# Minutes of

# 46th Meeting of the Senate

Date: 13th December 2021

**Time** : 3 P.M

Mode: Hybrid



INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN AND MANUFACTURING, KANCHEEPURAM

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

#### 46th MEETING OF THE SENATE

Date : 13<sup>th</sup> December, 2021

**Time** : 3.00 PM

Venue: : Through Hybrid Mode

#### **MINUTES**

2021-46-	Welcoming	g the members and invitees by the S	ecretary, Senate									
Senate-01		The Secretary, Senate extended warm welcome to all the esteemed members of the Senate and also the invitees.										
2021-46- Senate-02	To confirm	the Minutes of the 45th meeting of	the Senate held on 21st August, 2021									
Senate 02	The Minutes of 45 <sup>th</sup> Meeting of the Senate held on 21 <sup>st</sup> August, 2021 was circulated to members. No comments/suggestions were received from the members.											
	1	Senate may kindly confirm the Minutes of the 45 <sup>th</sup> meeting of the Senate placed as <b>Annexure- 1.</b>										
		e took note of the Action Taken Rethe Senate held on 21st August,2021.	eport and approved the Minutes of the 45 <sup>th</sup>									
2021-46- Senate-03	Action Tal 2021	ken Report on the decisions of 45th	meeting of the Senate held on 21st August,									
	The action	taken report of the institute on the dec	eision of the Senate is as under:									
	2021-45- Senate-05	Revised Academic Calendar for Jul-Nov 2021	The semester has been completed with the revised calendar.									
	2021-45- Senate-06	To formulate the guidelines for allotment of Guides to Post-Doctoral Fellows at the Institute	A committee has been constituted by the Chairman, Senate for recommendations.									
	2021-45- Senate-07	Issue of Provisional Degree Certificates to the Students	Provisional Certificates have been issued to all eligible students.									
	2021-45- Senate-08	Approval for New Elective courses proposed by the faculty members	The Elective courses approved by the Senate are being offered to students.									
	2021-45- Senate-09	Student Intake for the year 2021-22	Approved student intake has been communicated to the JoSAA and admission process is going on.									
	2021-45- Senate-10	Convening of the 9th Convocation of the Institute (Virtual mode)	The 9 <sup>th</sup> Convocation has been conducted online on 24 <sup>th</sup> September 2021 with Dr. G. Satheesh Reddy, Secretary, Dept. of Defence R&D and Chairman DRDO as the Chief Guest. The details are placed as an item in this Senate.									

2021-45- Senate-11	List of Graduands for the 9th Convocation	293 graduands have been awarded the degree during the convocation.	
2021-45- Senate-12	Prize Winners of the 9th Convocation	The medals to prize winners, as approved by the Senate, have been awarded.	
2021-45- Senate-13	Constitution of Sub-Committee to formulate additional criteria for Awards	A committee has been constituted by the Chairman, Senate for the recommendations.	
2021-45- Senate-14	Implementation of the Innovation and Startup Policy of the Institute	The revised policy based on the recommendations of the committee constituted by the Chairman, Senate has been placed in the Research Council meeting.	
2021-45- Senate-15	Grant of Permission to PhD Scholar to credit the courses from IIT Madras for the Dept. of HS (English Courses)		
2021-45- Senate-16	MoU signed with MTAB Technologies Pvt. Limited, Chennai	Programmes have been started as per the MoU.	
The Senate	took note of the Action Taken by the	e Institute.	

#### To report about 9th Convocation of the institute held on 24th September 2021

The 9th convocation of the Institute was held on 24th September 2021 at 2.30 PM successfully through virtual mode. The event was graced by Dr G Satheesh Reddy, Secretary, Department of Defence R&D and Chairman, DRDO as Chief Guest. Honourable Chairman, Members of the BoG and the Senate, Prize winners of the Convocation and PhD Scholars took part in the event in which 293 degrees have been awarded to 143-B. Tech, 97-Dual Degree, 46-M. Tech and 7-Ph. D scholars.

The Senate may kindly take note of the event.

The Senate took note of successful completion of 9th convocation of the Institute.

#### 2021-46-Senate-05

#### Details of the PhD students who have completed the defence meeting after the 45<sup>th</sup> senate and awarded Degrees in the 9th Convocation

The 45<sup>th</sup> Senate has granted in-principle approval to award the degrees to the PhD scholars who could defend their thesis by 15th of September 2021 in the 9th Convocation. As the review reports from the Examiners have not been received till 15th September 2021, permission has been sought from the Board of Governors to award the degrees to the scholars who defend their thesis up to 20<sup>th</sup> of September 2021.

The Board had authorized the Chairman, Board of Governors to approve the list of graduands for award of degrees to PhD scholars who have defended their thesis before 20th September 2021. There are 7 Ph. D scholars and their details of are given in **Annexure 2**.

