भारतीय प्रौद्योगिकी संस्थान रूड़की
रूड़की – 247 667 (भारत)
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
ROORKEE - 247 667 (INDIA)

सीनेट की सत्तासीवीं बैठक हेतु कार्यसूची
AGENDA FOR THE 87th MEETING OF THE SENATE OVER WebEx

बैठक सं0	: सत्तासीवीं
MEETING NO.	**: 87th**
स्थान	: वैबेक्स के द्वारा
VENUE	**: Over WebEx**
दिनांक	: 28 जुलाई 2021
DATE	**: 28th July 2021**
समय	: 04.00 बजे अपरान्ह
TIME	**: 04.00 P.M.**

भारतीय प्रौद्योगिकी संस्थान रूड़की

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

रूड़की 247 667

ROORKEE – 247 667

कार्यसूची/A G E N D A

मुद्दा सं0/ **Item No.**	विवरण/**Particulars**	पृष्ठ/ **Page(s)**
87.1	सीनेट की दिनांक 09.02.2021 को आयोजित हुई 86वीं बैठक के कार्यवृत्त की पुष्टि करना। To confirm the minutes of the 86th meeting of the Senate held on 09.02.2021.	1
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87.3	एम.टेक./आई.एम.टी./आई.डी.डी. के लिए वर्तमान थीसिस मूल्यांकन प्रक्रिया की समीक्षा के लिए गठित समिति की संशोधित रिपोर्ट पर विचार करना। To consider the revised report of the committee constituted to review the current thesis evaluation process for M.Tech./IMT/IDD.	8-9
87.4	एम.टेक./एम.आर्क./एम.यू.आर.पी. प्रवेश की लिए भारतीय सेना के अधिकारियों के संबंध में 55% और उससे अधिक स्कोर के साथ बी.ई./बी. टेक. की द्वितीय श्रेणी की डिग्री की स्वीकृति पर विचार करना। To consider the acceptance of Second Class Degree of B.E./B.Tech with 55% and above score with respect to the officers of Indian Army for M.Tech./M.Arch./ MURP admission.	10-11
87.5	बी.टेक और बी.आर्क की सभी शाखाओं में नवीकरणीय ऊर्जा प्रौद्योगिकी में लघु–विशेषज्ञता शुरू करने के लिए जल विद्युत और नवीकरणीय ऊर्जा विभाग के प्रस्ताव पर विचार करना।	12-13

	To consider the proposal of Department of Hydro and Renewable Energy to introduce minor specialization in Renewable Energy Technology across all the branches of B.Tech. and B.Arch.	
87.6	प्रवेश सत्र 2021–22 के लिए प्रस्तावित यूजी सीट मैट्रिक्स पर विचार करना और शैक्षणिक वर्ष 2021–22 से रसायनिक अभियान्त्रिकी विभाग के बी.टेक. (पॉलीमर सांइस एण्ड इंजिनियरिंग) कार्यक्रम को बंद करने के प्रस्ताव पर विचार करना। To consider the proposed UG Seat Matrix for the admission session 2021–22 and to consider the proposal of Department of Chemical Engineering to discontinue the B. Tech. (Polymer Science & Engineering) program from the academic year 2021–22 onwards.	14-20
87.7	आई.आई.टी. रोपड़ के यूजी छात्र श्री प्रवीन बडवाथ के आईआईटी रूड़की में रूड़की स्थानांतरण की मांग के अनुरोध की जांच के लिए गठित समिति की रिपोर्ट पर विचार करना। To consider the report of the committee constituted to examine the request of Mr. Praveen Badavath, a UG student of IIT Ropar, seeking transfer to IIT Roorkee.	21-25
87.8	सुश्री पल्लवी कौशिक (एन.संख्या. 17911005) पीएचडी, कम्पयूटर विज्ञान और इंजीनियरिंग विभाग के डबल डिग्री के अनुरोध को, आई.आई.टी. रूडकी एवम् ग्रोनिंगन विश्वविद्यालय (आर.यू.जी) नीदरलैंड के बीच डबल डिग्री के संबंध में हुए अनुबंध के अनुसार पर विचार करना। To consider the request of Ms. Pallavi Kaushik (Enr. No. 17911005), Ph. D. student, Department of Computer Science and Engineering for approving a double degree agreement between IIT Roorkee and University of Groningen (RUG), the Netherlands.	26-35
87.9	ड़िजाइन विभाग में पी.एच.डी. कार्यक्रम शुरू करने के लिए की गई सिफारिश और संस्थान असिस्टेंटशिप के साथ पी.एच.डी. की 70 सीटें आबंटित करने पर विचार करना। To consider the recommendation of Department of Design to start Ph. D. programme in the Department and to allocate 70 Ph. D. seats with Institute Assistantship.	36
87.10	निम्नलिखित को ध्यान में रखते हुए विभिन्न कार्यक्रमों में 'एग्जिट पॉलिसी' पर विचार करना: अ. इलेक्ट्रानिक्स और संचार अभियांत्रिकी विभाग उद्योग पेशेवरों के लिए एम. टेक. (वी.एल.एस.आई) में पाठयक्रमों और संगोष्ठी के 40 केडिट के पूरा होने बाद निकासी डिग्री कार्यकारी एम.टेक. (वी.एल.एस.आई.) के लिए एक प्रावधान बनाने का अनुरोध किया।	37-39

	ब. आई.आई.टी. रूड़की के उत्तीर्ण पी.एच.डी. छात्र डॉ निखत परवेज ने मास्टर डिग्री के बराबर अतिरिक्त डिग्री जारी की। To consider formulating an 'Exit Policy' in different programs in view of the following: a. Department of Electronics & Communication Engg. requested to create a provision for exit degree ("Executive M.Tech. (VLSI)") after the completion of 40 credits of courses and seminar in M. Tech. (VLSI) for Industry Professionals. b. Dr. Nikhat Parvez, a passed-out Ph.D. student of IIT Roorkee, to issue an additional degree, equivalent to Master's degree.	
87.11	दिनांक 02.02.2021 से आज तक विभिन्न पी.एच.डी. डिग्री प्रदान करने के लिए आवश्यताएं पूरी करने वाले छात्रों को अनंतिम पी.एच.डी. डिग्री प्रमाण पत्र प्रदान करने की पुष्टि करना। To ratify the award of Provisional Ph.D. Degree Certificates to the students who have completed the requirements for the award of Ph.D. Degree in various disciplines w.e.f. 02.02.2021 to date.	40-51
87.12	अध्यक्ष, सीनेट द्वारा दी गई मंजूरी को रिपोर्ट करना। To report the approvals accorded by the Chairman, Senate	52-60
अन्य मुददे अध्यक्ष की अनुमति से/Under any other item with the permission of the Chair.		

Item No. 87.1: **To confirm the minutes of the 86th Senate meeting held on 09.02.2021.**

The minutes of the 86th Senate meeting held on 09.02.2021 were circulated to the members vide e-mail dated 01.03.2021. No comments have been received.

The Senate may consider confirming the said minutes.

Item No.87.2: To report on the actions taken to implement the decisions of the Senate taken in its 86th Senate meeting held on 09.02.2021.

The minutes of the 86th Senate meetings held on 09.02.2021 were circulated to the members vide e-mail dated 1st March 2021. The status of actions taken is as under:

Item No.	Reference to the Senate minutes	Extracts of the Minutes	Status of action taken
86.3	Proposal of Department of Electronics and Communication Engineering to start an online M.Tech. (Microelectronics and VLSI) for working industry professionals.	The Senate considered and recommended the proposal to the Board of Governors for approval. Further, the Senate decided that the progress and status of the programme be placed before the Senate after the next year admissions are over.	Recommendations were placed before the 62nd meeting of the Board. The Board approved the proposal. The same was notified.
86.4	Proposal of renaming the Department of Biotechnology as Department of Biosciences and Bioengineering.	The Senate considered and recommended the proposal to the Board of Governors for approval.	Recommendations were placed before the 62nd meeting of the Board. The Board approved the proposal. The same was notified.
86.5	Proposal of Department of Biotechnology regarding B.Tech. (Biotechnology): 1. To change the programme name of B.Tech. (Biotechnology) to B.Tech. (Biosciences and Bioengineering) 2. Revised structure and syllabi of B.Tech. of Department of Biotechnology	The Senate considered and approved the proposal and decided to implement the changes with immediate effect i.e. from 2020-21 batch since the first semester of the old and new programmes are same.	Notified.

86.6	Proposal of Department of Architecture & Planning to include Minor Specialization and Departmental Honours Courses (MSC/DHC) in the existing B. Arch curriculum.	The Senate considered and approved the proposal.	Notified.
86.7	Proposal to introduce M. Tech in Dam Safety and Rehabilitation programme.	The Senate considered and approved the proposal with a total intake of 30 students alongwith a minimum of 05 seats for GATE qualified candidates.	Notified.
86.8	Revision of eligibility criteria under 'Extensive Professional Experience Scheme' for Ph.D. Admission.	The Senate considered and approved the modified eligibility criteria for Ph.D. admission under 'Extensive Professional Experience Scheme' (EPE). Further, it was approved that the candidates can choose their department on the basis of their interest or area of expertise. Proposals for further changes can be placed before the IRC.	Notified.
86.9	Report on the plagiarism complaint against Mr. Pramod Sharma's published papers and Ph.D. thesis.	The Senate considered the report and decided the following in respect of Mr. Pramod Sharma: 1. His academic programme be terminated and he will not be awarded a Ph.D. degree. 2. He will not be allowed re-admission in IIT Roorkee.	Notified.
86.10	Report on the plagiarism complaint against Mr. Vivek Kumar Mishra, M.Tech. (PP) and	The Senate considered the report and decided the following:	Notified.

	Mr. Elyas Khairandish, M.Tech. (WR).	Case-1 Mr. Vivek Kumar Mishra, M.Tech. (PP) student. 1. His academic programme be terminated and he will not be awarded an M.Tech. degree. 2. He will not be allowed re-admission in IIT Roorkee. Case-2: Mr. Elyas Khairandish, M.Tech. (WR) student. 1. His academic programme be terminated and he will not be awarded an M.Tech. degree. 2. He will not be allowed re-admission in IIT Roorkee. 3. The sponsoring agency/Ministry be informed about this decision of the Senate.	
86.12	Proposal to start following M.Tech. programs by the Centre for Artificial Intelligence and Data Science (CAIDS). 1. M.Tech. (Artificial Intelligenc 2. M.Tech. (Data Science)	The Senate considered the proposal for the creation of a **Centre for Artificial Intelligence and Data Science (CAIDS)** and recommended it to the Board of Governors for approval. The Centre will start as a Virtual Centre. Two new Academic Programmes: (1) M.Tech in Artificial Intelligence and (2) M.Tech in Data Science will be offered by this Centre w.e.f Academic Session 2021-22. Further, the Senate decided that an open house be conducted to finalize their course structure, curriculum, admission criteria etc. After the open	Recommendations were placed before the 62nd meeting of the Board. The Board approved the proposal. The same was notified.

		house, the revised proposal be considered by the IAPC.	
86.13	Proposal to start the following Master Programmes: 1. M. Des. (Industrial Design) 2. MIM (Masters in Innovation Management)	The Senate considered the proposal for the establishment of a Department of Design (DoD) for these programmes and recommended it to the Board of Governors for approval. Two new Academic Programmes: (1) M.Des. (Industrial Design) and (2) MIM (Masters in Innovation Management) will be offered by this Department w.e.f. academic session 2021-22. Further, the Senate approved the structure of the programmes.	Recommendations were placed before the 62nd meeting of the Board. The Board approved the proposal. The same was notified.
86.14	Proposal of Department of Humanities and Social Sciences to introduce a New Integrated MS Economics (Five Year Integrated) programme.	The Senate considered the proposal and recommended it to the Board of Governors for approval. It will have the provision for exit after four years with a BS degree. Further, the Senate approved the structure of the programme	Recommendations were placed before the 62nd meeting of the Board. The Board approved the proposal. The same was notified.
86.15	Proposal of Department of Management Studies to introduce Executive MBA (EMBA) programme.	The Senate considered the proposal and recommended it to the Board of Governors for approval.	Recommendations were placed before the 62nd meeting of the Board. The Board resolved that the proposal needs to be revised to make it more flexible keeping in view the

		Further, the Senate approved the structure of the programme and admission eligibility criteria	requirements of working persons. Structure was notified.
86.16	Proposal for the provision of S grade for Autumn Semester 2020-21 End Term Examination for all students.	The Senate considered and decided that 'S' grade be allowed on request in a maximum of two courses (excluding UG first year courses) of Autumn Semester 2020-21.	Notified.
86.19	Senate Nominees for the selection committees for faculty positions.	The Senate considered and decided that: Academics/Scientists with at least five years of experience of the level of Professor or equivalent from the following academic/research Institutes be considered as Senate nominees: IITs, IISc, IISERs, IIMs, SPAs, AIIMSs, BHU, JNU, Delhi University, University of Hyderabad and DST/NID/DBT/ ISI/ICSSR/TISS/DAE/DoS/DRDO/CSIR/ICAR/ICMR labs/ institutes. Further, more names can also be sent by the departments for the consideration of the Senate.	Dean of Faculty Affairs has been informed.

Under any other item:			
86.23	Request of some of the students to allow them to appear in the second examination of ETE Autumn Semester 2020-21.	The Senate considered the requests of students who suffered with the issues of poor internet connectivity/shutdown in some of the areas during ETE (excluding UG 1st year) of Autumn Semester 2020-21. The Senate allowed the provision of second examination of ETE Autumn Semester 2020-21 for such students.	Allowed the students to appear in the second examination of ETE Autumn Semester 2020-21.
(i) Item No. 86.17, 86.18 & 86.22 were deferred. (ii) Item Nos. 86.11 & 86.21 were only for reporting to the Senate. (iii) Item No. 86.20 was for ratification.			

