech. in Thermofluids Engineering	
		Ph.D. in Mechanical Engineering	
6	Materials Engineering	M.Tech. in Materials Engineering	<u>Curriculum</u>
		M.Tech. in Materials Engineering (Specialization in Functional Materials)	<u>Curriculum</u> <u>Ph.D. curriculum</u>
		Ph.D. in Metallurgical and Materials Engineering	
7	Chemical Engineering	M.Tech. in Chemical Engineering	<u>Curriculum</u> <u>DFB Minutes</u>
		Ph.D. in Chemical Engineering	<u>DPGC Minutes</u> <u>Checklist</u>
8	Civil and Infrastructure Engineering	M.Tech. in Infrastructure Engineering with specialization in Environmental Engineering	<u>Curriculum</u> <u>Checklist</u>
		M.Tech. in Infrastructure Engineering with specialization in Energy	<u>Curriculum</u> <u>Checklist</u>
		Ph.D. in Civil and Infrastructure Engineering	<u>Curriculum</u> <u>Checklist</u>
9	School of Artificial Intelligence & Data Science	M.Tech. in Augmented and Virtual Reality (AR & VR)	<u>Curriculum</u>
		Ph.D in School of Artificial Intelligence & Data Science	<u>Curriculum</u> <u>courses</u>
		Post Graduate Diploma, Certifications and MTech in Data Engineering	<u>Curriculum</u>

10	IDRD-Robotics and Mobility Systems (RMS)	M.Tech. in Robotics and Mobility Systems to M.Tech. in Robotics New name: M.Tech. in Robotics and Mobility Systems Same curriculum for Executive and Regular M.Tech. Ph.D. in Robotics and Mobility Systems	Curriculum Expert comment Review
11	IDRD-Quantum Information and Computation (QIC)	M.Tech. in Quantum Technologies Ph.D. in Quantum Information and Computation	Curriculum
12	Chemistry	Ph.D. in Chemistry	Domain Specific Chemistry - 1 Chemistry - 2
13	Physics	Ph.D. in Physics	Curriculum Review of Quantum and Condensed Matter Physics Review of Fundamental Physics
14	Center for Emerging Technologies for Sustainable Development		Curriculum
15	Centre for Mathematical and Computational Economics		Curriculum
16	Centre for Internet of Things (IoT) & Applications		Curriculum is under process
17	Center for Education Technology		Curriculum
18	Rishabh Centre for Research and Innovation in Clean Energy		Curriculum is under process
19	Centre for Technology Foresight and Policy		Curriculum
20	School of Liberal Arts	Ph.D in Liberal Arts	curriculum
21	School of Management and Entrepreneurship	Ph.D. in Management and Entrepreneurship	Curriculum Checklist
22	School of Design	Ph.D. in Design M.Des. in XR Design	Curriculum
23	IDRPs	Ph.D. in Digital Humanities	Curriculum is under process
		Ph.D. in Smart Healthcare	Curriculum is under process
		Ph.D. in Space Science & Technologies	Curriculum is under process

The detailed revised curriculum of the M.Tech. and Ph.D. program is placed as **Annexure -4.**

The e-senate recommended the revised M.Tech. and Ph.D. curriculum.

During the Physical Senate meeting, in response to queries from several HoDs, the Senate discussed and recommended to prepare a transition plan allowing existing second year M.Tech. students to shift to the new M.Tech. structure. The Chairperson SPGC was asked to prepare the transition plan guidelines. The Senate authorized the Chairman Senate to approve the same.