Sl No	N		Thesis Title	Date of Defence
1.			Detection And Analysis Of Symmetry In Robot-Assisted 3d Digital Reconstruction Of Heritage Artifacts	09.09.2021 2 pm
2.			Investigations On Optimal Planning Of Electric Vehicle Charging Stations In Radial Distribution Systems	16.09.2021 10.30 am

3.	Mr. Dinesh. G	EDM14D003	Qscsim - A Circuit Simulator For Switched Capacitor Circuit Analysis	16.09.2021 3 pm
4.			Energy Efficient And High Throughput Multi-Match Packet Classification Architectures For Nids	16.09.2021 4.30 pm
5.	Prasannavenkadesan MDM16D003 V		An In-Silico Surgical Drilling Protocol To Rehearse And Practice For Bone Fracture Fixation And Reconstruction Surgery	17.09.2021 12 Noon
6.			Stability Analysis Of Nonlinear Digital Filters With External Interferences	17.09.2021 3 PM
7.	Mr. Mathusuthanan MDM16D002		Evolution Of Stress And Fracture In Silicon Photovoltaic Module During Various Manufacturing Stages	17.09.2021 4.30 pm

The approval of the Chairman, Senate and the Chairman Board of Governors were obtained for award of degrees.

The Senate may kindly ratify the award of degrees to the above 7 Ph. D scholars.

The Senate noted the approval of the Chairman, BoG and accordingly ratified the decision of the Chairman Senate to award the PhD degrees to the scholars who have defended their thesis up to 20<sup>th</sup> September 2021.

#### 2021-46-Senate-06

#### Minor and Specializations of B Tech programmes

The Senate in its 44<sup>th</sup> meeting has approved that a student undergoing the 2020 B Tech curriculum may earn a Specialization from the parent Department if one completes 4 courses (16 credits) from the single vertical/specialization specified by the Dept.

#### OR

The student may earn a Minor from the other Department if one completes 3 courses (12 credits) as prescribed by that Department.

The Senate may kindly guide to fix the guidelines for offering Minor and Specialization by the Departments:

#### **Proposed Guidelines for the Department to offer Minor/Specialization:**

- Departments should do a thorough need analysis and brainstorming with industry and academic experts to identify the need-of-the-hour programmes
- Such programmes should necessarily equip the students to be hired by Core Industries in the respective field as well as for higher studies
- Industry oriented courses need to be offered to open more avenues for students
- Departments have to propose the list of courses in each basket/vertical with at least SIX courses
- The number of Minor and Specialization Verticals/baskets that can be offered for a batch is limited to maximum of THREE (2 Specialization + 1 Minor or vice-versa)
- One Minor or Specialization could be offered if at least 10-15 students register for the programme.
- Specializations proposed by the Departments should provide wider scope of growth for the students

#### **Proposed Guidelines for Students opting for Minor:**

- i. Minimum CGPA up to 4<sup>th</sup> Semester required to opt for the Minor is 8.5.
- ii. Student should not have any backlog at the end of 4th Semester
- iii. A minor is intended for a student to gain expertise in an area outside his/her major B. Tech discipline.
- iv. A specialist basket of at least 6 courses is to be identified for each Minor by the Department.
- v. Each basket may rest on one or more foundation courses. A basket may have sequences within it, advanced courses may rest on basic courses in the basket.
- vi. In order to successfully complete a Minor, a student needs to take at least THREE courses (12 credits) with a CGPA of 8.5 out of the courses defined in that Minor basket.
- vii. The area of the Minor must be different from the B Tech programme CORE discipline of the student; the courses that are part of the common core (including HSS), or the parent Department core/electives cannot be counted towards a Minor.
- viii. The name of the Minor will be mentioned only on the Transcript and the Consolidated Grade sheet but not on the Degree certificate.

#### **Proposed Guidelines for Students opting for Specialization:**

- i. Minimum CGPA up to 4<sup>th</sup> Semester required to opt for the Specialization is 8.5.
- ii. Student should not have any backlog at the end of 4<sup>th</sup> Semester
- iii. To produce industry-ready engineers well-versed with current technologies in addition to coreengineering fundamentals
- iv. Gives opportunity to interested students to enhance the skill and learn the technological advancements in that area
- v. Gives them an added privilege as they could apply for generic jobs with the regular undergraduate degree and domain specific jobs with the specialization
- vi. Excelling in an area allow the students to be more career or goal oriented with better knowledge on the career path
- vii. Hence the specializations proposed by the Departments should have wider scope of growth
- viii. A specialist basket of at least 6 courses is to be identified for each Specialization by the Department.
- ix. Each basket may rest on one or more foundation courses in the core curriculum with advanced courses following the basic courses in proper sequence.
- x. In order to successfully complete a Specialization, a student needs to take at least FOUR courses (16 credits) with a CGPA of 8.5 out of the courses defined in that Specialization basket.
- xi. The courses that are part of the common core (including HSS) cannot be counted towards a Specialization.
- xii. A student is allowed to take a maximum of one Specialization
- xiii. The name of the Specialization will be mentioned only on the Transcript and the Consolidated Grade sheet but not on the Degree certificate.

The Senate may kindly discuss and advise on the above guidelines.

The Senate took note of rules and regulations governing Specialization and Minor Programmes.