Item No. 87.3: **To consider the revised report of the committee constituted to review the current thesis evaluation process for M.Tech./IMT/IDD.**

The Senate in its 78th meeting considered the revised guidelines for the valuation of UG and PG project /dissertation. On the recommendation of the Senate, a five-member committee to review the current thesis evaluation process was constituted by the Chairman, Senate.

The IAPC in its 76th and 86th meeting held on 07.11.2019 and on 09.06.2020, respectively considered and recommended the report submitted by the committee to review the current thesis evaluation process for M.Tech./IMT/IDD with minor modification **(Appendix-A)**.

The agenda regarding the revised report received could not be taken up for consideration in the Senate in its 86th meeting held on 09.02.2021 and hence was deferred.

The said report is submitted for the consideration of the Senate.

Revised Report: Thesis Evaluation Process for M.Tech./ IMT/IDD

The revised report of the Committee on thesis evaluation process is as under:

1. The grades of thesis and course work should be separately mentioned.

2. The Chair person should be PG specialization wise. If there are more than 10 students in the specialization, then DAPC may appoint more than one chair person.

3. A soft copy of the M.Tech./IMT/IDD may be sent to all the members of the board at least one week prior the date of evaluation.

4. [A] Distribution of marks should be as under :

a. Supervisor	40 marks
b. Report	15 marks
c. Presentation	15 marks
d.Viva-Voce exam.	20 marks
e. Publication	10 marks

The marks for part "b" to "e" should be awarded by the examination board which should not include the supervisor. The total marks should be converted into grade by absolute grading system.

[B] Publication marks will be as under :

i) Accepted or published in reputed journals/conferences as decided by DAPC of the Department/Centre - 10 marks
ii) Published or accepted in a conference organized or supported by National/ International Society – 05 marks

NOTE : DAPC should decide in the beginning of each second semester the reputed journals/conferences for awarding 10 marks to the students.

5. Minimum passing grade points should be 05. If a student fails, then he should register for next semester and submit the theses at the end of the semester.

(Ujjwal Prakash)
MME

(Thanga Raj Chelliah)
WRDM

(Vipul Rastogi)
Physics

(B.K. Gandhi)
Chairman

Item No. 87.4: **To consider the acceptance of Second Class Degree of B.E./B.Tech with 55% and above score with respect to the officers of Indian Army for M.Tech./M.Arch./ MURP admission.**

The IAPC in its 83rd meeting (item no.83.2.7) deliberated towards acceptance of Second Class Degree of B.E./B.Tech with 55% and above score with respect to the officers of Indian Army for M.Tech./M.Arch./MURP admission.

As per the request letter received from Col. Pankaj Geetey, Col, MT-IO for DCOAS (IS&T) NO. A/63062/PGT Policy/GS/MT-IO dated 13 December 2019, it will be applicable to the army officers clearing the selection process and interview conducted by Indian Army & DRDO. Copy is attached at **Appendix-A**.

However, the IAPC did not recommend the agenda.

This agenda could not be taken up for consideration in the Senate in its 86th meeting held on 09.02.2021 and hence was deferred.

The above is submitted for the consideration of the Senate.

Tele: -2301 6455

Directorate General of
Military Training (MT-10)
General Staff Branch
Integrated HQ of MoD (Army)
DHQ PO, New Delhi- 110 011

A/63062/PGT Policy/GS/MT-10

17 Dec 19

Prof Ajit Kumar Chaturvedi
Director, IIT Roorkee
Roorkee-247 667

QUALIFICATION OF SPONSORED CANDIDATES FOR M TECH

Dear Sir,

1. Indian Army officers are being sponsored for M Tech Courses at your institute each year.

2. These officers are selected through a tough and competitive written entrance exam followed by interview by subject matter experts under aegis of DRDO & eminent experts / scientists from IIsT/IISc conducted for Indian Army officers each year.

3. In order to increase the competition and provide greater opportunities as well as motivation to our officers it is proposed that a Second Class Degree of BE/ B Tech with 55% and above score may also be accepted by your institute in case officer has cleared the selection process & interview conducted by India Army & DRDO.

4. Your assistance in this regard will help us motivate officers to achieve higher technological thresholds & assist Indian Army to transcend future battlefields.

5. For consideration please.

(Pankaj Geetey)
Col
Col, MT-10
for DCOAS (IS&T)

Copy to:-

Registrar IIT Roorkee
Roorkee-247 667

Item No. 87.5: **To consider the proposal of Department of Hydro and Renewable Energy to introduce minor specialization in Renewable Energy Technology across all the branches of B.Tech. and B.Arch.**

The Department of Hydro and Renewable Energy (HRED) has been offering courses in the Renewable Energy domain. Recognising the increasing global need for sustainable energy solutions, the HRED proposes to offer Minor Specialization Course (MSC) in Renewable Energy Technology to the students of all the branches of B. Tech. & B.Arch.

It is stated that the number of credits to be completed for minor specialization is in the range of 18-20, with a minimum of five courses. The Department proposes that students would be allowed to register for a maximum of two courses each semester. The detailed proposal is given at **Appendix-A.**

The IAPC, in its 105th meeting held on 09.06.2021, considered and recommended the proposal with modifications **(Appendix-A)**.

The above is submitted for the consideration of the Senate.

HYDRO AND RENEWABLE ENERGY DEPARTMENT
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

Proposal for **"Minor Specialization in Renewable Energy Technology"**

The Department of Hydro and Renewable Energy (HRED) is focusing on providing basic and practical knowledge on different forms of renewable energy. Based on the success of previously offered courses in the Renewable Energy domain as well as to address the global need for sustainable energy solutions, HRED proposes to offer a minor specialization in Renewable Energy Technology to the students of all the branches of B.Tech & B.Arch.

The number of credits to be completed for minor specialization shall be 18-20 credits, with a minimum of five courses. Initially, the following courses would be offered to the students of 3rd year II Sem., 4th year I, and II Sem. The students would be allowed to register for a maximum of two courses each semester.

Table 1: Semester wise breakup of the courses to be offered by HRED under minor specialization in Renewable Energy Technology

Semester	Course	Credit
Spring Semester (3^{rd} Year)	AHN-303*: Solar PV concepts, technology and application	3 (3L+0T)
	AHN-306*: Hydrogen Energy and Fuel cells	3 (3L+0T)
	AHN-513: Renewable Energy Resource Development Technology	4 (3L+1T)
	AHN-582: Electric vehicular technology	4 (3L+1T)
Autumn Semester (4^{th} Year)	AHN-511 Small Hydro Power Planning and Management	4 (3L+1T)
	AHN-528: Rural Electrical Energy System Planning and Design	4 (3L+1T)
	AHN-536: Biomass Production and Utilization	4 (3L+1T)
	AHN-542: Energy Conservation and Management	4 (3L+1T)
	AHN-522: Wind Energy Application Technology	4 (3L+1T)
Spring Semester (4^{th} Year)	AHN-518: Environmental Planning and Management	4 (3L+1T)
	AHN-581: Energy-Water-Food Nexus	4 (3L+1T)
	AHN-516: Hydro Mechanical Equipment	4 (3L+1T)
	AHN-540: Solar Photovoltaic Design and Application	4 (3L+1T)
	AHN-401**: Renewable Energy Mini Project	4

*Existing course number IAH-303 and IAH-306 be changed to AHN-303 & AHN-306 Respectively
**New course number proposed

Item No. 87.6: **To consider the proposed UG Seat Matrix for the admission session 2021-22 and to consider the proposal of Department of Chemical Engineering to discontinue the B. Tech. (Polymer Science & Engineering) program from the academic year 2021-22 onwards.**

Department of Chemical Engineering has been the coordinating Department for the UG program in Polymer Science & Engineering (PSE) with an intake of 40. The Department resolved to discontinue the program w.e.f. the academic session 2021-2022 **(Appendix-A)**.

The IAPC in its 107th meeting held on 07.07.2021 recommended the proposal of the Department. If approved by the Senate, 40 intakes be adjusted for the new MS (Economics) program to be offered by the Humanities and Social Sciences department w.e.f. the academic session 2021-2022 and the remaining 07 seat be merged to the B.Tech. (Chem. Engineering) program as agreed by the Department of Chemical Engineering in the 107th IAPC meeting. Therefore, the total intake of the Institute for the UG programs remains unchanged at 1353.

Accordingly, the IAPC recommended the following Seat Matrix for UG admission 2021-22:

Department	**Strength**
Biosciences and Bioengg.	46
Chemical	127
Civil	194
CSE	109
Electrical	165
E&CE	109
Engineering Physics	40
Mechanical	150
MMED	112
P & I	58
Arch.	37
IMT-GT	38
IMT-GPT	41
IMS-APM	42
IMS-APC	25
IMS-APH	27
MS-ECO	33
Total	**1353**

The above is submitted for the consideration of the Senate.

Indian Institute of Technology Roorkee
Department of Chemical Engineering

Date: 30.04.2021

Minutes of the online DFC meeting held on 24.03.2021 through Webex

An online DFC meeting was held on 29.04.2021 at 13:00 hrs via Webex. The following DFC members attended the meeting:

- Prof. A Anand
- Prof. C Balomajumder
- Prof. RP Bharti
- Prof. P Biswas
- Prof. T Das
- Prof. AK Dhiman
- Prof. S Ghosh
- Prof. PK Jha
- Prof. S Khanam
- Prof. S Kumar
- Prof. V Kumar
- Prof. P Mondal
- Prof. DK Ojha
- Prof. B Prasad
- Prof. NSM Reddy
- Prof. AK Sharma
- Prof. G Sharma
- Prof. S Sinha
- Prof. VC Srivastava, Chairperson
- Prof. HP Veluswamy
- Prof. A Yadav

1. DFC recommended Prof. P Biswas as Chairperson, DRC.

2. The elective courses to be offered in the forthcoming semester were discussed by the DFC. It was decided to offer the following courses as PEC:

CHN-323 Computer Applications in Chemical Engg CHN-327 Petroleum Refining*	For both B.Tech. (Chemical Engg.) & B.Tech. (Polymer Science & Engg) 3rd Year students.
PEN-405 Polymeric Membrane Technology# CHE-501 Mathematical Methods in Chemical Engg* CHE-503 Advanced Transport Phenomena* CHE-505 Advanced Reaction Engineering* CHE-513 Biochemical Engineering* CHE-515 Computational Fluid Dynamics*	For both B.Tech. (Chemical Engg.) & B.Tech. (Polymer Science & Engg.) 4th Year students
CHE-507 Advanced Themo. & Molecular Simulation	For B.Tech. (Chemical Engg.) 4th Year students

*These subjects be added as Program Electives for B.Tech. (Polymer Science & Engg) program.
#This subject be added as Program Electives for B.Tech. (Chemical Engg) program.

3. DFC discussed the teaching load of the faculty members for the Autumn Semester, 2021-22. The courses were allotted as per Appendix 1.

4. DFC deliberated on the report of the committee constituted for reviewing the B.Tech. PSE program. DFC unanimously opined that the B. Tech. (Polymer Science & Engg.) program should be discontinued from the academic year 2021-22. The detailed report (Appendix 2) along with the recommendation of DFC be sent to Institute (IAPC) for immediate consideration.

Meeting ended with thanks to the chair.

Ashish

Ashish Yadav
(Secretary, DFC)

Appendix 1

S. No.	Batch	Year	Type	Code	Name	Faculty
1	CHE	I	PCC	CHN-101	Intro. to Chemical Engineering	AA
2	PSE	I	PCC	PEN-101	Intro. to Polymer Sci. & Engg.	SK/CBM/SG/DO/ AS/New Fac.
3	CHE	I	PCC	CHN-103	Comp. Prog. and Num. Methods	VCN
	PSE	I	PCC	PEN-103		
4	CHE	II	PCC	CHN-201	Heat Transfer	TD
	PSE	II	PCC			
5	CHE	II	PCC	CHN-203	Mechanical Operations	PM
6	PSE	II	PCC	CHN-211	Fluid and Fluid Particle Mechanics	AS
7	CHE	II	PCC	CH-205	Chem. Engg. Thermodynamics	VCS or AY
	PSE	II	PCC	PEN-201	Polymer Engg. Thermodynamics	
8	CHE	II	PCC	CHN-207	Transport Phenomena	GS
9	PSE	II	PCC	PEN-203	Polymer Blends	PPK
10	CHE	III	PCC	CHN-301	Mass Transfer-II	NSMR
11	PSE	III	PCC	PEN-301	Polymer Product Processing & Engg.	SK
12	CHE	III	PCC	CHN-303	Process Dynamics and Control	AY or VCS
	PSE	III	PCC			
13	CHE	III	PCC	CHN-305	Process Equipment Design	SKH
14	PSE	III	PCC	PEN-303	Process Design of Equipment	BP
15	CHE / PSE	III	PEC I	CHN-323	Computer Appl. in Chem. Engg.	VK
16	CHE / PSE	III	PEC I	CHN-327	Petroleum Refining	HPV
17	CHE / PSE	IV	CHN/PSN-ELE 3/4	PEN-405	Polymeric Membrane Technology	DO
18	CHE / PSE	IV	PG-DEC & CHN/PSN-ELE 3/4	CHE-501	Math. Methods in Chemical Engg.	RPB
19	CHE / PSE	IV	PG-DEC & CHN/PSN-ELE 3/4	CHE-503	Adv. Transport Phenomena	SG
20	CHE / PSE	IV	PG-DEC & CHN/PSN-ELE 3/4	CHE-505	Advanced Reaction Engineering	PB
21	CHE	IV	PG-DEC & CHN- ELE 3/4	CHE-507	Adv. Themo.& Molecular Simulation	PKJ
22	CHE / PSE	IV	PG-ELC1 & CHN/PSN-ELE 3/4	CHE-513	Biochemical Engineering	CBM
23	CHE / PSE	IV	PG-ELC1 & CHN/PSN-ELE 3/4	CHE-515	Computational Fluid Dynamics	AKD
	CHE	III	PCC	CHN-391	Technical Communication	AA, BP, PM, PPK
	PSE	III	PCC	PEN-391	Technical communication	
	CHE	IV	PCC	CHN-499	Training Seminar	
	PSE	IV	PCC	PEN-499	Training Seminar	
	CHE	IV	PCC	CH-400A	Project	
	PSE	IV	PCC	PEN-400A	Project	

Review of undergraduate (UG - B. Tech.) Polymer Science and Engineering (PSE) at Department of Chemical Engineering, IIT Roorkee

The committee (members: Prof. R.P. Bharti, Prof. P. Biswas, Prof. A.K. Dhiman, Prof. P.K. Jha, Prof. S. Khanam, Prof. G. Sharma, Prof. N.S.M. Reddy) considered the following major points to discuss the efficacy of B.Tech. (Polymer Science and Engineering) program running under the Department of Chemical Engineering at IIT Roorkee.

