

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

MINUTES OF THE 51st MEETING OF THE SENATE

Date : 21.04.2023 (Thursday)

Time : 14:30 Hrs.

Venue: : Hybrid Mode

Members Present:

S.No	Members	S.No.	Members
01.	Prof. M V Kartikeyan- Chairman	10.	Dr. Tapas Sil
02.	Prof. N Ramesh Babu	11.	Dr. Naveen Kumar
03.	Prof. C Siva Ram Murthy	12.	Dr. S Jayavel
04.	Prof. Shanthi Pavan	13.	Dr. B Sivaselvan
05.	Ms. Hema Gopal	14.	Dr. N Sadagopan
06.	Dr Shankar Balachandran	15.	Dr. V. Masilamani
07.	Prof. M Sreekumar	16.	Dr. K Jayabal
08.	Prof. Binsu J Kailath	17.	Dr. Shalu MA
09.	Prof. M D Selvaraj	18.	Dr. Raguraman M
19.Sh. Chidambaram A - Secretary			

2023-51-Senate-01	<p>Appointment of New Senate Members and Appreciation of Contribution of Outgoing Members of the Senate</p> <p>The Senate was informed that as per provision 16(1) of IIIT Act, the members of the Senate inter alia include the following:</p> <p style="padding-left: 40px;"><i>(f) 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 the Board of Governors;</i></p> <p style="padding-left: 40px;"><i>(g) three persons who are not members of teaching staff co-opted by the Senate for their specialized knowledge;</i></p> <p>The term of office of above members is for a period of two years from the date of their nomination.</p> <p>In line with provisions, the Institute had earlier appointed the members on 01.04.2021 for a period of 2 years and their term completed on 31.03.2023. Therefore, the following new members were nominated to the Senate with due approval of Chairman BoG and Chairman Senate.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: center;">Category</th> <th style="text-align: center;">Persons Appointed</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"><i>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 the Board of Governors</i></td> <td style="vertical-align: top;"> <p>(i) Prof. N Ramesh Babu V Balaraman Institute Chair Professor, Dept. of Mechanical Engineering, IIT Madras.</p> <p>(ii) Prof. C Siva Ram Murthy Richard Karp Institute Chair Professor, Visiting Professor, IIT Hyderabad</p> <p>(iii) Prof. Shanthi Pavan NT Alexander Institute Chair Professor</p> </td> </tr> </tbody> </table>	Category	Persons Appointed	<i>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 the Board of Governors</i>	<p>(i) Prof. N Ramesh Babu V Balaraman Institute Chair Professor, Dept. of Mechanical Engineering, IIT Madras.</p> <p>(ii) Prof. C Siva Ram Murthy Richard Karp Institute Chair Professor, Visiting Professor, IIT Hyderabad</p> <p>(iii) Prof. Shanthi Pavan NT Alexander Institute Chair Professor</p>
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	Department of Electrical Engineering, IIT Madras
<i>three persons who are not members of teaching staff co-opted by the Senate for their specialized knowledge. (two members nominated now)</i>	(i) Ms. Hema Gopal , Vice President, Head BFSI Global Head, IBM Technologies, Chennai (ii) Dr. Shankar Balachandran Research Scientist, Intel Labs, Bengaluru

The Senate was also informed about the following outgoing members:

S.No	Name	S.No.	Name
01.	Prof.Krishna Nandivada IIT Madras	05.	Prof. Chandrashekar IIIT Bangalore
02.	Prof.Ram Bilas Pachori IIT Indore	06	Dr.Manoj Choudhury Tata Consultancy Services
03.	Prof. GK Ananda Suresh IISc Bangalore	07.	Dr.Shankar Venugopal Mahindra & Mahindra Research
04.	Dr.G Venkatesh IIT Madras	08.	Dr. Chandramouliswaran Paypal

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

2023-51-Senate-02

To Confirm the Minutes of the 50th Meeting of the Senate held on 19th January 2023

The Minutes of the 50th meeting of the Senate held on 19th January 2023 was circulated to all members. No comments were received from the members.

Senate was requested to confirm the Minutes of the 50th meeting of the Senate placed as **Annexure-A.**

The Senate confirmed and approved the Minutes of the 50th meeting of the Senate held on 19th January, 2023.

2023-51-Senate-03

Action Taken Report on the Decisions of the 50th Meeting of the Senate

The action taken report of the Institute on the decision of the Senate is as under:

Res No	Item	Action taken
2023-50-Senate-04	PhD Scholars Who Have Completed Their defence	Dr. T Anusuya, who successfully defended her thesis, has been issued viva completion certificate.
2023-50-Senate-06	Approval for New/Modified Elective Courses	The course will be offered from July 2023 semester onwards.
2023-50-Senate-07	Reintroduction of Dual Degree Program	The Senate, after due deliberation, advised the Institute to place a detailed agenda incorporating name of the program to be offered; curriculum and syllabi; Placement prospects and recommendation from industry experts etc. Accordingly, a separate agenda on this matter is placed for kind consideration of the Senate.
2023-50-	Schedule of Procedure	The Senate recommended for placing the