The Senate, after deliberation, approved the guidelines with a suggestion to include the following suitably in the guidelines:

- One Minor or Specialization could be offered if at least 10 students register for the programme after the deadline for ADD/DROP/CHANGE courses as per the academic calendar.
- Specific names for Minor and Specialization should be identified by the Departments with concurrence from the academic section.
- List of courses for each Minor/Specialization are to be fixed and circulated to the students during their 4<sup>th</sup> Semester itself so that students get sufficient time to decide.
- Multiple Departments together may propose to offer Interdisciplinary Minor as well.
- The Minor Programme in case of SIDI will follow the rules as already approved by the 44<sup>th</sup> Senate due to its interdisciplinary nature
- Credits earned from NPTEL courses may not be considered for Minor and Specialization as calculating the requisite CGPA of 8.5 may not be possible with NPTEL courses.

The Senate further advised the Institute to present the Minor and Specialization programmes planned along with the relevant list of courses in the subsequent Senate.

#### Change in credits of NPTEL courses as per new curriculum

The existing Senate rule (Res.No.15/2018 of 37<sup>th</sup> Senate) stipulates the number of credits that could be earned by students pursuing different programmes as furnished below.

Degree	Maximum number of Credits that can be earned from NPTEL courses	Condition for Successful Completion of course
B Tech	09 credits (out of 15 credits for elective)	≥ 40% of final score
Dual Degree	12 credits (out of 24 credits for elective)	≥ 40% of final score
M Des/ M Tech	09 credits (out of 12 credits for elective)	≥ 40% of final score
Ph D	ONE course (According to the recommendation of the DC) – Other than External Two courses (According to the recommendation of the DC) – for External	Minimum 65 Marks to be scored ≥ 65% of final score as per Res. No. 9 /2018 Senate 38

As the B Tech and M Tech curriculum have been revised with effect from 2020 and 2021 batches respectively, the number of credits that could be earned from NPTEL is required to be relooked. As per the revised curriculum of B Tech and M Tech, the credits under Electives are given below for all programmes.

#### **B** Tech Programmes

Branch	Semester				Total		In-House	NPTEL
	5	6	7	8	elective credits	credits from parent Dept.		Credits
CSE	0	5	3	1	36	12	16	8-9
CSE-AI	0	3	3	1	28	16	4	8-9
ECE	1	3	3	1	32	8	16	8-9
ME	1	4	3	1	36	12	16	8-9
SM	1	4	3	1	36	12	16	8-9

#### 2021-46-Senate-07

#### M Tech Programmes

Branch	Sei	Semester			Total	In-House Elective	NDTEL
	1	2	3	4	elective credits	Credits	NEILL
CS-DAI	2	5	0	0	28	24	4-6
CMS	0	4	0	0	16	12	4-6
MVS	2	2	0	0	16	12	4-6
MSD	2	3	0	0	20	16	4-6
SMT	1	3	0	0	20	16	4-6

The Senate may kindly peruse and advise on the proposal.

The Senate deliberated the existing rules and the proposed modifications.

The Senate opined that 65 marks criteria fixed for the PhD Scholars is too stringent. On this, it was informed that the said criteria was fixed by the 38<sup>th</sup> Senate to satisfy the minimum CGPA requirement of 7.5 by the scholars.

The Senate, after deliberation, approved the change in credits requirement to 8-9 (three 3 credit courses) and 4-6 (two 3 credit courses) in respect of NPTEL courses for the B Tech students admitted from 2020 batch onwards and M Tech 2021 batch onwards respectively.

#### Change in credits for B Tech (Honours) as per new curriculum

The Institute awards B Tech (Honours) to the candidates who successfully complete the stipulated requirements. The 40<sup>th</sup> Senate by its Res. No. 18/2019-40 Senate has ruled that for Honours, only In-House courses are permitted. Due to revision in curriculum, the rules modified for award B Tech (Honours). The revised requirements are given below for kind consideration of the Senate.

- 1) Honours programme shall be opted by a B Tech / DD student at the end of  $4^{th}$  Semester.
- 2) He/she should have a CGPA greater than or equal to 9.0 at the end of 4<sup>th</sup> Semester.
- 3) **TWELVE (12)** additional credits have to be earned by the student to acquire the B Tech Honours Degree during his/her  $5^{th}$ ,  $6^{th}$ ,  $7^{th}$  or  $8^{th}$  semesters.
- 4) These 12 credits could be earned by crediting minimum of THREE (03) courses each with at least three (04) credits.
- 5) Student has to earn the 12 credits from in-house courses offered by Institute faculty during regular classes.
- 6) The in-house courses may be selected from the core/elective courses offered by his/her own Department, however those courses should not be part of his/her regular B Tech curriculum.
- 7) The student shall be crediting ONLY ONE additional course required for Honours programme over and above the core and elective courses prescribed by the B Tech curriculum for that particular semester.
- 8) The student should earn any of the five grades S, A, B, C, D in the courses he/she credits.
- 9) The student shall lose the chance of pursuing the Honours programme if he/she earns any of the three grades E, U, W in any of the courses.
- 10) Those who have registered for B Tech (Honours) must maintain a CGPA of 9.0 or above when calculated by taking the normal B Tech programme courses and the additional courses credited for Honours programme into account.

Otherwise,

- a) They will be awarded only B.Tech Degree and not B Tech Honours Degree.
- b) Grade secured in these extra courses will not be considered for CGPA calculation but will be given in the grade sheet/Transcript.
- c) Extra credits earned by the student will be counted for prizes and awards.
- 11) The Dual Degree students should have completed the courses required for Honours programme by their 8<sup>th</sup> Semester.

