

# INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN AND MANUFACTURING, KANCHEEPURAM

## Minutes of the 61st Meeting of the Senate

Date: 13.05.2025 Time: 15:00 Hrs

Venue: Senate Hall, IIITDM Kancheepuram / Hybrid Mode

#### **Members Present:**

S.No	Members	S.No.	Members
01.	Prof. M V Kartikeyan - Chairman	10.	Prof. V. Masilamani
02.	Prof. NN Murty	11.	Prof. S Jayavel
03.	Prof. Krishna Moorthy Sivalingam	12.	Prof. Shalu M A
04.	Ms. Hema Gopal	13.	Prof. Naveen Kumar
05.	Dr. Subrata Kumar Datta	14.	Prof. B Sivaselvan
06.	Sh. Rajendran D	15.	Prof. Raja B
07.	Prof. Binsu J Kailath	16.	Dr. B Chitti Babu
08.	Prof. Jayabal K	17.	Dr. Raguraman M
09.	Prof. M D Selvaraj	18.	Prof. M Sreekumar

#### **Invitees:**

01.	Dr. Gowthaman Swaminathan PIC-Academics	04.	Dr. K Premkumar PIC-Research
02.	Dr. Arul Kumar Head- ICC	05.	Dr. Srijith K PIC-Exams
03.	Dr. Siva Prasad AVS PIC-Admissions	06.	R Gunasekaran Joint Registrar (Academics)

#### **Leave of absence Granted:**

01.	Prof. R Jayaganthan	
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## Index

Agenda	Agenda Items and Minutes of the Meeting	Page Number
Number		
2025-61- Senate-01	Appointment of New Senate Members and Appreciation of the Contribution of Outgoing Members of the Senate	03-04
2025-61- Senate-02	To confirm the Minutes of the 60 <sup>th</sup> Meeting of the Senate held on 28 <sup>th</sup> March, 2025	04
2025-61- Senate-03	Action Taken Report on the Decisions of the 60 <sup>th</sup> Meeting of the Senate.	04-05
2025-61- Senate-04	Approval for Revision in the Dual Degree Course Curriculum	05-06
2025-61- Senate-05	Change in Name of M.Tech Program Offered by the Department of Mechanical Engineering	07
2025-61- Senate-06	Approval for Revision in M.Tech Course Curriculum	07-08
2025-61- Senate-07	Approval for Syllabus of Revised Curriculum of B.Tech Programs	08-09
2025-61- Senate-08	Completion of Viva-Voce by the PhD Scholars	09
2025-61- Senate-09	Approval for New Elective Courses	09-10
2025-61- Senate-10	Approval for New Elective Course	10

## Appointment of New Senate Members and Appreciation of the Contribution of Outgoing Members of the Senate

As per provision 16(1) of the IIIT Act, the members of the Senate inter alia include the following:

- (f) three persons from amongst educationists of repute or persons from another field related to the activities of the Institute who are not in the service of the Institute, nominated by the Board of Governors;
- (g) three persons who are not members of the teaching staff co-opted by the Senate for their specialized knowledge;

The term of office of the above members is two years from the date of their nomination.

In line with provisions of the Senate, the Institute had appointed the members earlier for 2 years and their term completed in April 2025. Due to this, the Institute has recently appointed the following new members with the approval of the Chairman of the BoG and the Chairman of the Senate. The details are as follows:

Category		<b>Outgoing Members</b>	Newly Nominated Memb	
Three persons from amongst educationists of repute or persons from another field related to the activities of the Institute who are not in service of the Institute, nominated by	(i) (ii)	Prof. N Ramesh Babu Dept. of Mechanical Engineering, IIT Madras  Prof. Shanthi Pavan Dept. of Electrical Engineering, IIT Madras	(i) (ii)	Prof. R Jayaganthan Dept. of Engineering Design, IIT Madras.  Prof. NN Murty Department of Electrical Engineering, IIT Tirupati
the Board of Governors	( <b>iii</b> )	Prof. C Siva Ram Murthy Visiting Professor, IIT Hyderabad	(iii)	Prof. Krishna Moorthy Sivalingam Department of Computer Science Engineering, IIT Madras
Three persons who are not members of teaching staff co-opted by the Senate for their specialized knowledge	(ii)	Ms. Hema Gopal Leader IT Strategy, Genpact  Dr Sankar Balachandran Intel Labs Bengaluru  Lt.Gen PR Shankar Professor of Practice, IIT Madras	(i) (ii)	Centre Head, Micro Wave Tube Research & Development Centre (MTRDC), BEL Layout, Jalahalli, Bengaluru

It is pertinent to mention that the outgoing members have contributed immensely to all spheres of academic activity.

The Senate extended a warm welcome to the new members. The Senate further appreciated and took into record the immense contribution of outgoing members during their tenure.