	<p>As per the new Ph.D. program structure, Ph.D. compulsory courses are the same as relevant compulsory courses of the M.Tech. program. For few academic units, whose M.Tech. program is starting from the next academic year, the Senate recommended to offer these compulsory courses for the ongoing Ph.D. admissions. Any future changes in these courses will also be adopted for the Ph.D. program.</p> <p style="text-align: right;">Action : All Heads</p>										
<p>42.2.7</p>	<p>Proposal to revise the CGPA criteria for graduation of MBA/MBA-Tech students</p>										
	<p>Dr. Deepak Kumar Saxena, Head of the School of Management and Entrepreneurship (SME), presented a proposal through the e-Senate seeking approval to revise the CGPA criteria for graduation for MBA/MBA-Tech students. He highlighted that, as per the current regulations, the minimum CGPA for program continuation and graduation for Master's programs such as M.Sc. and M.Tech. is 5.0, whereas for MBA/MBA-Tech, the minimum CGPA for graduation is 6.0, and the minimum for continuation is 5.5.</p> <p>The School proposed that the minimum CGPA required for graduation for MBA/MBA-Tech students be revised to 5.0, in line with other Master's programs at the Institute. It was also proposed that this change be made applicable retrospectively, starting with the MBA batch of 2022-24.</p> <p>The e-senate recommended the revised CGPA criteria for graduation of MBA/MBA-Tech students as per the below table:</p> <table border="1" data-bbox="384 992 1527 1227"> <thead> <tr> <th>Sr. No.</th> <th>Program</th> <th>Existing CGPA for Continuation</th> <th>Existing CGPA for Graduation</th> <th>Proposed CGPA for Continuation and Graduation</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>MBA/MBA-Tech</td> <td>5.5</td> <td>6</td> <td>5</td> </tr> </tbody> </table> <p>On the recommendations/inputs of the Senators, Permanent Invitees/Special Invitees during the e-Senate Meeting, the Chairman, Senate approved the same.</p> <p style="text-align: right;">Action: Head, SME</p>	Sr. No.	Program	Existing CGPA for Continuation	Existing CGPA for Graduation	Proposed CGPA for Continuation and Graduation	1.	MBA/MBA-Tech	5.5	6	5
Sr. No.	Program	Existing CGPA for Continuation	Existing CGPA for Graduation	Proposed CGPA for Continuation and Graduation							
1.	MBA/MBA-Tech	5.5	6	5							
<p>42.2.8</p>	<p>Proposal to start a Ph.D. Program in Center for Technology Foresight and Policy (CTFP)</p>										
	<p>The Chairperson, SPGC, presented the proposal to start a Ph.D. program in the Center for Technology Foresight and Policy during the e-Senate meeting. He shared that the Center for Technology Foresight and Policy (CTFP) intends to begin a Ph.D. program to promote research in the domain of technology foresight, strategic decision making, and policy analysis. The program is expected to address emerging challenges in technology forecasting, technology assessment, and societal transitions that would in turn develop expertise in foresight-driven policy making.</p> <p>Mission of the program</p> <ul style="list-style-type: none"> • Develop scholars capable of addressing complex challenges in technology governance, futures thinking, and policy making. • Equip scholars to create evidence-based insights for designing foresight-driven policies. 										