The Senate may kindly peruse and advise on the proposal.

The Senate, after deliberation, approved the proposal to have additional 12 credits from three in-house courses as a requirement for awarding Honours in B Tech programme.

#### 2021-46-Senate-09

#### **New QIP Centre (Minor) to initiate the activities**

The Senate has granted permission to request the AICTE to initiate a QIP centre at the Institute vide Res. 2018-37-Senate-21 and accordingly, the proposal was submitted for three consecutive years from 2019 to 2021. Eventually, the AICTE vide its letter dated 11<sup>th</sup> June 2021 has granted approval to start a new QIP centre in Engineering and Technology from the year 2021-22. The AICTE order is attached as **Annexure 3.** 

It is proposed that the QIP Cell will be created under the Academics Cell. All accounts related to the QIP Cell will be managed by the Institute Accounts Section. Further the AICTE the sanctioned 8 Ph D seats under QIP programme.

Submitted to Senate for consideration and approval to commence the process under QIP Centre (Minor).

The Senate was informed that proposals from different faculty members have been collected for offering short term courses and the same has been submitted to the AICTE for approval. The Senate further approved the proposal of the Institute to initiate different activities under the QIP Cell.

The Senate further took note of the conditions specified by the AICTE in the approval letter of the QIP Centre (Minor) regarding accreditation. Accordingly, the Senate advised the Institute to initiate the process to apply for NBA accreditation by eligible Departments.

The Director assured the Senate that an NBA Cell will be created in the Institute with faculty member as the in-charge to initiate the process. The Senate further advised the Institute to organize different workshops on NBA by inviting eminent experts to the stakeholders of the Institute.

#### Approval for New Elective courses proposed by the faculty members

The New/Modified elective courses, with due approval from the Departmental Academic Committee (DAC), consisting of external experts is listed below is for kind perusal of the Senate.

	Sl. No	Course Name	Type/ Level	Faculty Name	External Experts
	1.	Finite Element Analysis	New UG / PG	Dr. Jayabal K Dept. of ME	Prof. Arockiarajan IITM Prof. Rajagopal IIT Hyderabad
	2.	Gas Dynamics and Propulsive Systems	New / UG / PG	Dr. S. Jayavel Dept. of ME	Prof Shaligram Tiwari (IITM)
	3.	Thermal Turbomachines	New / UG / PG	Dr. Karthick S Dept. of ME	Prof. S.P. Venkateshan
2021-46-	4.	4. Abrasive Machining and Finishing Processes		Dr. Kishor Kumar Gajrani Dept. of ME	Prof. V. K. Jain, (Retired, IIT Kanpur)
Senate-10	5.	Machining Dynamics and Adaptive Control	New / UG / PG	Dr. Kashfull Orra Dept. of ME	Prof. S. K. Choudhury, Dept of ME, IITK
	6.	Micro-system Fabrication	New UG / PG	Dr. Avinash Kumar Dept. of ME	Prof. Amit Agrawal, Dept of ME, IITB Prof. Suman Chakraborty, Dept. of ME, IIT KGP
	7.	Hybrid Electric and Electric Vehicles	New / UG / PG	Dr.K.Selvajyothi Dept. of ECE	Prof. G Bhuvaneswari, IIT D
	8.	Fiber Optic Communication System Design	New UG/PG	Dr. Srijith K Dept. of ECE	Prof. Balaji Srinivasan, EE, IITM Prof. Deepa Venkitesh, EE, IITM
	9.	Multimedia Processing and Analysis	New UG/PG	Dr. Appina Balasubramanyam Dept. of ECE	Prof. Sumohana S Channappayya, Dept. of EE, IIT Hyderabad Prof. Kaushik Mitra, Dept. of EE, IITM
	10.	Techniques and Management of E-waste	New / PG/PhD	Dr Pandiyarasan Veluswamy	Prof. Ir. Dr. Mohd Faizul Mohd Sabri (University of Malaya)