Senate-08	and Constitution of Institutional Human Ethics Committee _____	proposal before the BoG for its due approval. Accordingly, the proposal will be placed before the BoG in its forthcoming meeting.
2023-50-Senate-09	Introduction of New Category for Ph.D admission- Ph.D (Fellowship)	In line with approval of the Senate, the Institute has also invited applications under this category for Ph.D admission in July 2023 session.
2023-50-Senate-11	Approval for Engaging Senior Undergraduate Students as Teaching Assistants.	Being Implemented
2023-50-Senate-12	Guidelines for Ph.D Thesis Evaluation	In line with approval of the Senate, provisions have been suitably amended in the Ph.D ordinance under R.19(b) (1).
2023-50-Senate-13	Appointment of Honorary Faculty	The Senate recommended the proposal for placing before the BoG for its consideration and approval. Accordingly, the proposal will be placed in its forthcoming meeting of the BoG.

The Senate took note of action taken by the Institute.

2023-51-Senate-04

PhD Scholars Who Have Completed their Defence

The Ph D scholar, who have successfully defended their thesis was placed before the senate.

S. No	Name and Roll No	Guide	Date of Defence meeting	Department
1.	Sh. Penna Venkata Karthik Yadav (PHY19D002)	Dr.Y Ashok Kumar Reddy	07.02.2023	Science and Humanities
2.	Sh. D Sathish Kumar (MDM17D006)	Dr.S Jayavel	09.02.2023	Mechanical Engineering
3.	Sh.Badri Narayanan KB (MDM16D004)	Prof. M Sree Kumar	06.03/2023	Mechanical Engineering
4.	Sh. Vivek Kumar Chouhan (MDM17D007)	Dr.B Shahul Hamid Khan	10.02.2023	Mechanical Engineering
5.	Sh. Rajasekar K (MDM17D003)	Dr. B Raja	13.03.2023	Mechanical Engineering
6.	Ms. Tharani D (EDM17D009)	Dr.K Selvajyothi Dr.SS Karthikeyan, NIT Trichy(Co-Guide)	14.03.2023	Electronics and Communication Engineering
7.	Sh. Chandrasekar L (EDM18D004)	Dr.Kumar Prasannajit Pradhan	17.03.2023	Electronics and Communication Engineering
8.	Sh. Turimerla Pratap (EDM18D010)	Dr. Priyanka Kokil	21.03.2023	Electronics and Communication Engineering
9.	Sh. Mukkapati Ashok Bhupathi Kumar (EDM18D007)	Dr. Vijayakumar K	27.03.2023	Electronics and Communication Engineering

	<p>The details concerning the examiners and list of publications were placed before the senate as Annexure-B.</p> <p>The senate was requested to approve the award of the Provisional degree as the scholars are requesting the same. The Senate was further requested to approve the award of the Degree certificate in the forthcoming convocation.</p>												
	<p>The Senate noted the completion of the defence of above scholars. The the Senate, advised the Institute to award Provisional Certificate with due approval of the Chairman Senate for the benefit of scholars like employment, higher studies etc. Such cases of approval may be placed in the subsequent meeting of the Senate for ratification.</p>												
<p>2023-51-Senate-05</p>	<p>Approval for Offering Minor Program</p>												
	<p>The Senate was informed about the approval accorded for offering Minor program for students covered under 2020 B.Tech course curriculum in its 44th and 46th meeting. As per approval accorded by the Senate, the students have an option to earn a Minor from other department on completion of at least 3 courses, having 12 credits, offered by the concerned department.</p> <p>In line with the guidelines approved by the Senate, the departments had detailed deliberation to offer a suitable program which is not only futuristic but also meets the demands of the industry. Based on these deliberations, Minor programs proposed to be offered and the details of the same along with norms for enrolment were placed before the senate.</p> <p>Minor Programs to be offered:</p> <p>1. Minor in Machine Learning.</p> <table border="1" data-bbox="368 1245 1453 1675"> <tr> <td>Name of the Department Offering the Minor</td> <td>Computer Science and Engineering (CSE)</td> </tr> <tr> <td>Preamble (Need, Scope, Target audience, Outcome)</td> <td>This minor is offered for the students from departments other than CSE to encourage them in gaining knowledge thereby enhancing the skills and placement opportunities.</td> </tr> <tr> <td>Number of Credits (Theory, Practice)</td> <td>16</td> </tr> <tr> <td>Compulsory courses (mention credit structure in parenthesis)</td> <td>1. Optimization Techniques for Machine Learning (3-1-0-4) 2. Artificial Intelligence (3-0-2-4) 3. Pattern Recognition and Machine Learning (3-0-2-4) 4. Deep Learning (3-0-2-4)</td> </tr> </table> <p>2. Minor in VLSI Design</p> <table border="1" data-bbox="368 1749 1453 2114"> <tr> <td>Name of the Department</td> <td>Electronics and Communication Engineering</td> </tr> <tr> <td>Preamble (Need, Scope, Target audience, Outcome)</td> <td>VLSI Design is an emerging area and having wide applications in electronics, automobiles, RF, communication etc. On account of “Indian Semiconductor Mission (ISM)” of the Govt. of India, there is a huge market for VLSI Design engineers. The minor program is designed primarily focusing on Digital Circuits, VLSI System Design, Digital System Testing and Testable Design and High-level Verification with System Verilog and UVM. These courses help students</td> </tr> </table>	Name of the Department Offering the Minor	Computer Science and Engineering (CSE)	Preamble (Need, Scope, Target audience, Outcome)	This minor is offered for the students from departments other than CSE to encourage them in gaining knowledge thereby enhancing the skills and placement opportunities.	Number of Credits (Theory, Practice)	16	Compulsory courses (mention credit structure in parenthesis)	1. Optimization Techniques for Machine Learning (3-1-0-4) 2. Artificial Intelligence (3-0-2-4) 3. Pattern Recognition and Machine Learning (3-0-2-4) 4. Deep Learning (3-0-2-4)	Name of the Department	Electronics and Communication Engineering	Preamble (Need, Scope, Target audience, Outcome)	VLSI Design is an emerging area and having wide applications in electronics, automobiles, RF, communication etc. On account of “Indian Semiconductor Mission (ISM)” of the Govt. of India, there is a huge market for VLSI Design engineers. The minor program is designed primarily focusing on Digital Circuits, VLSI System Design, Digital System Testing and Testable Design and High-level Verification with System Verilog and UVM. These courses help students
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	to build a foundation on VLSI Design. This Minor program will be offered to students of Mechanical Engineering, and Computer Science and Engineering.
Number of Credits (Theory, Practice)	16
Compulsory courses* (mention credit structure in parenthesis)	1. Digital Circuits (3-1-0-4) 2. VLSI System Design (3-1-0-4) 3. VLSI Testing and Testable Design (3-1-0-4) 4. High level Verification with System Verilog and UVM (2-0-4-4)