#### 2025-61-Senate-02

## To confirm the Minutes of the 60<sup>th</sup> Meeting of the Senate held on 28<sup>th</sup> March, 2025

The Minutes of the 60<sup>th</sup> meeting of the Senate held on 28<sup>th</sup> March 2025 were circulated to all members and a copy was placed as Annexure A.

No comments were received from the members.

The Senate, after deliberations, confirmed the Minutes of the 60<sup>th</sup> meeting held on 28<sup>th</sup> March 2025.

#### 2025-61-Senate-03

Action Taken Report on the Decisions of the 60th Meeting of the Senate.

Action Taken Report on the Decisions of the 60<sup>th</sup> Meeting of the Senate is as follows:

## 2025-60-Senate-06

## In-Principle Approval for offering New M.Tech Program: RF and Microwave Engineering.

In the 60<sup>th</sup> Senate, the Senate accorded in-principle approval to offer a new M.Tech program in RF and Microwave Engineering from the academic year 2025-26. The intake for the program is 20 students to begin with. The Senate further advised the Institute to prepare a detailed curriculum for the program at its next meeting.

After the approval, the course name is modified to M.Tech in Electronics and Communication Engineering with a specialization in RF and Microwave Engineering, with the approval of the Chairman of the Senate, to align the name with other programs offered by the Institute. In addition, a detailed curriculum for the program is included in a separate agenda for consideration by the Senate.

#### 2025-60-Senate-07

## MoU between HITDM Kancheepuram and Iowa State University

The Senate opined that the courses/research work to be pursued by the students/scholars at Iowa State University are to be aligned with the mandate of the Institute and accordingly advised the Institute to ensure the same before finalisation of the MoU. The Senate further advised incorporating a provision in the proposed MoU for permitting B.Tech students to pursue the MS program at Iowa State University. after deliberation, The Senate, approved the collaboration with

The Institute is deliberating with Iowa State University for suitable modifications and execution of MoU.

	Iowa State University, USA and authorised the Director to sign the MoU with Iowa State University.	
2025-60- Senate-09	Student Intake for the year 2025-26:	
	The Senate approved the proposed student intake for the academic year 2025-26.	The Institute has prepared the seat matrix by duly following the reservation norms of the Government of India and communicated it to JoSAA/CCMT for admission.
2025-60- Senate-11	Approval for Enhancement of Financial Support to Scholars to present Research Papers in a conference held in India:	
	The Senate approved the proposal with enhanced financial support of Rs.25,000 per scholar for attending National / International conferences held in India. The scholars will be granted financial support to attend two conferences during the entire duration of their program.	The Institute has communicated the enhancement of financial support to all scholars.

In case of financial support to scholars to present their papers, the Senate desired that the assistance shall be granted for participation in flagship conferences.

The Senate further took note of the action taken by the Institute.

#### 2025-61-Senate-04

#### Approval for Revision in the Dual Degree Course Curriculum

In the 60<sup>th</sup> meeting of the Senate, the Senate approved the revision in the curriculum for the B.Tech program. Consequently, there is a requirement for revision in the course curriculum of Dual Degree programs offered by the Institute.

At present, the Institute is offering the following four DD programs:

- 1. B.Tech and M.Tech in Computer Science and Engineering
- 2. B.Tech in Electronics and Communication Engineering and M.Tech in Communication Systems.
- 3. B.Tech in Electronics and Communication Engineering and M.Tech in VLSI Design
- 4. B.Tech in Mechanical Engineering and M.Tech in AI and Robotics.

To revise the curriculum, the departments had discussions with external experts, and based on their suggestions, the curriculum has been modified.

The salient features of the revised curriculum of DD are as follows:

- 1. The total number of credits in DD Programs is in the range of 205 to 210.
- 2. To earn a degree in a program, the student should complete the required credits under each category of courses for the respective program.
- 3. The maximum credits that a student can register for in a semester are limited to 28 credits.
- 4. The DD program will have the same curriculum till the 6<sup>th</sup> semester of the respective UG Program of the department.
- 5. Two common Design Courses (DSC) and multiple Program-specific Design Courses (PDC) in each Program
- 6. Three common IT courses and one department-specific IT course for all Programs
- 7. Curriculum consists of about ten elective courses offered in three categories, viz. SEC (Science Elective Course), PEC (Program Elective Course), and ELC (Open Elective Course).
- 8. The option of program change to another DD program across the departments is open to students at the end of the first semester, subject to the Institute guidelines. However, within the department, the change of the DD program is permitted at the end of the 6<sup>th</sup> semester, subject to the Institute guidelines.
- 9. Program-specific core courses shall begin in the second semester.
- 10. Summer Internship for eight weeks, commencing after completion of the End-Semester Examination of the 6th Semester, is to be awarded a Pass/Fail grade.
- 11. Comprehensive Exam, focused on the Program core courses of the respective program, shall be conducted during the first two weeks of the 9<sup>th</sup> semester and awarded a Pass/Fail grade.
- 12. Students have the option to take 3-credit NPTEL courses to a maximum of 9 credits, in place of In-house Elective courses, to fulfil the credit requirement of the Open Elective Courses (ELC).
- 13. To earn an Honours degree, the student should complete 16 additional credits from 5-level courses from the PEC category offered by the parent Department, over and above the total program credits required. Accordingly, the Honours shall be mentioned in the Degree Certificates for those who complete the requirements.
- 14. The Electives for Honours are to be only In-House courses.