	recycling		Dept. of ECE	Professor. Cafer T Yavuz (KAUST, Saudi Arabia)
11.	Reading Auto/biography	New / PG/Ph.D.	Dr. Parvathy Das Dept. of SH	Dr. Udaya Kumar, Professor, School of Language Literature and Cultural Studies, JNU, NewDelhi Dr. Sharmila, Associate Professor, Humanities and Social Sciences, IIT Bombay
12.	Design Optimization	Revision UG / PG	Dr. Sivaprasad AVS Dept. of ME	Prof. Shankar Krishnapillai, Dept of ME, IITM.
13.	Principles of Vibrations	New UG / PG	Dr. Sivaprasad AVS Dept. of ME	Prof. S Narayanan IITM
14.	Failure Analysis and Design	Revision UG / PG	Dr. V.Timmaraju Dept. of ME	Prof. R. Gnanamoorthy IITM
15.	Surface Modification Technologies	Revision UG / PG	Dr. S. Gowthaman Dept. of ME	Prof. M. Duraiselvam, NIT Trichy
16.	Principles and Design of Refrigeration and Air- Conditioning Systems	Revision UG / PG	Dr.B.Raja Dept. of ME	Prof. S.P. Venkateshan Prof Shaligram Tiwari (IITM)
17.	Thermal management in electronic systems	Revision UG / PG	Dr.B.Raja Dept. of ME	Prof S. P Venkateshan (IITM) Prof Shaligram Tiwari (IITM)
18.	Computational Fluid Dynamics	Revision UG / PG	Dr. S. Jayavel Dept. of ME	Prof Shaligram Tiwari (IITM)
19.	Inverse problems in Engineering	Revision UG / PG	Dr.Shubhankar Charaborthy Dept. of ME	Prof. P.K.Das (IIT Kgp) Prof. S.P. Venkateshan
20.	Advanced Geometric Modelling and CAD	Revision PG/Ph.D	Dr P Pandithevan Dept. of ME	Prof. G. Saravana Kumar, IIT Madras
21.	Advanced Machining Processes	Revision UG / PG	Dr. K. Senthilkumaran and Dr. P. Pandithevan Dept. of ME	Prof. U.S Dixit, Dept of ME, IIT Guwahati.
22.	Computer Aided Design and Manufacturing	Revision UG / PG	Dr. P. Pandithevan Dept. of ME	Prof. G. Saravana Kumar, IIT Madras
23.	CNC Technology and Programming	Revision UG / PG	Dr. Senthilkumaran K Dept. of ME	Professor PVM Rao, Dept of ME, IITD
24.	Processing of Polymers and Composites	Revision UG / PG	Dr. V.Timmaraju Dept. of ME	Prof. R. Velmurugan IITM
25.	LASER based manufacturing techniques	Revision UG / PG	Dr. Avinash Kumar Dept. of ME	Prof. G. Vijaya Prakash, Physics Department, IITD
26.	Vibration Control	New UG / PG	Dr. Siva Prasad AVS Dept. of ME	Prof. S Narayanan, IITM
27.	Adaptive Filter Design	Revision PG/Ph.D	Dr. Asutosh Kar Dept. of ECE	Prof. CS Ramalingam, Dept. of EE, IIT Madras Prof. Trilochan Panigrahi, Dept. of ECE, NIT Goa

28.	Acoustic & Audio Signal Processing	Revision PG/Ph.D	Dr. Asutosh Kar Dept. of ECE	Prof. CS Ramalingam, Dept. of EE, IIT Madras Prof. Trilochan Panigrahi, Dept. of ECE, NIT Goa
29.	Detection and Estimation Theory	Revision PG/PhD	Dr. Appina Balasubramanyam Dept. of ECE	Prof. Sumohana S Channappayya, Dept. of EE, IIT Hyderabad

The details of the above courses are placed as **Annexure-4**.

The Senate may kindly consider and approve the proposed elective courses.

The Senate suggested certain changes in Principles of Vibrations and Vibration Control elective courses.

The Senate, after deliberation, granted approval to all the Elective courses. These courses will be offered by the respective departments in the subsequent semesters and the minimum number of Registrations for a course is at least 15.

#### Change of admission category and guide change of Mr. Reji G., Roll No. EDM19D007

Mr. Reji G. (Roll No. EDM19D007) joined the Institute as a JRF in an industry project supervised by Dr Asutosh Kar and also enrolled for Ph.D under the project category. The project funding industry expressed its inability to continue funding due to the pandemic midway. Accordingly, the student was paid stipend of Rs. 30,000/- up to Feb 2020 and was paid only 12,000/- later on. In the DC meeting held to discuss the issue, Dr Asutosh Kar has confirmed that it would not be possible to support the scholar from the project. The scholar represented that he had fallen into depression and was on medical leave till June 2021. Upon rejoining he submitted the request to complete his PhD with Institute support under a different supervisor. Considering the situation, DC recommended for financial support from the institute and change of supervisor. A copy of the minutes of the DC Meeting is placed herewith as **Annexure 5**. As per the recommendation of the DC, the Chairman Senate has authorized the HoD to allot him a different supervisor. Based on the mutual consent of the student and the supervisors, Mr Reji has been permitted to work under the joint guidance of Dr. K Selvajyothi Dept. of ECE and Dr. B. Raja, Dept. of ME.

#### 2021-46-Senate-11

The Chairman, Senate has approved that the period of Institute financial assistance would be from the date of his rejoining the Institute after medical leave and up to July 2024 or till the completion of synopsis/thesis submission whichever is earlier so that the total duration of stipend is limited to 5 years as per the MoE guidelines.

The Senate may kindly consider and ratify the decision of the Chairman Senate for change of category of PhD registration and the change of supervisor.

The Senate deliberated the item at length and advised the Institute to follow/fulfill the same selection process/ criteria prescribed for regular HTRA scholars in case of admission of scholars under project category.

In case of scholars who already get inducted into a project as JRF with a lower mark than the HTRA category cut off, they should not be converted to HTRA under any circumstances. Such students should re-appear for the HTRA selection process and only the successful candidates are eligible for conversion to HTRA.

In case of Mr. Regi.G, the Senate was informed that the initial shortlisting criteria applied for the HTRA candidates in the Dept. of ECE under General/OBC category was a minimum

score of 60 % or CGPA >= 6.5 in their UG & PG program and these candidates were permitted to appear for written test. In the written test, the candidates who scored at least 50% was called for the Interview and based on the performance, the candidates who scored at least 62% were recommended for HTRA. It has been verified that Mr. Reji has fulfilled all the above criteria during the selection process held on 14.06.2019.