It was informed that all the above mentioned courses are part of course curriculum and approved by the Senate.

3. Minor in Internet of Things

Name of the Department	Electronics and Communication Engineering
Preamble (Need, Scope, Target audience, Outcome)	Internet of Things (IoT) is a technology that has potential applications in manufacturing, public safety systems, and wireless applications. The courses focus on digital systems, sensors, and IoT technologies which helps students to acquire niche skills like sensors, controls, embedded systems, and networking. This minor program will be offered for Students of Mechanical Engineering, and Computer Science and Engineering.
Number of Credits (Theory, Practice)	16
Compulsory courses* (mention credit structure in parenthesis)	1. Digital Systems and Microprocessors (3-0-2-4) 2. Sensors and Embedded Systems (2-0-4-4) 3. Data Communication Networks (3 1 0 4) 4. Internet of Things (3-1-0-4)

On the above, it was informed that the courses for the above Minor program is under formulation and will be placed in its next meeting of the Senate.

The Senate discussed and approved the following norms concerning enrollment of Minor Program

- **The enrollment normally commences from 5th semester of their program.**
- **The number of credits for earning Minor is 16 credits. The credits earned shall be accounted under Free elective courses requirements.**
- **The minimum CGPA of 8.0 at the end of Semester 4 with no history of backlog is must to be eligible for enrollment for Minor.**
- **The students should have a minimum GPA of 8.0 with no history of backlog in all the Minor courses registered at the end of 4 years in addition to the overall CGPA of 8.0 with no history of backlog.**
- **To provide equal opportunity to students across departments, for a minor program offered by a department, a maximum of 10% of the students from each of the other engineering departments can enroll. Accordingly, for the**

	<p>minor program offered by the Dept. of CSE, 10% of ECE students and 10% of Mechanical Engineering students can enroll. This maximum intake has been worked out considering the available laboratory resources.</p> <ul style="list-style-type: none"> • The minimum strength for offering a minor program may be 10 students from all departments taken together • A student can register for either a Minor or a Specialization, but not both. However, a student can register for a Minor/Specialization and Honors. • The credits earned for Minor/Specialization are within the B.Tech/DD program credit requirements, whereas for Honors it is additional credits over and above the program credit requirements. <p>Further, as per rules stipulated by the Senate, the name of Minor program will be mentioned only on the Transcripts and the consolidated Grade sheets and not on the Degree certificate.</p> <p>On its query concerning drop out of students from the program, it was informed that the students will be permitted to drop out and the courses taken by the concerned students will be treated as free electives.</p> <p>For all Minor programmes, the Senate suggested to sequence the courses in such a way that the prerequisites are taken care of. In case of Minor in Machine Learning, it was clarified that ML basics required to understand the course on Optimization Techniques for Machine Learning shall be covered as part of this course itself.</p> <p>In case of Minor in VLSI Design, the Senate advised to check the overlap percentage between the courses Digital Logic Design (core course for CSE) and Digital Circuits.</p> <p>Under Minor in Internet of Things, Senate advised to change the course title “Internet of Things” in Sl. No.4 in the above list as “Foundations of IoT”.</p> <p>The Senate further approved all 3 Minor programmes to be offered from July 2023 semester onwards. 2023 semester onwards.</p>
<p>2023-51-Senate-06</p>	<p>Approval for Offering Specialization Program</p>
	<p>The Senate was informed about its approval for offering Specialization program for students covered under 2020 B.Tech course curriculum. As per approval accorded by the Senate, the students have an option to earn a Specialization from their parent department on completion of at least 4 courses, having 16 credits, from a single vertical/specialization offered by the department.</p> <p>In line with the guidelines approved by the Senate, the departments had detailed deliberation to offer a suitable specialization program for the benefit of students. Based on these deliberations, the Senate was informed about the Specialization programs proposed to be offered by the Institute:</p> <p>Specialization Programs to be offered:</p>