A copy of the Curriculum of all Dual Degree programs is placed as **Annexure "B1, B2, B3, and B4"**.

The Senate was informed of the change in the name of one of the programs from B.Tech in Electronics and Communication Engineering and M.Tech in VLSI Design to B.Tech in Electronics and Communication Engineering and M.Tech in Microelectronics and VLSI Systems. This was necessitated on account of addition of new courses in the revised course curriculum, and the Senate ratified the approval accorded by the Chairman of the Senate.

The Senate, after deliberation, approved the course curriculum of Dual degree programs of the Institute and the revised curriculum is effective from 2025 batch onwards.

## Change in Name of M.Tech Program Offered by the Department of Mechanical Engineering

The Department of Mechanical Engineering is in the process of revising the course curriculum of its PG programs, and at present, the department offers the following two PG programs:

- a) Master of Technology (M.Tech) in Mechanical Engineering with specialization in Smart Manufacturing.
- b) Master of Technology (M.Tech) in Mechanical Engineering with specialization in Mechanical Systems Design.

As digitalisation and networking have become an indispensable part of our daily lives, mechanical systems are becoming increasingly intelligent and making specific tasks easier for us. These trends are evident in automotive, material handling, and manufacturing, while noticeable in construction, agricultural machinery, medical devices, etc.

Intelligent mechanical systems design is an evolving field that combines traditional mechanical engineering with intelligent technologies like artificial intelligence, machine learning, and the Internet of Things to create more efficient, adaptable, and autonomous mechanical systems. Smart systems can use real-time data and feedback to optimise performance and make decisions rather than purely depending on pre-programmed instructions. In essence, intelligent mechanical systems design is about creating powerful and efficient machines, but also smart, capable of learning and making decisions like humans.

Considering the above, the department has included a set of new courses in the evolving areas in the existing Mechanical Systems Design and accordingly, renamed the program into "Mechanical Engineering with specialization in Intelligent Mechanical Systems Design" with the approval of the Chairman of the Senate.

It is also to be noted that the mandate of the Institution is Information Technology-enabled Design and Manufacturing technology. In the case of Smart Manufacturing, the IT-enabled manufacturing courses have already been included; hence, no change in the Program name is proposed.

The Senate, after deliberation, ratified the approval accorded by the Chairman Senate in revising the name of the M.Tech program into "Mechanical Engineering with specialization in Intelligent Mechanical Systems Design"

#### 2025-61-Senate-06

#### Approval for Revision in M.Tech Course Curriculum

Presently, the Institute offers the following six M.Tech programs:

- 1. Computer Science and Engineering with Specialization in Data Science and Artificial Intelligence.
- 2. Electronics and Communication Engineering with Specialization in Communication Systems.
- 3. Electronics and Communication Engineering with Specialization in Microelectronics and VLSI Systems.
- 4. Mechanical Engineering with Specialization in Intelligent Mechanical Systems Design.
- 5. Mechanical Engineering with Specialization in Smart Manufacturing.

6. Electronics and Communication Engineering with Specialization in RF and Microwave Engineering.

Of this, the curriculum of the first five programs was revised in the year 2021 and the M.Tech program with specialization in RF and Microwave is a new program.

As the Institute revises its curriculum from time to time, the curriculum of M.Tech programs has also been revised in consultation with external experts.

A copy of the revised curriculum is placed as **Annexure "C1–C6"**, and the salient features of the curriculum are as follows:

The salient features of the revised curriculum of M.Tech. are as follows:

- 1. The total number of credits in PG Programs is in the range of 74 to 76.
- 2. To earn a degree in a program, the student should complete the required credits under each category of courses for the respective program.
- 3. The maximum credits that a student can register for in a semester are limited to 28 credits.
- 4. M.Tech dissertation has three phases, with the first phase commencing from the end of the 2<sup>nd</sup> semester, during summer vacation. The Phase II and Phase III will be carried out during the 3<sup>rd</sup> and 4<sup>th</sup> semesters.

The revised curriculum applies to students admitted from 2025 onwards.