1. Admission Statistics through JEE opening and closing ranks.
2. Year-wise student statistics
3. Campus placement & higher studies
4. Status of UG program in Polymer Science & Engineering (PSE) in India and Abroad

The point-by-point summary is given below.

1. **Admission Statistics through JEE opening and closing ranks:** Comparison of JEE opening and closing ranks (Source: https://cutoffs.iitr.ac.in/) for admission to B.Tech. (PSE) and B.Tech. (CHE) programs at IIT Roorkee.

JEE Opening and Closing Ranks						**[P] PSE & [C] CHE IIT Roorkee**						
Year	UG	GEN		GEN-EWS		OBC		SC		ST		Remarks
2016	[P]	5943	7531	-	-	2787	3452	1525	1953	1	1037	
	[C]	2383	4017	-	-	1442	1833	817	1172	445	616	
	[P-C]	3560	3514	-	-	1345	1619	708	781	-444	421	
2017	[P]	6088	7688	-	-	2584	3154	1660	1982	918	920	
	[C]	2772	4078	-	-	1473	1723	867	1025	481	547	Gender - Neutral
	[P-C]	3316	3610	-	-	1111	1431	793	957	437	373	
2018	[P]	6632	7807	-	-	3415	3646	1833	2004	310	657	
	[C]	2926	3966	-	-	1504	1902	893	1095	442	669	
	[P-C]	3706	3841	-	-	1911	1744	940	909	-132	-12	
2019	[P]	6962	8365	832	832	3353	3894	1894	2213	1068	1098	
	[C]	3310	4384	422	495	1520	1990	696	1240	633	733	
	[P-C]	3652	3981	410	337	1833	1904	1198	973	435	365	
2020	[P]	6191	7315	790	1495	2326	3577	1849	2114	223	230	
	[C]	2914	4135	682	879	1874	2220	886	1385	519	750	
	[P-C]	3277	3180	108	616	452	1357	936	729	-296	-520	
2018	[P]	9429	10352	-	-	5926	5926	-	-	-	-	
	[C]	5619	6324	-	-	2546	4451	1015	1405	358	358	
	[P-C]	3810	4028	-	-	3380	1475	-	-	-	-	Female Only
2019	[P]	10090	11369	-	-	5134	6988	3198	3198	1102	1102	
	[C]	6513	8140	1186	1186	3960	4716	1378	1566	1183	1183	
	[P-C]	3577	3229	-	-	1174	2272	1820	1632	-81	-81	
2020	[P]	12205	13315	3417	3417	7000	7308	2698	2698	1076	1076	
	[C]	8068	8916	1681	1704	4260	4766	2091	2231	539	743	
	[P-C]	4137	4399	1736	1713	2740	2542	607	467	537	333	

2. **Year – wise student statistics:** Students admitted and retained in PSE program

Year	1st Year (2020)	2nd Year (2019)	3rd Year (2018)	4th Year (2017)
Seats	40	34	31	30
Current Strength	27	25	19	25
Change/Left	-13	-11	-12	-5

3. **Campus Placement:** Summary of students registered for campus placement.

Year	2019 – 20	2018 – 19	2017 – 18	2016 – 17	2015 – 16
Registered	16	20	11	18	33
Core Placement	0	0	0	1	0
Non-Core Placement	12	13	3	1	15
CTC – Average	13.54	11.65	8.00	10.54	6.53

4. **Status of UG program in Polymer Science & Engineering (PSE) in India and Abroad**

	Program	Department / School	University
1.	PG Polymer Science & Engineering	Polymer Science and Engineering	Univ. of Massachusetts
2.	M. Engg. Honours (4 years) Materials Science & Engineering with Polymers	Materials	Univ. of Manchester
3.	UG Minor: Polymer Science & Engineering	Material Science and Engineering	Lehigh Univ.
4.	M.Sc. / P.G. Diploma Polymer Science & Engineering	Material Science and Engineering	Loughborough Univ., UK
5.	B.Sc. Polymer Science & Engineering	Polymer Science and Engineering	Univ. Southern Mississippi
6.	UG Minor: Polymer Option in Chemistry Polymer Option in Chemical Engineering	Polymer Science and Engineering	Univ. of Akron
7.	UG Minor: Polymer Science & Engineering	Material Science and Engineering	Univ. of Illinois
8.	B.Sc. (Engg.) Polymer Science & Engineering	Macromolecular Science and Engineering	Case Western Reserve Univ., Cleveland, Ohio
9.	Certificate Polymer Science & Engineering	Material Science and Engineering	Univ. of Florida
10.	B. Tech. Polymer Science and Technology	Polymer Science and Technology	Calcutta Univ
11.	B. Tech. Chemical Engg. (Plastic and Polymers)	Chemical Engineering*	BIT Mesra [admitted through JOSA]
12.	B. Tech. Polymer Science and Engineering	Chemical Engineering*	IIT Roorkee [admitted through JOSA]
13.	M. Tech. Polymer Science and Engineering	Polymer Science and Engineering	IIT Roorkee
14.	M. Tech. Polymer Technology	Applied Science	Delhi Technical Univ.
15.	B.Tech. Polymer	Polymer and Surface Engg.	ICT Mumbai
16.	B.Tech. Plastic and Polymer Tech.	Plastic & Polymer Technology	LIT Nagpur
17.	Centre for Polymer Science and Engineering merged with Department of Material Science and Engineering		IIT Delhi
18.	B.Tech. (Polymer) course stopped		SLIET Longowal

Based on the above data, the following remarks can be made.

- **JEE ranks**: While the number of seats in PSE program are about 1/3rd of CHE program, the JEE ranks for PSE program are much inferior in comparison to the CHE program. The average rank difference between PSE & CHE programs over the 5 years span is noted as ~3676, ~820, ~1768, ~960 and ~95 for GEN, GEN-ESW, OBC, SC and ST categories, respectively. **Not only that, PSE program is considered as last choice by the admitted students at IIT Roorkee.**
- **Seats statistics:** Total of about 1/3rd of the student change from PSE to another branch.
- **Campus placement:** None of the students, in last three years, could got placed in core chemical/polymer industries through campus placement.
- **Status of PSE program in India/Abroad:**

  (a) Majority of well-known university of polymer research in USA, UK & Canada are offering either B.Sc. (Polymer) / UG Minor (polymer) or PG program. None of the polymer related programs are offered from Chemical Engineering department.

  (b) In India: 5 Institutes (IIT Roorkee, BIT Mesra, Calcutta Univ, LIT Nagpur & ICT Mumbai) offer UG program in polymer and 2 institutes (IIT Roorkee and DTU) offer PG program in polymer. Notably, chemical engineering department of 2 institute (IIT Roorkee & BIT Mesra) admitted the students through JEE. Further, SLIET Longowal stopped UG program in Polymer and IITD merged existing "Center for Polymer Science and Engineering" with "Department of Material Science and Engineering".

In summary, PSE program at UG level may not be considered as a value addition program (in terms of ranking, placement, etc.) neither to the students nor to the Department/Institute. The committee recommends closing of the B.Tech. (Polymer Science and Engineering) program with immediate effects. It may kindly be discussed in DFC for the suggestions/comments of the faculty members and the needful may be done at the earliest possible.

Item No. 87.7 **To consider the report of the committee constituted to examine the request of Mr. Praveen Badavath, a UG student of IIT Ropar, seeking transfer to IIT Roorkee**

Mr Praveen Badavath, a first year B.Tech. (MME) student of IIT Ropar, who had done his preparatory course at IIT Roorkee, had applied for transfer to IIT Roorkee on medical grounds. On 10-01-2020, Director IIT Ropar had sent IIT Ropar's NOC in this regard. In its 85th meeting held on 18.12.2020, the Senate had considered the request of Mr. Badavath and resolved that: "The Senate considered the item and observed the following: His medical reports and academic performance are quite old and may not reflect his current medical situation and academic performance. Presently, the classes are being conducted online, and there is no clarity as to when on-campus classes will be resumed. Therefore, there is no urgency to decide this application. The Senate decided that a committee be constituted by the Director to ascertain his current status and related questions. The report of the committee be placed before the Senate."

Subsequently, the Director had constituted the following committee to examine the matter as per the decision of the Senate:

1. Prof. M.K. Barua, DoSW & Chairman
2. Prof. C.N. Ramachandran, ADAA(C), Member
3. Dr. Jeetinder Singh, Sr. Medical Officer (Psychiatrist), Member

The report of the committee **(Appendix-A)** is submitted for the consideration of the Senate.

Minutes of Committee Meeting to discuss the case of Mr. Praveen Badavath a student of IIT Ropar on 19.02.2021 at 11:30 PM through WebEx Meetings

The following were present -

1) Prof. M.K. Barua, DoSW & Chairman
2) Prof. C.N. Ramachandran, ADAA(C), Member
3) Dr. Jeetinder Singh, Sr. Medical Officer (Psychiatrist), Member

At the outset, the Chairman welcomed all the members and briefed them about the agenda i.e to discuss the case of Mr. Praveen Badavath.

Mr. Praveen Badawath and his father Mr. Kishan Badawath were also called for the discussion. After due deliberations, the committee found that the performance of the student has significantly improved during the last one year.

1. Mr. Praveen Badawath earned 11.5 credits in the first semester of session 2019-20. In the second semester, he earned 10 credits, and in the third semester during session 2020-21 he earned 24 credits.

2. In the third semester, he passed all the subjects of the third semester including two subjects of the first semester i.e. Calculus (MA101) and Physics for Engineers (PH101).

3. He secured 5.88 CGPA in the 2nd Semester of session 2019-20 and 6.61 CGPA in his 3rd Semester during session 2020-21.

4. It was learnt that student was advised by the treating Doctor that student should stay along with his parents. Student took medications for few weeks after which he stopped medications and has been staying with his parents. For almost a year, he has not consulted any psychiatrist/Doctor and is not on any medication, but he is maintaining well at home with the support of his parents.

The meeting ended with a vote of thanks to the Chair.

(M.K. Barua)
Chairman & Dean of Students' Welfare

भारतीय प्रौद्योगिकी संस्थान रोपड़
INDIAN INSTITUTE OF TECHNOLOGY ROPAR

सत्रार्थ ग्रेड रिपोर्ट
SEMESTER GRADE REPORT

NAME PRAVEEN BADAVATH
ENTRY NO 2019MMB1331
PROGRAMME B.TECH. IN METALLURGICAL AND MATERIALS ENGINEERING

I SEMESTER 2019-2020

पाठ्यक्रम सं. COURSE NO	पाठ्यक्रम शीर्षक COURSE TITLE	क्रेडिट CREDITS	ग्रेड GRADE
GE102	WORKSHOP PRACTICE	2	B
GE104	INTRODUCTION TO ELECTRICAL ENGINEERING	3	D
HS101	HISTORY OF TECHNOLOGY	1.5	D
HS102	ENGLISH LANGUAGE SKILLS	3	C
MA101	CALCULUS	3	F
PH101	PHYSICS FOR ENGINEERS	3	F
PH102	PHYSICS FOR ENGINEERS LAB	2	B-

EARNED CREDITS (EC) = 11.5
SEMESTER GRADE POINT AVERAGE (SGPA) = 3.77

CUMULATIVE EARNED CREDITS (CEC) = 11.5
CUMULATIVE GRADE POINT AVERAGE (CGPA) = 5.74

Printed on:15-Sep-2020

DEPUTY REGISTRAR(ACADEMICS)

भारतीय प्रौद्योगिकी संस्थान रोपड़
INDIAN INSTITUTE OF TECHNOLOGY ROPAR

सत्रार्ध ग्रेड रिपोर्ट
SEMESTER GRADE REPORT

NAME PRAVEEN BADAVATH
ENTRY NO 2019MMB1331
PROGRAMME B.TECH. IN METALLURGICAL AND MATERIALS ENGINEERING

II SEMESTER 2019-2020

पाठ्यक्रम सं. COURSE NO		पाठ्यक्रम शीर्षक COURSE TITLE	क्रेडिट CREDITS	ग्रेड GRADE
GE101		TECHNOLOGY MUSEUM LAB	1	S
GE103		INTRODUCTION TO COMPUTING AND DATA STRUCTURES	4.5	S
GE105		ENGINEERING DRAWING	1.5	B-
GE110		INTRODUCTION TO METALLURGICAL AND MATERIALS ENGINEERING	3	S