The Senate, after deliberation, approved the case of Mr. Regi G taking into account the mental health of the student, pandemic situation and the approval accorded by the Chairman. The Senate further observed that this cannot be treated as a precedence and any such further conversions from JRF to HTRA should necessarily be done only after confirmation of fulfillment of admission criteria prescribed for regular HTRA scholars by the JRF candidates and a performance review of JRF by an External Committee of Experts in the field. The number of such conversions should be as per the rules of the Institute as the financial support is from Ministry of Education, Government of India.

#### 2021-46-Senate-12

#### To ratify the academic calendar of the Institute for the year 2022

As per extant practice, the academic session for the January session commences from the first week of January. In order to plan allocation of courses and also for the benefit of students, the Institute has prepared the Academic Calendar for the year 2022 and with due approval of the Chairman, Senate, the academic calendar for the year 2022 has been circulated to faculty and students. A copy of the same is placed as **Annexure-6** for the kind perusal of the Senate.

The Senate may kindly consider to ratify approval accorded by the Chairman, Senate on the Academic Calendar for the year 2022.

The Senate approved the Academic Calendar as placed before the Senate. The Senate further granted permission to Chairman Senate to modify the same in case of announcement of mid semester break so as to call back the students. Changes, if any, in the calendar may be approved by the Chairman and placed in the subsequent Senate for ratification.

#### 2021-46-Senate-13

### To discuss about Intake of Ph.D. Scholars per faculty under HTRA category and Thesis Submission Guidelines

- A. The PhD Programme was started in 2010 in the Institute, however, the number of PhD scholars under a faculty member is not clearly specified in the PhD guidelines. The Senate is requested to give directions on the maximum cap on number of scholars under different categories of HTRA, Project and External. As of now, the number of scholars under HTRA is limited to 2 per every faculty and new faculty could take only one scholar in their first year at the Institute.
- B. The then Director, Prof. B Majhi on 30/5/21 by email (Annexure 7) states that the PhD scholar should have two SCI papers in non-open-access Journals for Synopsis submission and the same has been followed for all the scholars since 1<sup>st</sup> June 2021. A request has been received through the HoD, Mechanical Engineering to permit the scholars who have completed five years to submit the synopsis with one non-open-access SCI journal. They may be allowed to submit the thesis with one such journal and their defence may be conducted after acceptance of the second non-open-access SCI journal.

Hence, it is submitted that new Ph.D guidelines will be prepared for discussion and approval of the Senate.

The Senate may kindly peruse and advise further.

The Senate advised the Chairman Senate to constitute a committee to look into the existing PhD guidelines and formulate revised guidelines and submit to Senate for consideration and implementation.

The Senate further advised the Institute to limit the number of HTRA scholars as 3, 2, 1 for Professor/Associate Professor, Assistant Professor Grade-I/Assistant Grade-II (Level 11) and Assistant Professor Grade-II (Level 10) respectively.

The Senate further advised the Institute not to relax the synopsis/thesis submission criteria so as to maintain the PhD research quality.

#### 2021-46-Senate-14

#### Formulation of Suitable Policy for Implementation of NEP 2020

The Ministry has instructed to come up with the Action plan for the implementation of the NEP 2020 for the categories listed below.

Preparation of institutional Development Plan (IDP) as envisaged in NEP,2020 1. 2. Action taken (till now) and action plan for moving towards more inter- disciplinary and multi-disciplinary courses. 3. Plan for implementation of Multiple Entry- Exit system. Online & Digital Education and credit award mechanism for the courses (e.g., SWAYAM courses). 5. Promotion of Regional Languages, Arts and Culture. Opening of International Students Office and its status update. 6. Connect with industry for research and education (including mobility between industry and academia as recommended by IIIT Council and IIIT Coordination Forum). 8. In addition to above points, any other item in line with NEP, 2020.

Accordingly, the Senate may authorize the Chairman Senate to constitute five sub-committees with one Dean, one HoD and another faculty member as the members to study each item and come up with the action plan. The Committees will have deliberations within the Institute and also with experts from Academia and of NEP 2020 before submitting the recommendations to the Senate.

Senate may kindly grant approval for the same.

The Senate advised the Chairman to constitute sub-committees to study each item for better implementation of the NEP and submit an action plan for consideration of the Senate.

#### 2021-46-Senate-15

#### Commencement of off-line classes on the campus

The Teaching-Learning-Evaluation-Grading-Processes during the last FOUR semesters have been delivered through online with due approval of Senate.

On account of improvement in the overall situation and also taking into guidelines of the Government, the Institute was planning to commence off-line classes on the campus by inviting students from Jan-May 2022 onwards.

In this regard, all the Departments have planned to have a maximum of 60 students in each batch and accordingly the course allotment has been completed by the Departments. All the Departments have been advised to strictly follow the SOP in the lab classes and the required arrangements has been made by the Heads of the Departments and various sections in consultation with their faculty members. In addition, the Institute is planning to utilize all class

rooms in the Academic Halls Block so as to maintain the SOP. Further, all the students have been advised to take vaccination before reporting to the institute.