The Senate was informed that the Institute is using the nomenclature "Practice" for practical courses. As other reputed institutes like IITs have adopted the nomenclature of Lab, it was decided to use the term "Lab" in place of "Practice". Further, in the case of courses offered by the Department of Computer Sciences, it was decided to continue the existing practice. This is applicable to all courses of UG/PG programs.

The Senate, after deliberation, approved the course curriculum of all M.Tech programs, and the revised curriculum is effective from the 2025 batch onwards.

#### 2025-61-Senate-07

#### Approval for Syllabus of Revised Curriculum of B.Tech Programs

In the 60<sup>th</sup> meeting of the Senate, the Senate approved revisions to the course curriculum of the following five B.Tech programs of the Institute.

- 1. Computer Science and Engineering
- 2. Computer Science and Engineering with Major in Artificial Intelligence
- 3. Electronics and Communication Engineering
- 4. Mechanical Engineering
- 5. Smart Manufacturing

In addition, the Senate approved offering new B. Tech programs in "Engineering Physics" and "Design Engineering" from the academic year 2025-26 onwards.

Consequent to this approval, a detailed syllabus of courses to be offered in the first year of the above program is placed as **Annexure "D1-D6"** for kind perusal of the Senate. In the case of Design Engineering, the syllabus for all courses, duly approved by the expert committee, is placed as **Annexure "D7"**.

The Senate perused the syllabus of all B.Tech programs. The Senate, after deliberation, approved the syllabus of B.Tech programs.

#### **Completion of Viva-Voce by the PhD Scholars**

During the intermittent period between the last and current meetings, the following scholars have completed their viva voce and successfully defended their thesis work.

S.No	Name of the Scholar	Name of the	Date of	Department
	with Roll Number	Guide(s)	Defense	
01.	Sh. Thunakala Bala	Dr. Priyanka Kokil	17.04.2025	Department of
	Krishna			Electronics and
	(EC21D0004)			Communication
				Engineering
02.	Sh. Simhadri	Prof. M D Selvaraj	21.04.2025	Department of
	Ravishankar			Electronics and
	(EDM17D010)			Communication
				Engineering
03.	Ms. Snigdhashree	Dr. Nachiketa Mishra	21.04.2025	Department of
	Nayak			Sciences and
	(MAT18D002)			Humanities

The details concerning the examiners and the list of publications of these scholars are provided in **Annexure** "E". The scholars were awarded a Provisional Certificate with due approval from the Chairman of the Senate.

The Senate took note of the completion of the Viva Voce by the scholars and ratified the approval accorded by the Chairman for issuing Provisional Degree Certificates. The Scholar will be awarded the degree in the next convocation of the Institute.

#### 2025-61-Senate-09

#### **Approval for New Elective Courses**

The following new elective courses are proposed to be offered by the Institute from the next academic session onwards. These courses have been approved by the Departmental Academic Research Committee (DARC), comprising external experts and the details are given below:

#### **New Elective Courses**

S. No	Course	Type / Level	Faculty Name	External Experts
01.	Quantum Computing	M.Tech/	Dr.Tejendra	1. Prof. Sivarama Krishnan,
	and Technology	Ph.D	Dixit	IIT Madras.
				2. Prof. Ankush Bag,
				IIT Guwahati
02.	Contemporary	Ph.D	Dr. Parvathy	1. Prof. Mini Chandran
	Literary Theory		Das	IIT Kanpur
				2. Dr. Gigy J Alex
				IISST,Thiruvananthapuram

The details of the above courses are placed in **Annexure** "F".

The Senate, after deliberation, approved the two elective courses. These courses will be offered from the July 2025 semester onwards.

#### **Approval for New Elective Course**

The following new elective course is proposed to be offered by the Institute from the next academic session onwards. This course has been approved by the Departmental Academic Research Committee (DARC), comprising external experts and the details are given below:

#### **New Elective Course**

S. No	Course	Type / Level	Faculty Name	External Experts
01.	Brain Computer Interface	UG/PG	Dr. Kannadasan K	Prof. Ram Bilas Pachori     IIT Indore
			0 7 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2. Dr. Ramesh Dharavath IIT (ISM)

The details of the above course are placed in Annexure "G".

The Senate, after deliberation, approved the elective course. This course will be offered from the July 2025 semester onwards.

Chairman, Senate, informed all the members that the 13<sup>th</sup> convocation of the Institute is scheduled on 26<sup>th</sup> July 2025, and Prof. Kamal Kishore Pant, Director, IIT Roorkee, will grace the occasion as Chief Guest. The Chairman further extended an invitation to all the expert members for their kind participation.

Ms. Hema Gopal, with the permission of the Chair, emphasised the significance of external project grants and advised the Institute to take adequate steps for seeking more project funding. The member also advised the Institute to improve the coding and communication skills of students for better placements.

Chairman Senate

Prof. Jayabal K

Dean (Academic Affairs)

Sh. A. Chidambaram

Registrar