EARNED CREDITS (EC) = 10.00
SEMESTER GRADE POINT AVERAGE (SGPA) = 7.00

CUMULATIVE EARNED CREDITS (CEC) = 21.5
CUMULATIVE GRADE POINT AVERAGE (CGPA) = 5.88

Printed on:26-Aug-2020

DEPUTY REGISTRAR(ACADEMICS)

भारतीय प्रौद्योगिकी संस्थान रोपड़
INDIAN INSTITUTE OF TECHNOLOGY ROPAR

सत्रार्ध ग्रेड रिपोर्ट
SEMESTER GRADE REPORT

NAME PRAVEEN BADAVATH
ENTRY NO 2019MMB1331
PROGRAMME B.TECH. IN METALLURGICAL AND MATERIALS ENGINEERING

I SEMESTER 2020-2021

पाठ्यक्रम सं. COURSE NO	पाठ्यक्रम शीर्षक COURSE TITLE	क्रेडिट CREDITS	ग्रेड GRADE
HS201	ECONOMICS	3	B-
MA101	CALCULUS	3	A
MA201	DIFFERENTIAL EQUATIONS	3	D
MM201	METALLURGICAL THERMODYNAMICS AND KINETICS	3	C
MM202	TRANSPORT PHENOMENA	3	B-
MM203	MATERIALS CHARACTERIZATION TECHNIQUES	3	B
MM207	MATERIALS CHARACTERIZATION TECHNIQUES	3	B-
PH101	PHYSICS FOR ENGINEERS	3	B-

EARNED CREDITS (EC) = 24.00
SEMESTER GRADE POINT AVERAGE (SGPA) = 7.00

CUMULATIVE EARNED CREDITS (CEC) = 52.5
CUMULATIVE GRADE POINT AVERAGE (CGPA) = 6.61

JOINT REGISTRAR(ACADEMICS)

Item No. 87.8: **To consider the request of Ms. Pallavi Kaushik (Enr. No. 17911005), Ph.D. student, Department of Computer Science and Engineering for approving a double degree agreement between IIT Roorkee and the University of Groningen (RUG), the Netherlands.**

Ms. Pallavi Kaushik is admitted in Ph.D. program on 07.07.2017 under Institute Assistantship category in Department of Computer Science and Engineering. She has expressed her interest to sign a student specific Double Degree Agreement between IIT Roorkee and University of Groningen (RUG), which is ranked #128 in QS Global World Rankings 2022, the Netherlands.

It is to inform that Ms. Pallavi Kaushik has carried out part of her thesis work at University of Groningen for 6 months (September 1, 2019 to March 1, 2020) under the SPARC scheme and 4 months (March 1, 2020 to July 1, 2020) under the ASEM-DUO fellowship program. Dr. Partha Pratim Roy (CSE) is her Ph. D. supervisor and Dr. Marieke van Vugt (RUG) has been already added as a co-supervisor as per IITR regulations.

IIT Roorkee, vide Senate approval No.76.18 has adopted different Models for Collaborative Doctoral Programmes with Foreign Universities **(Appendix–A)**. Dean International Relation has pursued for an institute wide MoU for Joint Ph.D. with RUG although there exists a general MoU between IITR and RUG **(Appendix-B)**. However, as per requirements, an initiation is required with student-specific agreement. Accordingly, a draft copy of agreement has been prepared **(Appendix-C).** The proposed agreement fits into our senate approved models **(Appendix – A).**

The IRC, in its 47th meeting held on 14.07.2021, recommended the request of Ms. Pallavi Kaushik to sign the above agreement between IIT Roorkee and the University of Groningen (RUG), the Netherlands.

The above is submitted for the consideration of the Senate.

The following Institutes have proposed to have collaborative degree programmes with IIT Roorkee

1) Lulea university of technology, Sweden
2) University of Strasbourg, France
3) Swinburne University, Australia
4) University of Alberta, Canada
5) The French network of doctoral schools (REDOC-SPI)

It is proposed that we shall start with the doctoral programmes with the models suggested below. The MoUs with the interested institutes shall be signed with additional clauses decided on a case-to-case basis by IRC.

Models for Collaborative Doctoral Programmes with Foreign Universities

A. Joint Degree

1. Students must meet the admission requirements and need to complete the degree requirements of their home institution.

2. They will receive the degree only from their home institution with a remark that the program has been completed jointly with the host institution.

B. Dual Award Degree

1. Students must meet the admission requirements and complete the degree requirements of both the institutions.

2. They receive a separate degree from both the institutions.

Conditions common for both of the above models

1. Students must have a supervisor at each institution.

2. They must spend minimum 6 months over the entire duration of the program at the host institution.

3. They shall pay tuition fee at the home institution only.

university of groningen

IIT Roorkee

MEMORANDUM OF UNDERSTANDING ON ACADEMIC COOPERATION BETWEEN THE UNIVERSITY OF GRONINGEN, THE NETHERLANDS AND INDIAN INSTITUTE OF TECHNOLOGY ROORKEE, INDIA

The University of Groningen (Rijksuniversiteit Groningen), Broerstraat 5, 9712 CP Groningen, the Netherlands, represented by its President, Prof. Jouke de Vries,
and
Indian Institute of Technology Roorkee, Roorkee 247667, Uttarakhand, India, represented by its Dean of Sponsored Research & Industrial Consultancy, Prof. Manish Shrikhande,
hereby agree to this Memorandum of Understanding on scientific and educational cooperation.

This MoU is to provide for, but is not limited to, the exchange of staff, scholars, students and/or academic information and materials in the belief that the research and educational processes at both universities would be enhanced and that mutual understanding between their respective staff, scholars and students would be increased by the establishment of such exchange programmes.

Article 1
The universities agree to promote the following exchange programmes, based on their respective academic and educational needs:

1. Exchange of scholars and staff.
2. Exchange of undergraduate and graduate students.
3. Exchange of academic information and materials.
4. Joint research activities and publications.
5. Participation in conferences and academic meetings.
6. Other academic exchanges that both universities agree to.

Article 2
The implementation of each exchange programme or joint project based on this MoU as mentioned in article 1 shall be separately negotiated and agreed upon in writing by both universities.

Article 3
Any exchange programme or joint project entered into, as mentioned in article 1, will form an appendix to this MoU. Both institutions acknowledge that any binding terms and conditions regarding their collaboration or cooperation, including but not limited to specific financial, administrative, scientific, intellectual property, and legal terms, will be set forth in such separate written agreements, to be executed by authorized representatives of both institutions. Nothing in this Memorandum establishes an exclusive relationship between the institutions.

Article 4
Both universities shall designate a programme officer to develop and co-ordinate the specific programmes and projects that will be agreed upon.

Article 5
This Agreement does not bind either institution to any current or future financial commitment. Each institution will bear its own costs associated with preparation of this Agreement. Each institution further acknowledges that activities under this Agreement will be subject to all required approvals, accreditations, consents, licenses, or permits, as well as internal approvals, as necessary to proceed with the activity.

Article 6
No person should be excluded from activities under this Agreement on the basis of race, colour, gender, age, religion, disability, sexual orientation, gender identity, or gender expression.

Article 7
Except in promoting the collaborative activities described above, neither institution may use the other's name or logo in any press release, website, product advertising, or for any other promotional or publicity purpose, without written permission from the other. In addition, written permission must be obtained to use the other's trademarks for any purpose.

Article 8
The institutions will comply with all applicable local and national laws and regulations with respect to activity under this Agreement, including law related to anti-bribery, economic sanctions, export control, anti-boycott, privacy and data protection, higher education, and accreditation standards or procedures.
The institutions will comply with EU General Data Protection Regulation applicable since 25 May 2018 and other applicable legislation and regulations concerning the processing of Personal Information. Parties will determine in good faith how they will apply these laws and the data processing principles cooperating within IIT Roorkee and UG.

Article 9
Activities carried out under this Agreement will be done without the disclosure of either institution's confidential or proprietary information to the other institution or to third parties. Should it become necessary for the institutions to disclose to each other confidential or proprietary information, the providing institution will notify the receiving institution in advance and in writing, and the institutions will agree on reasonable terms for the protection of such information. All confidential information will be clearly marked as such, or promptly disclosed as such, in writing.

Article 10
This Agreement does not establish a legal partnership, joint venture, employment relationship, or relationship of agency between the institutions. Neither institution may act as an agent on behalf of the other institution on any matter, including in matters with the other institution's national government.

Article 11
In the event that a translation of this Agreement is prepared or signed by the institutions, the English language version will govern in the event of a conflict between the English language version and the translation.

Article 12
No amendment to this Agreement will be valid unless signed by authorized representatives of each institution.

Article 13
Any sharing of intellectual property arising due to joint collaborative works may be done in accordance with the IPR policies of the partners. The revenue sharing may be decided by entering into a separate IPR agreement on case-to-case basis.

Article 14
This MoU shall become effective from the moment it has been signed and dated by both parties and remain valid for a period of five years. It is also understood that either institution may terminate the agreement at any time, giving the other not less than 6 months' notice of its wish to terminate, in order to avoid any possible inconvenience to the other institution.

Signatures

For the University of Groningen,
the Netherlands,

Prof. Jouke de Vries,
President of the University.

Place, date:

Groningen, 13-1-2020

For Indian Institute of Technology Roorkee,
India

Manish

Prof. Manish Shrikhande,
Dean, Sponsored Research & Industrial Consultancy.

Place, date:

Roorkee, 07 Feb 2020

university of groningen

Agreement double doctoral degree

between

the University of Groningen (Rijksuniversiteit Groningen) (the Netherlands),
Broerstraat 5, 9712 CP Groningen,
represented by Prof. dr. Jouke de Vries, President

and

Indian Institute of Technology Roorkee (India),
Roorkee 247667, Uttarakhand, Roorkee,
represented by Prof. Ajit K. Chaturvedi, Director

jointly referred to as **'the partner institutions'**

in due observance of the following:

- the Dutch Higher Education and Research Act (*Wet op het hoger onderwijs en wetenschappelijk onderzoek*);
- the PhD Regulations of the University of Groningen (*Promotiereglement*);
- the Indian Parliament's Institutes of Technology Act 1961;
- the PhD Regulations of the Indian Institute of Technology Roorkee

agree as follows:

PART I: Administrative matters

Article 1
The doctoral candidate to whom this agreement pertains is

Pallavi Kaushik
born 27-11-1992
Nationality: Indian

The University of Groningen and the Indian Institute of Technology Roorkee agree to register Ms Pallavi Kaushik as a doctoral candidate, under joint supervision of the University of Groningen and the Indian Institute of Technology Roorkee.

Article 2
The doctoral candidate is jointly supervised by:

1. Prof. Niels Taatgen
   University of Groningen
   Department of Artificial Intelligence, Bernoulli Institute
   Faculty of Science and Engineering

2. Prof. Partha Pratim Roy
   Indian Institute of Technology Roorkee
   Department of Computer Science and Engineering

Article 3
The enrolment of the doctoral candidate is effective from July 2017. The expected period of research is set to 4,5 years; therefore, the doctoral thesis is expected to be submitted to the Assessment Committee by December 2021. This period can only be extended in exceptional cases, after a favourable opinion given by the partner institutions and on proposition by the doctoral supervisors. This proposition must be introduced 3 months before the expected date of the doctoral thesis submission set above.

Article 4
The University of Groningen and the Indian Institute of Technology Roorkee will instruct the doctoral candidate to register at both institutions.

Article 5
The doctoral candidate must prove sufficient health insurance coverage for the full period of her stay in the Netherlands and in India, as well as a personal liability insurance.

PART II: Research supervision and thesis preparation

Article 6
Both universities recognize the validity of the research project undertaken by the doctoral candidate. All rules of the partner institutions pertaining to scientific publications are in force.

Article 7
1. Prof. Niels Taatgen appointed as a Professor at the University of Groningen, and Prof. Partha Pratim Roy, appointed as a Professor at the Indian Institute of Technology Roorkee, are designated as joint supervisors.

2. The supervisors will consult regularly on the research progress of the doctoral candidate. The supervision is equally divided between both institutions. Each institute will invest 50% of the allotted time for supervision. The daily supervision and scientific mentoring resides with the supervisor located where the research work is being undertaken at that particular moment.

Article 8
1. The theme of the dissertation is: Tracking Depression and Elucidating its Mechanisms using Cognitive Neuroscience, EEG, and Machine Learning

2. The dissertation will be written in English. A summary of the dissertation will be written in English and Dutch.

3. Both partner institutions will instruct the doctoral candidate to follow the rules of both institutions concerning the registering, the description and the reproduction of the thesis.

Article 9

The research project will be carried out at both institutions following the research plan which can be found in the attached appendix. The plan is jointly approved by the doctoral supervisors. Any modification of this plan must be submitted to the two institutions by the doctoral supervisors at least one month in advance.

Article 10

1. The intellectual property rights of the thesis, the publication, the use and protection of the research results shall be safeguarded in accordance with the specific regulations of both institutions.

2. Foreground intellectual property rights shall be the property of both institutions. The institutions shall jointly apply to obtain and/or maintain the relevant intellectual property rights and shall strive to set up appropriate agreements in order to do so.