Accordingly, it is proposed to be call back the students in the following order to minimize the risk and to ensure quarantine for the students and the same has been communicated to the students.

Batch	To report by (Date)
All M Tech/M. Des and PhD	15 <sup>th</sup> Dec 2021
<b>2018 B Tech and DD, 2017 DD</b>	20th Dec 2021
2019 B Tech and DD	25 <sup>th</sup> Dec 2021
2020 B Tech	30th Dec 2021

Orientation programme for the first year students is proposed to be held from 8<sup>th</sup> to 10<sup>th</sup> December 2021 and the classes would commence the 13<sup>th</sup> December 2021 The first semester is proposed to be held online as most of students falling under less than 18 years category and is not covered under vaccination drive.

Considering the recent variant Omicron, the Institute will re-look into the proposal and the Senate may kindly authorize the Chairman, Senate to take suitable decision based on the circumstances.

The Senate advised the Chairman, Senate to take suitable decision towards commencement of the classes inside the campus, taking into account prevailing situation and Government guidelines in this regard.

All the classes for the Jan-May 2022 semester may be conducted through online mode and based on periodic review, students may be called back to the campus by providing midsemester break in phases for different batches.

#### 2021-46-Senate-16

## Approval for offering Design Research: Theory and Methods for Ph. D scholars of Dept. of SIDI in place of Research Methodology course

HoD, Dept. of SIDI has submitted a request for permitting the scholars of SIDI to credit the course Design Research instead of Research Methodology. The proposal from SIDI is given in **Annexure 8**.

The course work of a PhD scholar of all other Departments consists of 2 CORE and 2 ELECTIVE courses along with the Research Methodology (RM) course which is a compulsory PASS/FAIL course without any credits. The RM course actually tries to equip the scholar to professionally and personally become a better researcher. The content of the RM course is given in **Annexure 9**.

Senate may kindly advise if the above PASS/FAIL RM course is to be replaced by Design Research course for the PhD scholars in SIDI. Senate may also advise on their course work requirement if they need to complete 2 CORE and 2 ELECTIVES in addition to Design Research course.

The Senate advised the Institute to propose a compulsory PASS/FAIL Research Methodology course specific to the PhD scholars in the SIDI. The Senate further authorized the Chairman, Senate to approve the same and get ratification of the Senate in its subsequent meeting.

#### Institute support for the scholars who have Joined under Project category

The faculty were taking JRF for their project. The JRFs were registering for Ph.D under sponsored category their stipend were paid from the respective project. However, the project duration is normally limited to 02/03 years and they cannot continue their Ph.D work with financial support beyond the project period since the financial support ends with the project.

Multiple requests have been received from faculty members for supporting the project scholars with Institute fellowship after the completion of the project duration. The table below gives the details of all such scholars who have been in similar situation.

S. No	Name	Roll No	Guide Name	D.O.J under Ph. D	Project Starting Date	Date of completio n of Project	Amou nt
1.	MOHANAPRIYA	COE19D003	Dr N Sadagopan	09.01.2019	06.12.2018	25.10.2021	840000
2.	K SRIDHARAN	EDM19D003	Dr B Chitti Babu	01.01.2019	01.04.2019	22.02.2022	840000
3.	MURUGESAN M	MDM20D005	Dr Senthil Kumaran R	01.01.2020	26.08.2019	08.03.2022	841100
4.	PULIKONDA MOUNIKA	EC21D0001	Dr. Priyanka Kokil	04.01.2021	01.01.2020	15.02.2022	798950
5.	KEERTHANA K	EDM19D004	Dr Selvaraj M D	22.07.2019	15.02.2019	18.03.2021	792000
6.	S. SUDHARSON	EDM18D009	Dr Priyanka Kokil	23.07.2018	06.11.2017	10.11.2020	676700
7.	TURIMERLA PRATAP	EDM18D010	Dr Priyanka Kokil	23.07.2018	11.12.2017	28.02.2021	805000

The Chairman Senate has approved supporting them with Institute fellowship considering the pandemic situation and approved the Institute support as indicated above.

However, guidelines need to be prepared for conversion of sponsored category to Institute category with financial support. (HTRA) to formulate guidelines with regard to number of seats, duration of financial support etc from the Institute.

The Senate may consider and approve the proposal for granting institute fellowship for the above scholars and may authorize the Chairman Senate to constitute a subcommittee to look into the issue for suitable recommendations.

The Senate deliberated the proposal at length along with earlier item No. 2021-46- Senate-11 and approved the following:

- i. Automatic conversion from Project to HTRA category is not possible under any circumstances.
- ii. A JRF working in a sponsored project of at least 2 years duration can be considered for PhD admission under Project category without any financial commitment from the Institute for the remaining duration after the closure of the project.
- iii. A JRF under Project category cannot be considered for HTRA category unless exactly same selection process and criteria have been followed/fulfilled for the PhD admission under Project and HTRA categories in that Department for the respective session of PhD admission process.
- iv. Such Project PhD scholars who requested for conversion into HTRA category after the closure of the sponsored project, must compulsorily be reviewed by an expert committee with external members (Professors working in similar areas from CFTIs) for research progress and output.