1. Specialization in Micro Electronics and VLSI Systems

Name of the Department	Electronics and Communication Engineering
Preamble (Need, Scope, Target audience, Outcome)	Microelectronics and VLSI Systems is having wide applications in the domains of electronics, automobiles, RF, communication, and many more. The courses focuses on both device level as well as design level covering MOSFET Modeling for VLSI Circuits, Analog IC Design, Digital IC Design, VLSI System Design, VLSI Technology, VLSI Testing and Testable Design and High-level Verification with System Verilog and UVM. These courses will enable the students to acquire the skill sets of microelectronics and nanoelectronics including designing and testing of chips.
Number of Credits (Theory, Practice)	16
Compulsory courses* (mention credit structure in parenthesis)	3 courses out of 5 courses 1. MOSFET Modelling for VLSI Circuits (3-1-0-4) 2. Analog IC Design (3-1-0-4) 3. Digital IC Design (3-1-0-4) 4. VLSI System Design (3-1-0-4) 5. VLSI Technology (3-1-0-4) 1 course out of 2 courses 6. VLSI Testing and Testable Design (3-1-0-4) 7. High level Verification with System Verilog and UVM (2-0-4-4)

The Senate was informed that all the above courses have already been approved by the Senate.

2. Specialization in Electric Vehicle Systems

Name of the Department	Mechanical Engineering
Preamble (Need, Scope, Target audience, Outcome)	India is signatory to Paris treaty to protect nature and to reduce carbon emissions by 2050. As vehicle contributes more carbon and the fuel import is drain on foreign exchange, Government has initiated steps to promote electric vehicle research and usage. B.Tech Mechanical Engg (Specialization in Electric Vehicle Systems) offers the necessary theoretical background with a good blend of education to develop electric vehicles while standing at the forefront of innovations. The course will impart the nuances of energy storage, drives, sensors and controls, thermal management, hybridization, etc to Mechanical Engineers. The students will learn to combine knowledge and methods used in Mechanical, Electrical, Electronic Engg and design thinking courses. This will enable the student to integrate both aesthetic as well as safety features for future electric vehicles. Additionally, the courses to be offered under the program includes sensor and control and calibration, lightweight structures, and new sustainable materials.
Number of Credits (Theory, Practice)	16 Credits (4 elective)
Compulsory courses* (mention credit structure in	Specialization core (Compulsory- Course contents placed for approval)

parenthesis)	<ol style="list-style-type: none"> 1. Energy Storage systems for Electric vehicles (3-1-0-4) 2. Power Trains and Drives (3-1-0-4)
Elective Courses*	<p>Specialization elective – (Already approved)</p> <ol style="list-style-type: none"> 3. Hybrid Electric and Electric Vehicles (3-1-0-4) <p>Specialization elective (Course contents placed for Approval)</p> <ol style="list-style-type: none"> 4. Sensors and Controls for Electric Vehicles (3-1-0-4) 5. Thermal Management in Electric Vehicles (3-1-0-4) <p>Specialization elective (Course contents will be submitted in the next senate for approval)</p> <ol style="list-style-type: none"> 6. Vehicle Management system (3-1-0-4) 7. Mechanical Design of Electric Vehicles (3-1-0-4)

On the above proposed 7 courses, the course titled “Hybrid electric and Electric Vehicle” is already approved by the Senate. In respect of 4 other courses, the Senate was requested to peruse the details placed as **Annexure C**. It was intimated that the other courses, to be offered in 7th semester of the program, are under formulation and will be placed before the Senate in its next meeting.

The Senate was further intimated about the norms for enrolment as enlisted below:

- The enrollment normally commences from 5th semester of their program.
- Number of credits for earning a Specialization from parent department is 16 credits. The credits earned shall be accounted under elective courses (professional/free) requirements.
- The minimum CGPA of 8.0 at the end of Semester 4 with no backlog is must to be eligible for enrollment for Specialization.
- The students should have minimum GPA of 8.0 with no backlog in all the Specialization courses registered at the end of 4 years in addition to the overall CGPA of 8.0 with no history of backlog.
- For a specialization program offered by a department, a maximum of 20% of the students can enroll.
- The minimum strength required to offer a specialization program may be 10 students.