PART III: Evaluation and conferral of degree

Article 11

1. After the positive assessment of the thesis supervisors, the thesis can be submitted to the Assessment Committee.

2. The Assessment Committee consists of four persons. Only full professors employed by a university who have not co-authored with the doctoral candidate may be members of the Assessment Committee.

3. The Assessment Committee consists at least of one professor from the University of Groningen and one professor from the Indian Institute of Technology Roorkee.

4. The Assessment Committee shall be composed by mutual consent between the partner institutions, in accordance with the regulations in force at the partner institutions.

Article 12

1. After the positive assessment of the Assessment Committee, the thesis can be submitted to the PhD Examining Committee.

2. The Examining Committee shall consist of at least five persons;
   - full professors, both from the University of Groningen and from the Indian Institute of Technology Roorkee,

   and;
   - a maximum of 2 University Readers/Associate Professors or Lecturers/Assistant Professors with PhDs;
   - the members of the Assessment Committee;
   - the chair.

   The supervisors are not members of the PhD Examining Committee.

3. The Examining Committee shall be composed by mutual consent between the partner institutions, in accordance with the regulations in force at the partner institutions.

Article 13

1. The Examining Committee allows the doctoral candidate to publicly defend her thesis after a positive assessment by the Assessment Committee.

2. The thesis will be defended, in English, during a public ceremony, and will be duly recognized by both partner institutions.

3. After the Examining Committee has given a favourable recommendation, each University will confer upon the candidate the doctoral degree of their own institution. Each institution shall issue its own degree certificate which will mention the joint nature of the supervision by the partner institutions, leading to the award of a double doctorate.

4. The University of Groningen will award the degree Doctor *(translated into English as: Doctor of Philosophy (PhD))*.
   The Indian Institute of Technology Roorkee will award the degree of Doctor (in English and Hindi).

Article 14

The present agreement holds as long as necessary for the completion of the doctoral degree. The agreement may be reviewed on an annual basis by each institution and may be terminated if good reason is found to do so. In addition, the agreement may be termination the initiative of the doctoral candidate or following collegial advice from the doctoral supervisors. As long as the agreement is in force the institutions commit themselves to supporting the doctoral candidate in continuing the project.

General provisions

Article 15

The parties will comply with all applicable local and national laws and regulations with respect to activity under this Agreement, including law related to anti-bribery, economic sanctions, export control, anti-boycott, privacy and data protection, higher education, and accreditation standards or procedures.
The institutions will comply with EU General Data Protection Regulation applicable since 25 May 2018 and other applicable legislation and regulations concerning the processing of Personal Information. Parties will determine in good faith how they will apply these laws and the data processing principles cooperating within IIT Roorkee and UG.

Article 16

Activities carried out under this Agreement will be done without the disclosure of either institution's confidential or proprietary information to the other institution or to third parties. Should it become necessary for the institutions to disclose to each other confidential or proprietary information, the providing institution will notify the receiving institution in advance and in writing, and the institutions will agree on reasonable terms for the protection of such information. All confidential information will be clearly marked as such, or promptly disclosed as such, in writing.

Groningen, ... Roorkee, ...

.....
Prof. dr. Jouke de Vries
President of
the University of Groningen

.....
Prof. Ajit K. Chaturvedi
Director
Indian Institute of Technology Roorkee

.....
Prof. dr. Jasper Knoester
Dean
Faculty of Science and Engineering
University of Groningen

.....
Prof. P. Arumugam
Dean
International Relations
Indian Institute of Technology Roorkee

.....
Prof. dr. N.A. Taatgen
Thesis supervisor
University of Groningen

.....
Prof. Partha Pratim Roy
Thesis supervisor
Indian Institute of Technology Roorkee

.....
Prof. dr. E.M.J. Verpoorte
Director Graduate School of
Science and Engineering
University of Groningen

.....
Prof. A.K. Sharma
Dean of Academic Affairs
Indian Institute of Technology Roorkee

Visa:

.....
Pallavi Kaushik
The doctoral candidate

Item No. 87.9: **To consider the recommendation of Department of Design to start Ph. D. programme in the Department and to allocate 70 Ph. D. seats with Institute Assistantship.**

The Department of Design proposes to start research programme in the Department w.e.f. the academic year 2021-2022. It is mentioned that the Department of Design has been established in the year 2021 vide Resolution No. BG/05/2021 of 62nd BOG meeting. The Department has started two PG level academic programmes–M.Des. and MIM w.e.f. the Academic Year 2021-2022. There are 14 faculty members in the Department in Joint Faculty position.

The IRC, in its 47th meeting held on 14.07.2021, recommended the proposal of Department of Design to start Ph. D. program with effect from Spring Semester 2021-22 as per details given below:

1. (i) Allocation of seats with Institute Assistantship-35.

   (ii) Candidates under the categories; Full Time Research Scholars (Institute Assistantship Research Scholars / Externally Funded Research Scholars / In-service External Research Scholars) and Part Time (In-service Internal Research Scholars/In-service External Research Scholars).

2. Minimum Educational Qualification (MEQ):

Candidates should have qualified CEED/GATE/ UGC-NET/JRF/ CSIR- JRF or any other National Level Examination conducted by Ministry of Education or its agencies such as NTA/UGC/IITs/IISc/NID/IISER etc; and fulfil the following educational qualification :

(i) M.Des./M.Tech./M.Arch.

OR

(ii) Bachelor's Degree in Design followed by Master's Degree in any specialization.

OR

(iii) MIM/Master's in Management /M.B.A. or equivalent

OR

(iv) Master's degree in Science / Bachelor Degree in Engineering / Technology / Architecture/ Master's Degree alongwith M. Phil. may be considered for research areas consistent with the academic background and special interests.

The above is submitted for the consideration of the Senate.

Item No. 87.10: To consider formulating an Exit Policy in different programs in view of the following:

(a) Department of Electronics & Communication Engg. requested to create a provision for exit degree ("Executive M.Tech. (VLSI)") after the completion of 40 credits of courses and seminar in M Tech (VLSI) for Industry Professionals.

(b) Dr. Nikhat Parvez, a passed-out Ph.D. student of IIT Roorkee, requested to issue an additional degree, equivalent to Master's degree.

The IAPC, in its 107th meeting held on 07.07.2021, recommended the proposal of the Department of Electronics & Communication Engineering to create a provision of exit from the program on the request of a student in the 'M. Tech. VLSI for Industry Professionals with the following criteria:

(i) Exit option with "P.G. Diploma in VLSI"
(ii) Minimum 40 credits in course work to be earned with CGPA $\geq$ 5.00
(iii) The requests received from the students to be processed by the concerned PIC/Department.

The IAPC recommended further deliberations on formulation of a generalized exit policy across the programs.

In the meanwhile, Dr. Nikhat Parvez, who was admitted in Ph. D. programme on 09.07.2014 in the Department of Architecture and Planning as direct entry after UG, has requested through email dated 06.07.2021 **(Appendix-A)** to issue an additional degree, equivalent to Master's degree, as she is facing difficulties to apply for jobs due to not having a Master's degree. She was awarded the Ph. D. degree in 2020 Convocation of the Institute.

The IRC, in its 47th meeting held on 14.07.2021, did not recommend the request of Dr. Nikhat Parvez.

However, the IRC observed that a registered student with direct entry after UG program in a Ph.D. program will require to earn additional credits during his/her program to be considered for obtaining an additional degree. At present, IIT Roorkee does not have

any provision/guidelines for this; therefore, a mechanism to this effect needs to be evolved.

The IRC has recommended that exit options be created in all programs after earning specified number of credits.

In view of the above observations/recommendations of the IAPC and IRC, the broad matter of "Exit Policy", including the two specific requests as mentioned above, is submitted for the consideration of the Senate.

Appendix - F

From: "nikhat parvez" <ar.nikhatparvez@gmail.com>
To: "secy dhe" <secy.dhe@nic.in>, "ashe-mhrd" <ashe-mhrd@gov.in>, ashe-moe@gov.in
Sent: Tuesday, July 6, 2021 3:28:06 PM
Subject: Clarification for Masters Degree after doing Direct PhD from IIT

Dear Sir,

With due respect, I would like to bring this to your notice that I, Dr. Nikhat Parvez have successfully completed a direct Ph.D. from the Department of Architecture and Planning, IIT Roorkee in March 2020.

Since IIT Roorkee offers a direct Ph.D. program and I fulfilled all the essential qualifications for getting admission, I got enrolled in the direct Ph.D. program of IIT Roorkee in 2014 after graduation without doing a master's. In Direct Ph.D., I did extensive coursework for 1 year which was more than the regular Ph.D. coursework. After successfully completing my research and fulfilling all other requirements laid down by IIT Roorkee for awarding a Ph.D., I have been awarded a Ph.D. and obtained a degree for the same from IIT Roorkee in March 2020. I am attaching the scanned copy of the Ph.D. Degree awarded to me with this email for your kind reference.

After the award of a Ph.D., I want to pursue my career further as an academician. Therefore, I have applied in the past and continue to do the same for the various posts advertised for assistant professors in various government institutions. When I apply for the recruitment of Assistant Professor in any Government Institution (Central University), I am disqualified and my application is not even shortlisted for the interview for not having a Master's Degree citing that 'Master's is an essential qualification for the post of Assistant Professor which I do not have.' The Ph.D. degree is not even considered in the absence of a Master's Degree. Also in the scoring proforma for the post of Assistant Professor, I am given 0 out of 25 for not having a Master's Degree which brings down my score significantly even after having a valid Ph.D. from a reputed institution (IIT Roorkee).

Sir, Kindly look into this matter because in this scenario, even after spending 5 years in research and getting a Ph.D., I am not able to get a job as an Assistant Professor. I would kindly request you to either issue me an equivalent degree for a master's or instruct the institutions and universities to acknowledge direct Ph.D. without a master's and not disqualify such candidates for not having a master's degree.

I am looking forward to your prompt reply as this has become a critical issue for me to work as an Assistant Professor.

Sincerely
Dr. Nikhat Parvez
Contact No. 9760875593

Item No. 87.11: To ratify the award of Provisional Ph.D. Degree Certificates to the students who have completed the requirements for the award of Ph.D. Degree in various disciplines w.e.f. 02.02.2021 to date.

Provisional Ph.D. Degree Certificates have been issued to 105 students who have completed the requirements for the award of the Degree in various disciplines w.e.f. 02.02.2021 to date **(Appendix-A)**.

The above is ratification for the Senate.

List of the students who have completed the requirements for the award of Ph.D. Degree in various disciplines w.e.f. 02.02.2021 to date and issued Provisional Ph.D. Degree Certificates.

Sl.No.	Name	Deptt.	Topic	Supervisor	Examiner (For./Ind.)	PDC Date
1	Mr. Mohit Dev	AR	FORMULATION OF A FRAMEWORK FOR PUBLIC TRANSPORT GOVERNANCE IN INDIAN CITY	Prof. Arindam Biswas	Prof. Tetsuo Kidokoro, Univ. of Tokyo Japan Prof. Binayak Choudhury, SPA Bhopal	16.02.21
2	Mr. Suryendu Dasgupta	AR	STRATEGIES TO OVERCOME CONSTRAINTS IN CONSERVATION OF HERITAGE AREAS IN HILL STATIONS OF INDIA: A CASE OF DARJEELING	Prof. Pushplata	Prof. Jhon Schofield, University of York, UK Prof. Ajay Khare, Prof., SPA Bhopal	05.07.21
3	Ms. Munesh Devi	ASE	STUDY OF SOME HYPERBOLIC SYSTEMS OF CONSERVATION LAWS AND WATER WAVE EQUATION	Prof. Rajan Arora	Prof. Alexey Shevyakov, Univ. of Saskatchewan Canada Prof. Lal Pratap Singh, IIT Varanasi	09.06.21
4	Mr. Tara Chand Yadav	BB	STRUCTURAL ELUCIDATION AND NANOPARTICLE FORMULATION OF TYROSOL FOR BIOMEDICAL APPLICATION	Prof. Ramasare Prasad Prof. Vikas Pruthi	Prof. Kamal Dua, Tech. Sydney Univ., Australia Prof. Subhash Chandra Yadav, AIIMS New Delhi	26.02.21
5	Ms. Neetu	BB	STRUCTURAL CHARACTERIZATION OF DRUG-TARGETS FROM GRAM-NEGATIVE BACTERIA	Prof. Pravindra Kumar	Prof. Punit Kaur, AIIMS New Delhi Prof. B. Padmanabhan, NIMHANS Bangalore	02.03.21
6	Ms. Poonam Dhankhar	BB	BIOCHEMICAL AND STRUCTURAL CHARACTERIZATION OF DYE DECOLORIZING PEROXIDASE FROM BACILLUS SUBTILIS	Prof. Pravindra Kumar	Prof. Samudrala Gourinath, JNU New Delhi Dr. Ram Kumar Dhaked, DRDE Gwalior	06.04.21
7	Ms. Rashmi Gangwar	BB	RECOMBINANT THERMOSTABLE MN-SUPEROXIDE DISMUTASE FROM NERIUM OLEANDER AND ASSESSMENT OF ITS ANTIOXIDANT POTENTIAL	Prof. R. Prasad	Prof. Prashant Mishra, IIT Delhi Prof. Arvind K. Kayastha, IIT Varanasi	06.04.21
8	Mr. Shanid Mohiyuddin	BB	CHITOSAN AND CALCIUM PHOSPHATE NANOPARTICLES FOR DELIVERY OF ANTICANCER AGENTS	Prof. P. Gopinath	Prof. Harishkumar Madhyastha, Univ. of Miyazaki, Japan Prof. Siddhartha Sankar Ghosh, IIT Guwahati	21.06.21