- v. There should be a limit on number of such (Project to HTRA) conversions in each Department in every financial year due to fixed number of HTRA fellowships.
- vi. Institute support may be provided to such Project scholars who fulfill the conditions stipulated at (i) to (v) above under the HTRA category for a maximum duration of two years after the closure of the project.
- vii. In case of SEVEN scholars listed above, the Senate advised to verify their selection criteria vis a vis with HTRA scholars selected during the year and to conduct a review of such project scholars by an expert committee with external members to consider to extend support under HTRA category for a maximum duration of two years.
- viii. The details about the criteria of admission and outcome of the performance review may be presented in the subsequent senate.

## Alternate Evaluation System in case of Student with Disabilities: Grant of additional compensation time for Examination.

Students admitted with learning disabilities are undergoing alternate evaluation scheme as per the Senate Res. No. 2017-36-Senate-18 and the following system has been followed in the Institute.

Assignments: 50%
Quiz I & II: 15 % each
End Semester Exam: 20%

Mutually exclusive Portions of the syllabus for each of the examination Enhancing the compensation Examination time by 15 minutes for every 1-hour normal examination.

Recently, the Ministry vide its letter dated 29<sup>th</sup> August 2018 advised all the institutes to grant extra compensation time of 20 minutes for every one-hour examination. A copy of letter is placed as **Annexure 10.** In line with direction of the Government, the institute with approval of the Chairman, Senate, enhanced the compensation time to 20 minutes for every one-hour examination.

The Senate may consider ratifying the approval accorded by the chairman Senate.

The Senate ratified the approval accorded by the Chairman, Senate.

#### 2021-46-Senate-19

#### Fees structure for the B. Tech students for the academic year 2021-22

As per the MHRD notification letter no.F.No.79-3/2015-TS.1 dated. 10.07.2015, the tuition fee for the new entrants of the UG programme is to be enhanced at the rate of 10% every year. During the year 2020-21, the tuition fee of the institute was Rs. 60,000/- per semester for the B.Tech (same as 2019 – as per MoE direction through letter No. F.No.77-2/2020-TS.I dated 24.04.2020). The effect of the pandemic is still persisting in various parts of the country and many requests have also been received from prospective students for reduction in fee structure. It has been verified that few other CFTI IIITs have not also enhanced the tuition fee for the year 2021-22.

Considering the above, it has been decided to collect the same tuition fee for the year 2021-22 at the rate of Rs.60,000/- per semester and fee circular was issued with the approval of the Chairman, Senate. Further, in line with guidelines of the Government, all SC/ST and PWD-B Tech students will be exempted from payment of tuition fee irrespective of their parental

	income. (Annexure 11).
	However, the M.Tech and Ph.D fee is collected as per Ministry norms.
	The Senate may kindly ratify the Fee Structure for the B. Tech 2021 batch students.
	The Senate discussed the same and due to ongoing pandemic and hardship faced economically, retaining the same fee for the B Tech 2021 batch students was ratified by the Senate.
2021-46- Senate-20	MoU signed with MTAB Technologies Pvt. Limited, Chennai
	The Institute has signed a MoU with MTAB Technologies PVT. Limited, Chennai for utilizing Abhyaz, a web-based technology innovation platform developed by MTAB technology PVT. Ltd. The MoU is effective from 21.08.2021 and a copy of the MoU is placed as <b>Annexure 12</b> for kind information of the Senate.
	Senate may kindly take note of MoU signed with MTAB Technologies Ltd.
	The Senate took note of the MoU signed with MTAB and advised the Institute for active contribution.
2021-46- Senate-21	MoU signed with SAMSUNG
	The Institute has signed a MoU with SAMSUNG India Pvt. Limited for developing student projects with faculty support. The students whose projects are successfully demonstrated will be provided with internship opportunities at SAMSUNG. The successful completion may further be enhanced into an institute-industry research collaboration as well. The copy of the MoU is placed as <b>Annexure 13</b> for kind information of the Senate.
	Senate may kindly take note of MoU signed with SAMSUNG.
	The Senate took note of the MoU signed with SAMSUNG and advised the Institute for active contribution.
2021-46- Senate-22	Panel of Experts for Faculty Recruitment as Senate nominee
	It was informed by the Director as the Chairman of Senate that a panel of Experts as Senate nominee for faculty recruitment in various Departments have been formulated based on the Statutes and proposed to the Chairman, Board of Governors. The Experts Committee for the respective department would be constituted from the panel of experts approved by the Chairman, BoG and the same would be presented to the Senate after completion of recruitment in all the Departments.
	The Senate ratified the panel of experts for faculty recruitment as Senate nominee approved by the Chairman, Senate and Chairman, BoG.

	Elective Course for Approval – Pattern Recognition by Dr. J Umarani
2021-46- Senate-23	The course contents approved by Dr. Surya Prakash, Associate Professor, IIT Indore as part of the DAC was placed before the Senate as <b>Annexure 14</b> .
	The Senate, after consideration, approved the course contents.

The next meeting of the Senate will be held in February 2022.

Sd/-(Dr. Binsu J Kailath) Dean Academics Sd/-(A. Chidambaram) Registrar

Sd/-(Prof. D V L N Somayajulu) Chairman