The Senate was further informed that as per rules stipulated by the Senate, the name of Specialization will be mentioned only on the Transcripts and the consolidated Grade sheets and not on the Degree certificate. Senate was further requested to approve the Specialization Program proposed to be offered by the Institute. If approved, all the above specialization Program will be offered from July 2023 semester onwards.

The Senate deliberated the proposal in detail.

In case of Specialization program for Electric Vehicle systems, the Senate advised the Institute to include practice components (hands on, prototype building, etc.). In this regard, the Senate advised the Institute to explore collaboration with industries and suggested to seek support from ICAD; NAT etc. IIT Research parks; Virtual labs of AICTE and Technology platforms of the Ministry of Heavy Industries may also be explored for this purpose.

Further, the senate advised that the no history of backlog is must for enrollment along with other conditions mentioned. The revised proposal incorporating

	<p>suggestions received shall be placed in the forthcoming Senate for approval.</p> <p>The Senate further approved the specialization program offered by the ECE department, to be offered from July 2023 semester onwards.</p>
2023-51-Senate-07	<p>Recommendations of the Expert Committee Constituted to Review PG Program</p> <p>In the 49th meeting of the Senate, the Senate was apprised about the status of admission in PG courses during last 3 years i.e from 2020 to 2022. The actual admission in case of certain program is less than 10 and the Institute was forced to run the program with the minimum strength on account of admission through CCMT. The Senate noted the status and advised the institute to monitor the status of admission in the year 2023-24.</p> <p>Subsequent to this, an expert committee was constituted by the Institute to review the ongoing PG program. The committee comprised Prof. S Narayanan as its Chairman and Prof. Apurbba Kumar Sharma, IIT Roorkee; Prof. R Jayagandhan, IIT Madras; Prof. Sasidhar Gumma, IIT Tirupati as external members and Prof. SP Venkatesan and Prof. Binsu J Kailath as internal members.</p> <p>The salient feature of the recommendations of the committee are:</p> <ul style="list-style-type: none"> • There shall be only one M.Tech Program in each engineering department without any specialization. • Regular B.Tech students who satisfy the academic requirement may be permitted to register for Dual Degree program • Aggressive marketing strategy to be evolved for placement and faculty member to be encouraged to interact with industry. • Institute should explore exchange program with other Universities. • Course work shall comprise between 70-75 credits with at least 40 credits for courses and 30 for project. • Admission under non- HTTA category can be encouraged. • Introduction of Industry sponsored M.Tech Program • Introduction of 3 year M.Tech Program • Option to M.Tech students to register for Ph.D program <p>A copy of recommendations of the committee was placed before the Senate as Annexure D.</p>
	<p>The Senate noted the recommendations of the committee.</p> <p>The Senate advised the Institute to explore possible collaboration with industries which may result in industries sponsoring their employees for PG program besides offering internship facility to other students. The Senate further advised the Institute to revise the curriculum, wherever required, to meet the demands of the industry. The Institute is further required to enhance the visibility of its programs through publicity and having exchange program with IITs and other reputed institutes along with foreign universities.</p>
2023-51-Senate-08	<p>Reintroduction of Dual Degree Programme</p> <p>In the 50th meeting of the Senate, a proposal on re-introduction of Dual Degree (DD) Program was placed for consideration of the Senate.</p> <p>During the meeting, the Senate was informed that there is no talent pool to pursue research due to combined effect of discontinuation of DD programme and reduction in</p>

admission in PG Programme. It is also noted that the companies, showing reluctance during initial period, are preferring for DD students due to their continuation in their job secured through placement. The Senate, after due consideration, advised the Institute to place a detailed agenda incorporating the name of the program to be offered, its curriculum and syllabi, placement prospects and recommendation of industry experts etc.

In line with advise of the Senate, the departments held extensive discussion and based on recommendation, the proposal to offer Dual Degree program was placed before the senate.

S.No	Name of the DD Program	Number of Seats to be offered
01.	B.Tech and M.Tech in Computer Science and Engineering	60
02.	B.Tech in Electronics and Communication Engineering and M.Tech in VLSI Design	20
03.	B.Tech in Electronics and Communication Engineering and M.Tech in Communication Systems	20
04.	B.Tech in Mechanical Engineering and M.Tech in Artificial Intelligence and Robotics	40
	Total	140

The detailed course curriculum for all the above programs placed as **Annexure E1 to E4** and further requested to approve the proposal of reintroduction of Dual Degree program from the academic year 2023-24 onwards.

The Senate, after deliberation, accorded, in principle, approval for offering Dual Degree program in the dept. of CSE and ECE from July 2023 onwards. The Senate further advised the Institute to place a detailed syllabi for course curriculum proposed for these two DD programmes in the next meeting.

In the case of the DD program offered by the ME dept., the program may be renamed as B.Tech in Mechanical Engineering and M.Tech in AI and Robotics. Further, as the program is interdisciplinary, the Senate advised ME dept. to discuss with other departments for preparation of curriculum and syllabi. Accordingly, the revised proposal shall be placed in the forthcoming Senate for deliberation and approval.