9	Mr. Ajay Kumar Chauhan	BB	PRODUCTION AND APPLICATION OF LIGNOLYTIC ENZYMES OF HALOPIGER ASWANENSIS	Prof. Bijan Choudhury	Prof. Yong Hwan Kim, Ulsan National Institute of Sci. & Tech., Republic of Korea Prof. A. Kermanshahi-pour, Dalhousie Univ., Canada Prof. T. R. Sreekrishnan, IIT Delhi	13.07.21
10	Mr. Ajay Kumar Patel	CE	EVALUATION OF SOIL FERTILITY STATUS THROUGH MIXED PIXELS ANALYSIS OF HYPERSPECTRAL DATA	Prof. J. K. Ghosh	Prof. Nicolas Dobigeon, Univ. of Toulouse, France Prof. Anurag Ohri, IIT Varanasi	05.03.21
11	Ms. Aditi Chauhan	CE	CHARACTERIZING CHLORIDE-INDUCED CORROSION IN REINFORCED CONCRETE UNDER VARYING ENVIRONMENTAL CONDITIONS	Prof. Umesh K. Sharma	Prof. Yogesh M. Desai, IIT Bombay Prof. S. K. Bhattacharyya, IIT Kharagpur	16.03.21
12	Mr. Solomon Debbarma	CE	FEASIBILITY OF RAP FOR SUSTAINABLE ROLLER COMPACTED CONCRETE PAVEMENT	Prof. G. D. Ransinchung R. N.	Prof. Dharamveer Singh, IIT Bombay Prof. Brind Kumar, IIT Varanasi	18.03.21
13	Mr. Satendra Kumar	CE	EFFECT OF SODICITY ON SOIL HYDRAULIC PROPERTIES AND ROOT WATER UPTAKE	Prof. K. S. Hari Prasad Dr. D. S. Bundela	Prof. Rao S. Govindaraju, Purdue University, USA Prof. Sekhar Muddu, IISc Bangalore Prof. Shashi Mathur, IIT Delhi	26.03.21
14	Mr. Dipaloke Majumder	CE	RESPONSE OF TUNNELS IN SQUEEZING GROUND CONDI	Prof. Mahendra singh Prof. M. N. Viladkar	Prof. Ramanathan Ayothiraman, IIT Delhi Prof. T. G. Sitharam, IIT Guwahati	12.04.21
15	Mr. Zaid Mohammad	CE	ENERGY ABSORPTION IN METALLIC PLATES AND SHELLS SUBJECTED TO PROJECTILE IMPACT	Prof. P. K. Gupta	Prof. William Stronge, Univ. of Cambridge, UK Prof. N. K. Gupta, IIT Delhi	27.05.21
16	Mr. Sunil Kumar Pundir	CE	ROLE OF GEO-PARAMETERS & GEO-INFORMATICS IN OFF-ROAD TRAFFICABILITY EVALUATION	Prof. R. D. Garg	Prof. Ashish Sharma, UNSW Sydney, Australia Prof. Subashisa Dutta, IIT Guwahati	28.06.21
17	Ms. Komal Jayaswal	CE	STUDIES ON FULL SCALE UASB-DHS SYSTEM FOR THE TREATMENT OF MUNICIPAL WASTEWATER	Prof. B. R. Gurjar Prof. Hideki Harada	Prof. Tian C. Zhang, Univ. of Nebraska-Lincoln, USA Prof. Masafumi Fujita, Ibaraki University, Japan Prof. Mohammad Jawed, IIT Guwahati	08.07.21
18	Mr. Sandeep Kumar Singla	CE	EXTRACTION OF CROP INFORMATION USING GEOMATICS AND MACHINE LEARNING	Prof. R. D. Garg Prof. O. P. Dubey	Dr. D. Ram Rajak, SAC Ahmedabad Prof. Vladimir Badenko, Peter the Great St. Petersburg Polytechnic Univ., Russia Prof. Venkataraman Lakshmi, Univ. of Virginia, USA	13.07.21

19	Mr. Mohd Asif	CH	CONVECTIVE FLOW ACROSS A POROUS ARRAY OF CYLINDERS WITH APPLICATION TO NANOFLUIDS	Prof. Amit K. Dhiman	Prof. Cheol Woo Park, Kyungpook National Univ., Korea Prof. Arul Prakash K, IIT Madras Prof. Amaresh Dalal, IIT Guwahati	23.03.21
20	Mr. Vikash	CH	HYDRODYNAMICS AND MIXING STUDIES IN HIGH SHEAR MIXERS FOR VISCOUS FLUIDS	Prof. Vimal Kumar	Prof. D. V. Khakhar, IIT Bombay Prof. R. P. Chhabra, IIT Ropar	10.05.21
21	Mr. Ritesh Patidar	CH	HYBRID ADVANCED OXIDATION PROCESSES FOR THE DEGRADATION OF PHARMACEUTICAL AND PERSONAL CARE PRODUCTS IN WASTEWATER	Prof. V. C. Srivastava	Prof. Shang-Lien Lo, National Taiwan Univ., Taiwan Prof. Jayant M Modak, Ilsc Bengaluru	30.06.21
22	Mr. Pradeep Kumarr Yadav	CH	PRODUCTION OF SYNGAS FROM CARBON DIOXIDE REFORMING OF METHANE USING PEROVSKITE-TYPE CATALYSTS: SYNTHESIS, CHARACTERIZATION AND REACTIVITY	Prof. Taraknath Das	Prof. Kaustubha Mohanty, IIT Guwahati Prof. Ch. Subrahmanyam, IIT Hyderabad	08.07.21
23	Mr. Vivekraj V. K.	CSE	AUTONOMOUS VIDEO SKIMMING: TAXONOMY, FRAMEWORKS AND QUANTITATIVE EVALUATION	Prof. Balasubramanian Raman Prof. Debashis Sen	Prof. Pradeep K. Atrey, State Univ. New York at Albany, USA Prof. Phalguni Gupta, GLA Univ. Mathura	02.03.21
24	Mr. Ankush Agarwal	CSE	WEB BASED AGRICULTURE MONITORING SYSTEM USING MULTI-SENSOR DATA	Prof. Sandeep Kumar Prof. Dharmendra Singh	Prof. Deepak R. Mishra, Univ. of Georgia, USA Prof. P. C. Pandey, IIT Kharagpur	06.04.21
25	Mr. Ankur Gupta	CSE	DESIGN AUTOMATION OF DECISION SUPPORT SYSTEMS FOR CARDIOVASCULAR DISEASE PREDICTION	Prof. Balasubramanian Raman	Prof. Christian Micheloni, Univ. of Udine, Italy Prof. M. K. Bhuyan, IIT Guwahati	21.06.21
26	Mr. Sarang Kapoor	CSE	SUBJECTIVELY INTERESTING PATTERNS IN NETWORKS	Prof. D. K. Saxena Prof. Matthijs van Leeuwen	Prof. Jilles Vreeken, Saarland Univer., German Prof. Ashish Anand, IIT Guwahati	30.06.21
27	Mr. Patnala Phani Kumar	CTRN	EXPLORING THE POTENTIAL OF NEIGHBORHOODS FOR METRO RAIL-BASED TRANSIT-ORIENTED DEVELOPMENT	Prof. Manoranjan Parida Dr. Ch. Ravi Sekhar	Prof. Wafaa Saleh, Edinburgh Napier Univ., UK Prof. Ashish Verma, IISc Bangalore	02.03.21
28	Mr. Jaideep Malik	CY	NOVEL LAYERED TITANATES AND NIOBATES: APPLICATIONS IN PHOTOCATALYTIC DEGRADATION	Prof. T. K. Mandal	Prof. Mohammad Qureshi, IIT Guwahati Prof. Ch. Subrahmanyam, IIT Hyderabad	26.03.21

			OF ORGANIC POLLUTANTS AND WATER SPLITTING			
29	Ms. Soniya Dhiman	CY	EXTRACTION, SEPARATION AND RECOVERY OF VALUABLE METALS FROM E-WASTE USING PHOSPHONIUM IONIC LIQUIDS	Prof. Bina Gupta	Prof. Ahmad Ghahreman, Queen's Univ. Kingston, Canada Prof. Ana Maria Sastre Requena, Univ. Politecnica de Catalunya, Spain Prof. S. H. Hasan, IIT Varanasi	26.03.21
30	Mr. Anuj Sharma	CY	CARBAZOLE BASED ORGANIC MATERIALS FOR ELECTRONIC APPLICATION	Prof. K. R. Justin Thomas	Prof. Parameswar K. Iyer, IIT Guwahati Prof. Rajneesh Misra, IIT Indore	22.06.21
31	Ms. Sudiksha Aggrawal	CY	IMMOBILIZATION OF NANOSTRUCTURES IN PAPER MATRICES: SYNTHESIS & APPLICATIONS	Prof. Paritosh Mohanty	Prof. Vivek Kumar, IIT Delhi Prof. Bhanu Nandan, IIT Delhi	05.07.21
32	Mr. Deependra Tripathi	CY	APPLICATIONS OF TRANSITION METAL COMPLEXES	Prof. U. P. Singh Prof. Raj Kumar Singh	Prof. W. E. Smith, Strathclyde University, UK Prof. V. P. Singh, BHU Varanasi	08.07.21
33	Ms. Neha Dua	CY	SYNTHESIS OF HYBRIDS OF CARBO - AND HETEROCYCLIC SYSTEMS USING QUINONE VARIANTS	Prof. R. K. Peddinti	Prof. Jerry Kosmeder, Roche Tissue Diagnostics, USA Prof. Kumar Biradha, IIT Kharagpur Prof. V. R. Pedireddi, IIT Bhubaneswar	15.07.21
34	Ms. Sangeeta	DMM	EARTHQUAKE-INDUCED LANDSLIDE HAZARD ASSESSMENT IN UTTARAKHAND	Prof. B. K. Maheshwari	Prof. T. G. Sitharam, IIT Guwahati Prof. Gali Madhavi Latha, IISc Bangalore	13.05.21
35	Mr. Girish Chandra Tripathi	ECE	SOFTWARE-DEFINED-SOLUTIONS FOR NONLINEARITIES IN SUB 6 GHZ TO mmWAVE TRANSMITTERS	Prof. Meenakshi Rawat	Prof. F. M. Ghannouchi, Univ. of Calgary, Canada Prof. M. Jaleel Akhtar, IIT Kanpur	04.03.21
36	Ms. Nidhi Pandit	ECE	INVESTIGATIONS ON MULTI-MODE RESONATORS FOR COMMUNICATION AND SENSING APPLICATIONS	Prof. N. P. Pathak	Prof. Takashi Shimizu, Utsunomiya Univ., Japan Prof. M. Jaleel Akhtar, IIT Kanpur	12.03.21
37	Mr. Deepak Murugan	ECE	MULTI -SENSOR DATA FUSION FOR LAND COVER PARAMETER RETRIEVAL AND CLASSIFICATION	Prof. Dharmendra Singh	Prof. Pradeep K. Atrey, State Univ. of New York at Albany, USA Prof. Pradip K. Jain, IIT Varanasi	06.04.21
38	Mr. Sambaiah Pelluri	ECE	INVESTIGATION ON COMPACT SUBSTRATE INTEGRATED WAVEGUIDE FILTERS	Prof. M. V. Kartikeyan	Prof. Francisco Falcone, UPNA Spain Prof. Pradip K. Jain, IIT Varanasi	06.04.21

39	Ms. Ekta Aggrawal	ECE	WIDEBAND CONTINUOUS MODE POWER AMPLIFIERS FOR OUTPHASING WIRELESS TRANSMITTERS	Prof. Karun Rawat	Prof. Gaurab Banerjee, IISc Bangalore Dr. D. S. Rawal, DRDO Delhi	21.05.21
40	Mr. Aditya Nath Bhatt	ECE	HYBRID ORGANIC-INORGANIC QUANTUM DOT WHITE LIGHT EMITTING DEVICES	Prof. Brijesh Kumar	Prof. P. Paul Ruden, Univ. of Minnesota, USA Prof. Yogendra K. Mishra, Univ. of Southern Denmark Dr. Vidya Nand Singh, CSIR New Delhi	12.06.21
41	Mr. Satendra Kumar Gautam	ECE	TECHNIQUES FOR IMPROVING LEAKAGES AND ROW HAMMER FAILURE IN NANO-SCALE DRAM TRANSISTOR	Prof. Sanjeev Manhas	Prof. M. M. De Souza, Univ. of Sheffield, UK Prof. Saurabh Lodha, IIT Bombay	15.06.21
42	Mr. Amit Kumar	ECE	PERFORMANCE MODELING AND ANALYSIS OF GRAPHENE-BASED ON-CHIP VLSI INTERCONNECTS	Dr. B. K. Kaushik	Prof. Abhinav Kranti, IIT Indore Prof. Satyabrata Jit, IIT Varanasi	24.06.21
43	Mr. Vishal Kumar Gaur	EE	FAULT DETECTION AND LOCATION ALGORITHMS FOR TRANSMISSION LINE	Prof. Bhavesh R. Bhalja	Prof. Tarlochan Sidhu, Ontario Tech Univ., Canada Prof. Ashok K. Pradhan, IIT Kharagpur	16.03.21
44	Ms. Sandhya Prajapati	EE	SOLAR PHOTOVOLTAIC SYSTEMS FOR ENERGY APPLICATIONS: SOME SIMULATED INVESTIGATIONS	Prof. E. Fernandez	Prof. Mohan Lal Kolhe, Univ. of Agder, Norway Prof. Akhtar Kalam, Victoria Univ., Australia Prof. B. S. Rajpurohit, IIT Mandi	22.04.21
45	Mr. Phanindra K. Ganivada	EE	SYNCHROPHASOR TECHNOLOGY ASSISTED PROTECTION SCHEMES FOR ACTIVE DISTRIBUTION NETWORK	Prof. P. Jena	Prof. V. K. Sood, Ontario Tech Univ., Canada Prof. A. K. Pradhan, IIT Kharagpur	19.05.21
46	Mr. Surender Hans	EE	DESIGN, DEVELOPMENT, AND CONTROL OF A FLEXIBLE NEEDLE FOR PERCUTANEOUS INTERVENTIONS	Prof. Felix Orlando Maria Joseph	Prof. Harish Pillai, IIT Bombay Prof. Bijnan Bandyopadhyay, IIT Bombay	25.05.21
47	Mr. Pushkar Prakash Arya	EE	ADVANCED INTERNAL MODEL CONTROLLER DESIGN FOR TIME DELAYED PROCESSES	Prof. Sohom Chakrabarty	Prof. Prabirkumar Saha, IIT Guwahati Prof. Bidyadhar Subudhi, IIT Goa	01.06.21
48	Mr. Shivam Jain	EE	DESIGN OF IMC AND ADRC CONTROLLERS FOR LINEAR AND TIME DELAYED SYSTEMS WITH FRACTIONAL ASPECTS AND THEIR APPLICATIONS	Prof. Yogesh Vijay Hote	Prof. R. Padhi, IISc Bangalore Prof. Bidyadhar Subudhi, IIT Goa	16.07.21