	<p>Objectives</p> <ul style="list-style-type: none"> • The key objectives of the PhD program at CTFP are: • To produce scholars who can critically assess the societal, economic, and environmental implications of emerging technologies. • To provide advanced education in technology foresight, policy analysis, and strategic decision making. • To engage in collaborative research with industry, government, and international bodies on foresight and governance. <p>Key Research Themes</p> <p>Indicative topics emanating from current activities include Technology Assessment, Pathways and Forecasting, Foresight Methods, Evidence-based Policy Analysis, Life Cycle Assessment, Policy Design for Governing Complex Socio-Technical Systems, Design of Emerging Technology-based Information Systems (ETIS), Future of Policy Making, Foresight-driven Policy Making, Foresight-based Sustainability, and Foresight-based Corporate Governance. Specific technologies of interest within the Center include Artificial Intelligence (AI), Internet of Things (IoT), Blockchain, Quantum Technologies, and Decarbonisation technologies. Specific application domains of interest include Logistics, Transportation, and Energy.</p> <p>PhD Courses</p> <p>TFP7010 Foresight with Simulation Modeling and Analysis TFP7011 Technologies and Policies for Smart Contract Applications TFP7012 Socio Technical Systems - Complexity and Governance MSL72030 Technology Forecasting and Assessment</p> <p>The detailed concept note is placed as Annexure -5</p> <p>The e-Senate recommended the proposal to start a Ph.D. program in Center for Technology Foresight and Policy. On the recommendations/inputs of the Senators, Permanent Invitees/Special Invitees during the e-Senate Meeting, the Chairman, Senate approved the same.</p> <p style="text-align: right;">Action: Head, CETSD</p>
<p>42.2.9</p>	<p>Proposal for revising the Specialization Course Credits in BS Programs in Chemistry and Physics with Specializations</p>
	<p>The Chairperson, SUGC, presented the proposal for revising the Specialization Course Credits in BS Programs in Chemistry and Physics with Specializations from 30 to 25 during the e-Senate meeting. He shared that as per the Senate-approved curriculum, the structure for the BS programs in Chemistry with Specialization and Physics with Specialization, the total credit requirement for Specialization courses (Core and Elective) are 30 credits. He proposed to align the BS programs in Chemistry and Physics with Specializations with the structure of B.Tech. programs, where the Specialization component includes both courses and a project, instead of the previous arrangement where all 30 credits were assigned solely to the courses. This revision is intended to reduce the academic load on BS students, bringing it in line with that of the institute's B.Tech. programs.</p> <p>The e-senate recommended that the total Specialization course credits (Core and Elective) for the BS Chemistry from 7th semester to 8th Semester and for the BS Physics from 6th to 8th Semester with Specialization be reduced from 30 credits to 25 credits. The revised distribution of credits is as follows (details placed as Annexure -6):</p>

The details of revision in credits (12 credits of specialization core course and 13 credits instead of 18 credits of specialization elective course) for the BS programs in Chemistry and Physics with Specialization are as follows:

Current Curriculum	Proposed Revision
Current Total No. of Credits: 175	Proposed Total No. of Credits: 170
Specialization: 30 credits Specialization Core: 12 credits Specialization Elective: 18 credits	Proposed Specialization: 25 credits Specialization Core: 12 credits Specialization Elective: 13 credits
No. of BS Specialization Core Courses: Four Theory Courses (12 Credits)	Proposed BS Specialization Core Courses: <ul style="list-style-type: none"> • Minimum 6 Credits of Theory Courses • Remaining Credits (up to 6 Credits) can be of Project and/or Lab
Proposed Credits of BS Specialization Elective Courses: Chemistry: 18 Credits Theory Courses Physics: 12 Credits Theory and 6 credits Project Courses (total 18 credits)	Proposed Credits for BS Specialization Elective Courses: <ul style="list-style-type: none"> • Minimum 6 credits of Theory courses • Remaining Credits (up to 7 Credits) can be of Project and/or Lab

On the recommendations/inputs of the Senators, Permanent Invitees/Special Invitees during the e-Senate Meeting, the Chairman, Senate approved the same.

Action: Head, PH, CY and SME

42.3	Reporting, Adopting and Noting Items
42.3.1	Academic recommendations of 5th SPGC Meeting held on 21st January, 2025
	The e-Senate via online webportal noted the academic recommendations of 5 th SPGC Meeting held on 21st January, 2025.
42.3.2	Academic recommendations of 7th SPGC Meeting held on 27th February, 2025
	The e-Senate via online webportal noted the academic recommendations of 7 th SPGC Meeting held on 27 th February, 2025.

42.4	Ratification Items
42.4.1	Approvals accorded by the Chairman, Senate
	In the e-Senate via online webportal, the approvals accorded by the Chairman, Senate on behalf of the Senate were ratified.
42.5	Any other Item with the prior permission of the Chairman
	None

The meeting ended with thanks to the Chairman and all members.

Ankur Gupta
14/10/2025

(Dr. Ankur Gupta)

Offg. Registrar & Secretary, Senate

Approved

Avinash
22/10/2025

(Prof. Avinash Kumar Agarwal)

Director & Chairman, Senate IIT Jodhpur