2023-51-Senate-9

List of Journals and Conference for Publication

In the 49th meeting of the Senate, the Senate was informed about the publication requirement of the scholar for meeting the synopsis requirement. The Senate after deliberation advised the Institute that the number of prescribed publications is the minimum requirement for synopsis, however, the scholars may be encouraged to publish more publications. The Senate further advised the Institute to place a list of journals prepared by the departments in consultation with expert members.

In line with direction of the Senate, the departments held extensive discussion with external experts and the recommendations of the committee of all the departments was placed before the Senate as **Annexure F** and the Senate was requested to look into the recommendations of the committee and offer suitable suggestions.

The Senate, after detailed discussion, approved the recommendations of the committee. The Senate further suggested that the following guidelines may be followed for publication of articles in journals/conferences.

- (a) Reputed journals indexed in Web of Science
- (b) Reputed Flagship conferences organized by professional societies / council
- (c) DC with external expert shall look into the quality of publications on a case by case basis taking into account the journal/conference review comments and review process for fulfilling the publication requirements.

Further, the Senate encouraged the scholars to participate in workshops, summer schools and conferences, etc. organized by CFTIs / Research institutes / Res. Laboratories, in line with the Institute norms.

2023-51-Senate-10

Approval for New Elective Courses

The proposal of the Institute to offer four new elective courses from Jul, 2023 academic session onwards was intimated to the Institute. These course have been approved by the Departmental Academic Committee (DAC) comprising external experts.

New Courses

S. No	Course	Type / Level	Faculty Name	External Experts
1.	Mechanical Design Simulation	UG	Dr. Venkata Timmaraju Mallina	Dr. Ratnakumar Annabattula, Professor, Mechanical Engineering, IIT Madras
2.	Failure Analysis Application for Engineering Materials	UG/ PG/ Ph.D	Dr. Satish Gunturi and Dr. Venkata Timmaraju Mallina	Dr. V Subramanya Sarma, Department of Metallurgical & Materials Engineering, IIT Madras
3.	Advanced Functional material Devices	PG/ Ph.D	Dr. Sadhu Sai Pavan Prasanth	Prof. K Sethupathi IIT Madras Prof. Anbarasu M IIT Madras
4.	AI for Autonomous Vehicles	UG/ PG	Dr. Ram Prasad Padhy	Prof. C Krishna Mohan IIT Hyderabad Prof. Pankaj Kumar Sa NIT Rourkela

The Senate was requested to look into the details of the above courses placed as **Annexure-G** and approval for these courses.

The Senate perused the courses proposed to be offered by the Institute. The Senate, after detailed discussion, approved the courses as placed before the Senate.