49	Ms. Priyanka Sharma	EQ	SITE CHARACTERIZATION AND LIQUEFACTION POTENTIAL ASSESSMENT IN INDO-GANGETIC PLAINS	Prof. M. L. Sharma Prof. V. A. Sawant	Prof. P. Anbazhagan, IISc Bangalore Prof. G. R. Dodagoudar, IIT Madras	22.02.21
50	Mr. Sunil Kumar Saini	EQ	SELF CONSISTENT SCALING LAWS FOR THE HIMALAYAS	Prof. Josodhir Das Prof. M. L. Sharma	Prof. Javed N. Malik, IIT Kanpur Prof. P. N. Singha Roy, IIT Kharagpur	16.03.21
51	Ms. Neetu Goswami	EQ	ESTIMATION OF SOURCE, PATH AND SITE PARAMETERS FOR THE GARHWAL HIMALAYA USING LOCAL EARTHQUAKES	Prof. S. C. Sharma	Dr. Sumer Chopra, ISR, Gandhinagar Dr. Ajay Paul, WIHG, Dehradun	07.07.21
52	Ms. D. P. Monika Saini	ES	BALANCED CROSS SECTIONS AND STRUCTURAL EVOLUTION OF NAGA SCHUPPEN BELT, NE INDIA	Prof. B. Bhattacharya Prof. D. K. Mukhopadhyay Dr. Premanand Mishra	Prof. Priyank Jaiswal, Oklahoma State Univ., USA Prof. John Clayburn, Univ. of Oxford, UK Prof. T. K. Biswal, IIT Bombay	24.03.21
53	Mr. Mohd Zubair	ES	NEAR-SURFACE RESISTIVITY AND RMT STUDIES AT SELECTED SITES IN UTTARAKHAND, INDIA	Prof. M. Israil Prof. S. Szalai	Prof. Sudha Agrahari, IIT Kharagpur Prof. Uma Shankar, IIT Vaaranasi	24.06.21
54	Mr. Rahul Kumar Garg	HRD	HYDRAULIC TRANSIENT IN PENSTOCK OF MILD STEEL AND GLASS FIBRE REINFORCED PLASTIC FOR HYDRO POWER PLANTS	Prof. Arun Kumar	Prof. Bryan Karney, Unive. of Toronto, Canada Prof. Dhiman Chatterjee, IIT Madras Prof. Pranab K. Mohapatra, IIT Gandhinagar	05.04.21
55	Mr. Prem Prakash	HRD	OPTIMAL SIZING AND SITING OF DISTRIBUTED GENERATION IN DISTRIBUTION SYSTEM	Prof. D. K. Khatod	Prof. Nick Jenkins, School of Engg., Cardiff Univ.,UK Prof. K. Shanti Swarup, IIT Madras	05.06.21
56	Mr. Abhishek Gautam	HRD	PERFORMANCE INVESTIGATION OF A PACKED BED SOLAR ENERGY STORAGE SYSTEM HAVING SPHERES WITH PORES AS PACKING ELEMENTS	Prof. R. P. Saini	Prof. Shireesh B Kedare, IIT Bombay Prof. Tara Chandra Kandpal, IIT Delhi	29.06.21
57	Ms. Meera Singh	HSS	QUEER SPACE: A STUDY OF SELECT SOUTH ASIAN NARRATIVES	Prof. P. Jha Prof. Nagendra Kumar	Prof. Shefali Rajamannar, Univ. of Southern California, USA Prof. Ajit K. Mishra, IIT Varanasi	22.03.21
58	Mr. Goutam Naskar	HSS	THE NATURE OF INTERACTION IN SECOND LANGUAGE CLASSROOM : A STUDY AT SECONDARY LEVEL IN WEST BENGAL	Prof. Smita Jha	Prof. Rich Rice, Texas Tech Univ., USA Prof. Raj Nath Bhat, IIT Varanasi	08.04.21
59	Ms. Elham Fatma	HSS	PARADISE & PAIN: WOMEN & TRAUMA IN SELECT CONTEMPORARY KASHMIRI FICTIONS	Prof. Rashmi Gaur	Prof. Rahul K. Gairola, Murdoch Univ., Australia Prof. Pramod K. Nayar, Univ. Hyderabad	14.05.21

60	Mr. Asif Khan	HSS	FINANCIAL AND SOCIAL EFFICIENCY OF MICROFINANCE INSTITUTIONS IN INDIA	Prof. Rachita Gulati	Prof. Aaron Tan, Univ. of Huddersfield, UK Prof. Geeta Duppati, The Univ. of Waikato, New Zealand Prof. Seema Sharma, IIT Delhi	28.05.21
61	Ms. Prateeksha Maurya	HSS	DYNAMICS OF FINANCIAL ACCESS AND GENDER DISPARITY IN UNORGANIZED ENTERPRISES IN INDIA: A SPECIAL REFERENCE TO UTTARAKHAND	Prof. P. C. Mohanty	Prof. Minaketan Behera, JNU New Delhi Prof. M. K. Rao, IIT Kharagpur	06.06.21
62	Mr. Ashish Sharma	HSS	ECONOMIC IMPACTS OF DROUGHTS AND DROUGHT RISK MANAGEMENT PRACTICES: A STUDY OF MADHYA PRADESH	Prof. Subir Sen	Prof. Subhajyoti Samaddar, Kyoto Unive., Japan Prof. Ilan Noy, Wellington 6011, New Zealand Prof. Badri Narayan Rath, IIT Hyderabad	08.07.21
63	Ms. Aliva Nanda	HY	UNDERSTANDING HYDROLOGICAL PROCESSES OF LESSER HIMALAYAN HILLSLOPES	Prof. Sumit Sen	Prof. Vijay P. Singh, Texas A&M Univ., USA Prof. Bimlesh Kumar, IIT Guwahati	11.02.21
64	Mr. Shashi Ranjan	HY	IN-SITU REMEDIATION OF ARSENIC CONTAMINATED GROUNDWATER USING PERMEABLE REACTIVE BARRIER	Prof. Brijesh K. Yadav Prof. Himanshu Joshi	Prof. Diganta Bhusan Das, Loughborough Univ., UK Prof. Mihir Kumar Purkait, IIT Guwahati	04.03.21
65	Mr. Pankaj Kumar	MA	PERFORMANCE MODELING AND RELIABILITY PREDICTION OF FAULT-TOLERANT MACHINING SYSTEMS	Prof. Madhu Jain	Prof. Tuan Phung-Duc, Univ. of Tsukuba, Japan Prof. U. C. Gupta, IIT Kharagpur	02.03.21
66	Mr. Abhishek Kumar	MA	RATE OF APPROXIMATION BY CERTAIN POSITIVE LINEAR OPERATORS	Prof. Aditi Gangopadhyay Prof. P. N. Agarwal	Prof. H. M. Srivastava, Univ. of Victoria, Canada Prof. Ana Maria ACU,Lucian Blaga Univ. of Sibiu, Romania Prof. M. Guru Prem Prasad, IIT Guwahati	14.05.21
67	Ms. Chinika Dangi	MA	NUMERICAL SOLUTION OF SOME PROBLEMS ON STATIC AND DYNAMIC BEHAVIOR OF FGM NANOSTRUCTURES UNDER COMPLICATING EFFECTS	Prof. Roshan lal Prof. N. Sukavanam	Prof. Francesco Tornabene, Univ. of Salento, Italy Prof. Poonam Kumari, IIT Guwahati	05.06.21
68	Mr. Sudhir Kumar	MA	B-SPLINES BASED METHODS FOR SOLVING PARABOLIC AND HYPERBOLIC PARTIAL DIFFERENTIAL EQUATIONS	Prof. Ram Jiwari Prof. R. C. Mittal	Prof. Mani Mehra, IIT Delhi Prof. Jitendra Kumar, IIT Kharagpur	28.06.21
69	Mr. Rahul Shukla	MA	ORDER OF CONVERGENCE BY CERTAIN POSITIVE LINEAR APPROXIMATION METHODS	Prof. R. K. Pandey Prof. P. N. Agarwal	Prof. Narendra K. Govil, Auburn Univ., USA Prof. Muraru Varmen-Violeta, Univ. of Bacau, Romania Prof. P. Devaraj, IISER Thiruvananthapuram	01.07.21

70	Mr. Farhan Ahmad Shamim	MIE	DEVELOPMENT AND PARAMETRIC INVESTIGATIONS OF NEAR-DRY WIRE ECDM PROCESS	Prof. Akshay Dvivedi Prof. Pradeep Kumar	Prof. Deepak Gupta, Wichita State Univ., USA Prof. Pulak M. Pandey, IIT Delhi	09.02.21
71	Mr. Vibhuti Bhushan Pandey	MIE	CRACK INITIATION AND PROPAGATION USING DAMAGE MECHANICS AND XFEM UNDER CREEP FATIGUE ENVIRONMENT	Prof. Indra Vir Singh Prof. B. K. Mishra	Prof. Timon Rabczuk, Bauhaus Univ. Weimar, Germany Prof. M. Ramji, IIT Hyderabad	11.02.21
72	Mr. Bharat Bhushan Sharma	MIE	ATOMISTIC MODELS TO STUDY MECHANICAL AND FRACTURE BEHAVIOUR OF DRY AND WATER SUBMERGED h-BN NANOSHEETS	Prof. Avinash Parashar	Prof. Hitendra Kumar Malik, IIT Delhi Prof. Rajnesh Tyagi, IIT Varanasi	24.02.21
73	Mr. Ratnadeep Nath	MIE	DOUBLE-DIFFUSIVE MIXED CONVECTION OF NANOFLUID IN BACKWARD FACING STEP CHANNEL	Prof. K. Murugesan	Prof. Hakan Fehmi Oztop, Firat University, Turkey Prof. Arul Prakash K., IIT Madras	17.03.21
74	Mr. Shaik Mozammil	MIE	SYNTHESIS, CHARACTERIZATION AND MODELING STUDIES ON IN-SITU TiB_2 REINFORCED ALUMINIUM MATRIX COMPOSITES	Prof. P. K. Jha	Prof. Manoj Gupta, National Univ., Singapore Prof. Pankaj Biswas, IIT Guwahati	08.04.21
75	Mr. Siddappa P. G.	MIE	EXPERIMENTAL ESTIMATION OF THERMAL CONTACT CONDUCTANCE AT CRYOGENIC TEMPERATURES AND NUMERICAL MODELLING	Prof. A. Tariq	Prof. Atul Srivastava, IIT Bombay Prof. K. Muralidhar, IIT Kanpur	28.05.21
76	Mr. Sanjay Singh Samant	MIE	A STUDY OF MECHANICAL, FRACTURE AND FATIGUE BEHAVIOR OF MODIFIED 9CR-1MO STEEL	Prof. I. V. Singh Dr. Ram Niwas Singh	Prof. R. Shabadi, University of Lille, France Prof. Satyam Suwas, IISc Bangalore	22.05.21
77	Mr. Mohit Goel	MIE	MOLECULAR DYNAMICS STUDY OF EFFECTS OF DEFECTS AND GEOMETRY ON STATIC AND DYNAMIC MECHANICAL BEHAVIOUR OF CARBON NANOTUBE	Prof. S. P. Harsha	Prof. Nalinaksh S. Vyas, IIT Kanpur Prof. Hitendra K. Malik, IIT Delhi	14.06.21
78	Mr. Deepak Kumar	MIE	NUMERICAL STUDY OF NATURAL CONVECTION IN RECTANGULAR CAVITY FILLED WITH NANOFLUID UNDER MAGNETIC FIELD	Prof. Sudhakar Subudhi	Prof. Prasanta K. Das, IIT Kharagpur Prof. Kirti Chandra Sahu, IIT Hyderabad Prof. Amaresh Dalal, IIT Guwahati	28.06.21
79	Mr. Kamal Raj Sharma	MIE	EXPERIMENTAL INVESTIGATION OF UNSTEADY AERODYNAMICS AND FLOW CONTROL FOR FLEXIBLE STRUCTURE	Prof. Sushanta Dutta	Prof. K. Muralidhar, IIT Kanpur Prof. Shaligram Tiwari, IIT Madras	28.06.21