2023-51-Senate-11	Performance of 2022-23 batch students in their First Semester																																																																
	<p>The performance of the students, admitted in the year 2022-23, during their first semester of their program was placed before the senate:</p> <table border="1" data-bbox="635 241 1141 548"> <thead> <tr> <th>CGPA Range</th> <th>Number of students</th> </tr> </thead> <tbody> <tr> <td>>9</td> <td>31</td> </tr> <tr> <td>8-9</td> <td>125</td> </tr> <tr> <td>7-8</td> <td>106</td> </tr> <tr> <td>6-7</td> <td>63</td> </tr> <tr> <td>5-6</td> <td>43</td> </tr> <tr> <td><5</td> <td>28</td> </tr> </tbody> </table> <p>The senate was informed that there are over 71 students secured CGPA less than 6 in their first semester and the performance of such students was intimated to parents with a request to advise their wards to improve their performance in the subsequent semester. In addition, counselling was also provided to all the students. The students have also been cautioned that in case of poor performance in subsequent semester, the student will only be permitted to enroll for slow pace program.</p>					CGPA Range	Number of students	>9	31	8-9	125	7-8	106	6-7	63	5-6	43	<5	28																																														
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	The Senate took note of performance of the students and advised the Institute to monitor their performance on continuous basis.																																																																
2023-51-Senate-12	Student Intake for the year 2023-24																																																																
	<p>The proposed intake for the academic year 2023-2024 in respect of UG/PG and Ph.D program for the AY 2023-24 was placed before the Senate. It was intimated that the admission is being maintained almost at the level of intake for the year 2022-23.</p> <table border="1" data-bbox="331 1193 1437 2085"> <thead> <tr> <th>Degree</th> <th>Course Name</th> <th>No of Seats(Gender Neutral + Supernumerary for Girls)</th> <th>DASA</th> <th>SII</th> </tr> </thead> <tbody> <tr> <td>B.Tech</td> <td>Computer Science and Engineering</td> <td>89 (71+18)</td> <td>10</td> <td>5</td> </tr> <tr> <td>B.Tech</td> <td>Computer Science and Engineering with Major in Artificial Intelligence</td> <td>46 (37+9)</td> <td>6</td> <td>5</td> </tr> <tr> <td>B.Tech</td> <td>Electronics and Communication Engineering</td> <td>128 (102+26)</td> <td>6</td> <td>5</td> </tr> <tr> <td>B.Tech</td> <td>Mechanical Engineering</td> <td>85 (68+17)</td> <td>2</td> <td>5</td> </tr> <tr> <td>B.Tech</td> <td>Smart Manufacturing</td> <td>44 (35+9)</td> <td>2</td> <td>5</td> </tr> <tr> <td></td> <td>Total (B.Tech)</td> <td>392 (313+79)</td> <td>26</td> <td>25</td> </tr> <tr> <td>DD</td> <td>B.Tech and M.Tech in Computer Science and Engineering</td> <td>60</td> <td>6</td> <td></td> </tr> <tr> <td>DD</td> <td>B.Tech in Electronics and Communication Engineering and M.Tech in VLSI Design</td> <td>20</td> <td>2</td> <td></td> </tr> <tr> <td>DD</td> <td>B.Tech in Electronics and Communication Engineering and M.Tech in Communication Systems</td> <td>20</td> <td>2</td> <td></td> </tr> <tr> <td>DD</td> <td>B.Tech in Mechanical Engineering and M.Tech in Artificial Intelligence and Robotics</td> <td>40</td> <td>2</td> <td></td> </tr> <tr> <td></td> <td>Total (DD)</td> <td>140</td> <td>12</td> <td></td> </tr> </tbody> </table>					Degree	Course Name	No of Seats(Gender Neutral + Supernumerary for Girls)	DASA	SII	B.Tech	Computer Science and Engineering	89 (71+18)	10	5	B.Tech	Computer Science and Engineering with Major in Artificial Intelligence	46 (37+9)	6	5	B.Tech	Electronics and Communication Engineering	128 (102+26)	6	5	B.Tech	Mechanical Engineering	85 (68+17)	2	5	B.Tech	Smart Manufacturing	44 (35+9)	2	5		Total (B.Tech)	392 (313+79)	26	25	DD	B.Tech and M.Tech in Computer Science and Engineering	60	6		DD	B.Tech in Electronics and Communication Engineering and M.Tech in VLSI Design	20	2		DD	B.Tech in Electronics and Communication Engineering and M.Tech in Communication Systems	20	2		DD	B.Tech in Mechanical Engineering and M.Tech in Artificial Intelligence and Robotics	40	2			Total (DD)	140	12	
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M.Tech	Computer Science and Engineering with Specialization in Data Science and Artificial Intelligence	20	1	4
M.Tech	Electronics and Communication Engineering with Specialization in Communication Systems	20	1	3
M.Tech	Electronics and Communication Engineering with Specialization in Microelectronics and VLSI Systems	20	1	3
M.Tech	Mechanical Engineering with Specialization in Mechanical Systems Design	20	1	3
M.Tech	Mechanical Engineering with Specialization in Smart Manufacturing	20	1	3
	Total (M.Tech)	100	5	16
PhD	PhD (Full Time with HTRA)	40	-	03
	Grand Total	672	21	44

The Senate was intimated about the proposal to continue the allocation of supernumerary seats for girls as per details given below:

Program		Intake (C)	Girl Student joined under Gender Neutral 2022 (f)	% of Girl Students	20 % of C	Super-numerary seat for Girl students (x) = $(0.2C-f)/0.8$	Female only seats (f+x)	Gender Neutral (C-f)	Total Seat (C+x)
B Tech	CSE	80	9	11.25	16	9	18	71	89
	CSE-AI	40	3	7.5	8	6	9	37	46
	ECE	120	18	15	24	8	26	102	128
	ME	80	12	15	16	5	17	68	85
	ME-SM	40	5	12.5	8	4	9	35	44
	Total	360	47	13.05	72	32	79	313	392

The Senate was requested to approve the proposed intake and upon approval, the seat matrix, providing reservation of seats in line with norms of the Govt. of India will be communicated to JoSAA/CSAB 2023.

The Senate approved the student intake, as placed, for the academic year 2023-24. As the proposal for the DD program offered by the ME dept. needs revision, the DD program (B.Tech in ME + M.Tech in AI and Robotics) shall be offered after the approval of the revised curriculum.

2023-51-Senate-13

Cooperation Agreement with University of Agder Norway

The Senate was intimated that University of Agder, Norway has shown interest to sign a MoU with the institute for collaboration in the area of Faculty Exchange; Exchange of non-degree seeking students; joint research program in the area of mutual interest; exchange of academic publications and reports; organization of symposia, workshops, lecture, conference etc.

	<p>University of Agder (Norwegian: Universitetet i Agder) is a public university with campuses in Kristiansand and Grimstad, Norway. The institution was established as a university college in 1994 with the merger of six colleges and was granted its current status as a university in 2007, but its academic activity dates as far back as 1839. It is one of eight universities in Norway. University of Agder is ranked #1346 in Best Global Universities. It is the leading University for Artificial Intelligence /Mechatronics / Wireless Communications / Electronic System Design in Norway and also taking lead in Europe.</p> <p>This university is showing special interest on exchange of non-degree seeking students. Under this exchange program, students may pursue their degree/ research for a period of one year at UiA and no tuition fee is charged by the university. It was also intimated that prominent IITs and other CFTIs have also signed MoU with this university.</p> <p>As this being beneficial to the Institute, the Senate was requested to approve the proposal of signing MoU with <i>University of Agder</i> and the the draft MoU is placed as Annexure H.</p>
	<p>The Senate approved the proposal of signing of MoU with University of Agder, Norway for the academic collaboration.</p>
2023-51-Senate-14	<p>Joint Collaborative Agreement with AMTDC</p>
	<p>The Senate was informed about the execution of Joint Collaborative Agreement with Advanced Manufacturing Technology Development Centre (AMTDC) on 8th April 2023. AMTDC is a nonprofit society functioning at IITM Research Park and is having expertise in activities related to internships; skill development and technology development.</p> <p>Under the collaborative agreement, the proposal to provide industrial Internships for students of the Institute was elaborated and the entire cost will be borne by the centre. The agreement is placed as Annexure I.</p>
	<p>The Senate took note of agreement signed with Advanced Manufacturing Technology Development Centre (AMTDC) for internship; skill and technology development programs and ratified the approval accorded by the Chairman Senate to sign the agreement.</p>
2023-51-Senate-15	<p>Criteria for Institute Awards: Recommendations of the Committee</p>
	<p>In the 45th meeting of the Senate, the matter regarding formulation of suitable criteria and number of awards of the Institute was deliberated. The Senate after due consideration, advised the Director to constitute a committee to look into the extant criteria and evolve suitable new criteria.</p> <p>In line with direction of Senate, a committee was constituted under the chairmanship of Prof. Sreekumar. The committee held several meetings and recommended the revised criteria for Institute Awards, a copy of the same was placed as Annexure J for perusal of the Senate.</p> <p>The Senate was requested to consider the recommendation of the committee and offer suitable suggestions for its implementation for awards during the year 2023-24 onwards.</p>

The Senate perused the recommendations of the committee. In case of evaluation of Best Project Award, it was decided to permit all S grade holders to appear before the award committee. Further, in case of “Other Institute Contributions” the maximum marks in respect of “Participation in Institute functions” shall be limited to a maximum of 6 points for a student. With the above amendments, the Senate approved the recommendations of the committee. Further, the Senate approved the implementation of guidelines from the 2023 graduating batch.

2023-51-Senate-16

Ratification on the Decision of the Academic Disciplinary Committee

During the period between current and last meeting, the following disciplinary cases were reported and placed for due consideration of the Academic Disciplinary Committee. The recommendations of the committee were submitted to the Chairman Senate and with approval of Chairman Senate, action was taken against the following students and the details were placed before the Senate:

S No.	Roll No.	Misconduct	Examination	Penalty imposed by the disciplinary committee
1	EC22B1027	Possession of handwritten material	End Semester Examination Feb 2023	The erring student shall be awarded ‘U’ grade in the subject MA1000-Calculus and one grade less in all the other subjects of the first semester and 20 hours of community service
2	CS22B1061	Possession of handwritten material	End Semester Examination Feb 2023	The erring student shall be awarded ‘U’ grade in the subject MA1000-Calculus and one grade less in all the other subjects of the first semester and 20 hours of community service
3	ME22B1043	Possession of handwritten material	End Semester Examination Feb 2023	The erring student shall be awarded ‘U’ grade in the subject EC1000-Electronics Circuit for Engineers and one grade less in all other subjects of the first semester and 20 hours of community service
4	CS22B1051	Possession of handwritten material	End Semester Examination Feb 2023	The erring student shall be awarded U grade in the subject ME1000-Material for Engineers and one grade less in all other subjects of the first semester and 20 hours of community service.
5	EC22B1053	Exchange of Answer Scripts	End Semester Examination Feb 2023	The erring student shall be awarded ‘U’ grade in all subjects in the first semester
6	EC22B1047	Exchange of Answer Scripts	End Semester Examination Feb 2023	30 Hours of Community Service and the erring student shall be awarded ‘U’ grade in all subjects in the first semester
7	CS22B1027	Exchange of Answer Scripts	End Semester Examination Feb 2023	30 Hours of Community Service and the erring student shall be awarded ‘U’ grade in all subjects in the first Semester
8	CS22B1028	Exchange of Answer Scripts	End Semester Examination Feb 2023	30 Hours of Community Service and the erring student shall be awarded ‘U’ grade in all subjects in the first Semester

The Senate was requested to ratify the decision of the Chairman Senate on awarding penalty as recommended by the disciplinary committee.

The Senate ratified the disciplinary action imposed by the Chairman Senate on the above listed students

2023-51 -Senate-17	Guidelines for Joint/Dual Faculty Positions
	In order to facilitate the joining/participation of faculty members from parent department to recipient departments/ Centre to carry out interdisciplinary research, a set of guidelines formulated was placed before the Senate as Annexure K for perusal and approval of the Senate.
	The Senate perused the Guidelines for Joint/Dual Faculty positions and approved the guidelines

Sd/-
(Dr. Sadagopan N)
Dean (Academic Affairs)

Sd/-
(Shri. A. Chidambaram)
Registrar

Sd/-
(Prof. M.V.Kartikeyan)
Director