80	Mr. Rajesh Govindan	MIE	DYNAMICS OF HUMAN BODY EXPOSED TO LOWFREQUENCY VIBRATION DURING SPACEFLIGHT	Prof. S. P. Harsha Prof. V. H. Saran	Prof. Luigi Maffei, Università degli Studi della Campania "Luigi Vanvitelli", Italy Prof. Pulak M. Pandey, IIT Delhi	29.06.21
81	Mr. Sutar Sunil Suresh	MIE	INVESTIGATION ON BIOMECHANICS OF BLAST INDUCED TRAUMATIC BRAIN INJURY USING COMPUTATIONAL MODELS	Prof. Ganpule Shailesh Govind	Prof. Rika Wright Carlsen, Robert Morris Univ., USA Prof. Prasad Patnaik BSV, IIT Madras	05.07.21
82	Mr. Naveen Kumar	MIE	SOME STUDIES ON WELDABILITY AND EROSION BEHAVIOUR OF NITRONIC STEELS	Prof. Navneet Arora	Prof. Ashish Kumar Nath, IIT Kharagpur Dr. N. D. Pandey, DRDL, Hyderabad Prof. S. Aravindan, IIT Delhi	08.07.21
83	Mr. Abhishek Kumar Gupta	MME	ENERGY STORAGE CERAMICS: SYNTHESIS AND CHARACTERIZATION	Prof. Anjan Sil	Prof. Somaditya Sen, IIT Indore Dr. Om Prakash Thakur, DRDO Delhi	09.03.21
84	Ms. Nikki Archana Barla	MME	SIMULATION OF STRESS INDUCED SENSITIZATION DURING ARC WELDING OF STAINLESS STEEL	Prof. Sourav Das Prof. P. K. Ghosh Dr. Vinod Kumar	Prof. Mahesh Chandra Somani, Univ. of Oulu, Finland Prof. Amitava De, IIT Bombay	21.05.21
85	Mr. Aniruddha Malakar	MME	FRICTION STIR PROCESSING OF GREEN AL POWDER COMPACT	Prof. Vivek Pancholi	Prof. Indrajit Charit, Univ. of Idaho, USA Prof. Pasquale Cavaliere, Univ. of Salento, Italy Prof. Indradev Samajdar, IIT Bombay	13.07.21
86	Ms. Sheeba Ramola	MS	TALENT MANAGEMENT PRACTICES OF ORGANIZATIONS IN INDIA	Prof. Santosh Rangnekar	Prof. Amulya Gurtu, Univ. of Wisconsin-Green Bay,USA Dr. Pushpendra Priyadarshi, IIM Lucknow	09.03.21
87	Mr. Jai Singh	NT	DEVELOPMENT OF WEAR RESISTANT HYDRO TURBINE STEEL THROUGH PHASE TRANSFORMATION INVOLVING MICRO- AND NANO-SIZED SECOND PHASE DISPERSED IN THE METALLIC MATRIX	Prof. S. K. Nath Prof. R. K. Dutta	Prof. R. Devesh Mishra, Texas Univ., USA Prof. Debalay Chakrabarti, IIT Kharagpur	08.02.21
88	Mr. Akshay V Singhal	NT	NOVEL ROUTES FOR SYNTHESIS OF GRAPHENE DERIVATIVES AND THEIR APPLICATIONS	Prof. Indranil Lahiri	Prof. Mudrika Khandelwal, IIT Hyderabad Prof. Suryasarathi Bose, IISc Bangalore	01.06.21
89	Ms. Manmeet Kaur	NT	ADVANCED NANOMATERIALS SYNTHESIS FOR HYDROGEN STORAGE APPLICATIONS	Prof. Kaushik Pal	Prof. Bhanu Bhusan Khatua, IIT Kharagpur Prof. Nishith Verrma, IIT Kanpur	22.06.21
90	Mr. Dharmendra Singh Raghav	PH	ELUCIDATING SIZE EFFECTS ON THE COMPETING MAGNETIC PHASES IN La1-x-yPryCaxMnO3 IN BULK POLYCRYSTALS	Prof. G. D. Verma	Prof. Dhananjay Kumar, North Carolina A&T State Univ., US Prof. Sujeet Chaudhary, IIT Delhi	08.04.21

91	Ms. Neha Kanaujiya	PH	GROWTH AND CHARACTERIZATION OF MOS2@METAL OXIDE BASED NANOCOMPOSITES FOR SUPERCAPACITOR APPLICATIONS	Prof. G. D. Verma	Prof. Tseung Yuen Tseng, National Chiao Tung Univ., Taiwan Prof. Rajendra K. Singh, IIT Varanasi	07.05.21
92	Mr. Nadir Ali	PH	NONVOLATILE SILICON PHOTONIC SWITCHES ENABLED BY WAVEGUIDE EMBEDDED PHASE CHANGE MATERIAL	Prof. Rajesh Kumar	Prof. Vilson Rosa de Almeida, Instituto Technologico de Aeronautica, Brazil Prof. G. Vijaya Prkash, IIT Delhi	13.05.21
93	Mr. Sandeep Kumar	PH	DEVELOPMENT OF IRON BASED OXIDES AS PROSPECTIVE ANODES FOR NEXT-GENERATION LI-ION BATTERIES	Prof. Yogesh K. Sharma	Prof. Amartya Mukhopadhyay, IIT Bombay Prof. Rajendra S. Dhaka, IIT Delhi	04.06.21
94	Mr. Mujeeb Hasan	PH	EFFECT OF MAGNETIC FIELD ON HEAVY QUARKONIA	Prof. B. K. Patra	Prof. Yuri Kovchegov, The Ohio State Univ., USA Prof. Munshi G. Mustafa, SINP Kolkata	04.06.21
95	Mr. Mohd Rehan	PH	OPTICAL FIBERS FOR HIGH PEAK POWER SHORT AND ULTRA-SHORT LASER PULSES	Prof. Vipul Rastogi	Prof. Tarak Nath Dey, IIT Guwahati Prof. Partha Roy Chaudhuri, IIT Kharagpur	28.06.21
96	Mr. Sushanta Kumar Sethi	PPE	MOLECULAR DYNAMICS SIMULATION OF ENVIRONMENTAL FRIENDLY EASY-CLEAN COATINGS	Prof. Gaurav Manik	Prof. Amit Kumar, IIT Guwahati Prof. Kinsuk Naskar, IIT Kharagpur	22.02.21
97	Ms. Anushree Pandey	PPE	MICROENCAPSULATION OF AMYGDALIN IN CHITOSAN AND ITS POTENTIAL APPLICATION IN CANCER DRUG DELIVERY	Prof. Y. S. Negi	Prof. Sudaxshia Murdan, UCL School of Pharmacy, UK Prof. Bhuvanesh Gupta, IIT Delhi Prof. Diwan S. Rawat, Univ. of Delhi, Delhi	02.03.21
98	Mr. Sumit Kumar Singh	PPE	INVESTIGATING PROPERTY DETERIORATION IN SBS MODIFIED BINDER AND MIXTURE DURING STORAGE	Prof. S. Ravindranath	Prof. Filippo Giustozzi, Royal Melbourne Inst. of Tech., Australia Prof. Dharamveer Singh, IIT Bombay	05.04.21
99	Mr. Jagdeep Kumar Nayak	PPE	BIOREMEDIATION OF DOMESTIC AND INDUSTRIAL WASTEWATER FOR BIOELECTRICITY GENERATION USING PHOTOSYNTHETIC MICROBIAL FUEL CELL	Prof. U. K. Ghosh	Prof. S. P. JUNG, Chonnam National Univ.-Gwangju, Korea Prof. Rajesh Roshan Dash, IIT Bhubaneswar	13.05.21
100	Mr. Trilok Kumar Saini	PT	IMPROVEMENT IN ROUTE QUALITY AND DEVELOPMENT OF NETWORK INTERCONNECTION TECHNIQUE IN MANET	Prof. S. C. Sharma	Prof. Manav Bhatnagar, IIT Delhi Prof. Ravi Shankar Singh, IIT Varanasi	16.03.21

101	Mr. Kalka Dubey	PT	DEVELOPMENT OF METAHEURISTIC BASED WORKFLOW AND TASK SCHEDULING ALGORITHMS IN CLOUD ENVIRONMENT	Prof. S. C. Sharma	Prof. Ravi Shankar Singh, IIT (BHU) Varanasi Prof. Karm Veer Arya, ABV-IIITM, Gwalior	13.07.21
102	Mr. Hallu Birara Mesfin	WRD	IRRIGATION WATER REQUIREMENTS UNDER CHANGING CLIMATE IN TANA BASIN, ETHIOPIA	Prof. S. K. Mishra Prof. R. P. Pandey	Prof. Ronny Berndtsson, Lund Univ., Sweden Prof. Eldho T. I., IIT Bombay	12.02.21
103	Mr. B. Anil Kumar	WRD	ENERGY MANAGEMENT IN DIESEL-ELECTRIC TUGBOAT USING VARIABLE SPEED TECHNOLOGY	Prof. Thanga Raj Chelliah	Prof. Akira Sugawara, Niigata Univ., Japan Prof. K. Shanti Swarup, IIT Madras	26.03.21
104	Mr. Sanchit Saran Agarwal	WRD	HYDROPOWER DEVELOPMENT UNDER UNCERTAINTIES AND OPERATIONAL PERFORMANCE ASSESSMENT	Prof. M. L. Kansal	Prof. Carmen Lucia Tancredo Borges, Federal Univer. of Rio de Janeiro, Brazil Prof. Kumar Neeraj Jha, IIT Delhi	13.05.21
105	Mr. Karthik D.	WRD	THERMAL PERFORMANCE IMPROVEMENT IN MULTIMEGAWATT POWER CONVERTER SERVING TO ASYNCHRONOUS HYDROGENERATOR	Prof. Thanga Raj Chelliah Prof. Deepak Khare	Prof. Hamid A. Toliyat, Texas A&M University USA Prof. Suryanarayana Doolla, IIT Bombay	22.06.21

Item No. 87.12: To report the approvals accorded by the Chairman, Senate:

(a) Recommendations of 99th (emergency), 100th (emergency), 101st, 102nd, 103rd (emergency), 104th, 105th, 106th (emergency) and 107th meetings of IAPC.

1. Semester plan for all students (excluding UG I Year) for Spring Semester 2020-21 (Item No.: 99.1, 99th (emergency) IAPC dt: 16.02.2021)

2. Revision of eligibility criteria towards MBA Admission-2021-23 based on the proposal received from the Department of Management Studies. (Item No.: 100.1, 100th (emergency) IAPC dt: 25.02.2021)

3. Requests of students regarding continuation of program in spite of not fulfilling minimum SGPA and addition/deletion of courses after the last date (Item No.: 101.2.2, 101st IAPC dt: 19/21.03.2021)

4. Plans received from various Departments to shift/conduct lab courses during Spring 2020-21 for all students (excluding UG I Yr) (Item No.: 101.2.3, 101st IAPC dt: 19/21.03.2021)

5. Plan to reflect new grades on the transcript and computation of SGPA/CGPA for the course(s) opted as Repeat Course (Item No.: 101.2.6, 101st IAPC dt: 19/21.03.2021)

6. Renaming of the M.Tech. specialization of Welding Engineering in Deptt of Mechanical and Industrial Engg w.e.f. the Academic Year 2021-22 (Item No.: 101.2.7, 101st IAPC dt: 19/21.03.2021)

7. Seat-Matrix for admission to M.Tech./ M.Arch./M.U.R.P. / M. Des. & MIM Programmes 2021-22. (Item No.: 101.2.8, 101st IAPC dt: 19/21.03.2021)

8. Changes in eligibility criteria for M.Tech. Admission 2021-22 to the Deptt of Mechanical and Industrial Engg. (Item No.: 101.2.9, 101st IAPC dt: 19/21.03.2021)

9. Seat distribution for M.Tech programmes of Department of Mechanical and Industrial Engg. for

Academic Year 2021-22. (Item No.: 101.2.10, 101st IAPC dt: 19/21.03.2021)

10. Addition of ES Gate paper in eligible GATE discipline for Deptt. of Hydro and Renewable Energy towards M. Tech. (EMRL) Admission 2021-22. (Item No.: 101.2.11, 101st IAPC dt: 19/21.03.2021)

11. Addition in eligibility criteria for the M. Tech. Admission 2021-22 and the name change of 'M.Tech. (Pulp and Paper)' to 'M.Tech. (Pulp and Paper Technology)' by the Deptt of Paper Technology. (Item No.: 101.2.12, 101st IAPC dt: 19/21.03.2021)

12. The revised JAM seat matrix -2021 with new programme codes and format. (Item No.: 101.2.13, 101st IAPC dt: 19/21.03.2021)

13. Admission eligibility criteria for the new M.Tech. (Artificial Intelligence) and M.Tech. (Data Science) Programmes. (Item No.: 101.2.14, 101st IAPC dt: 19/21.03.2021)

14. Revision of the existing rule towards admission to M.Tech. / M.Arch. / M.U.R.P. Programmes for the GATE qualified candidates working under SRIC. (Item No.: 101.2.15, 101st IAPC dt: 19/21.03.2021)

15. Admission process and selection criteria for the new M. Des (Industrial Design) and MIM (Master in Innovation Management) Programmes. (Item No.: 101.2.16, 101st IAPC dt: 19/21.03.2021)

16. Revised proposal of admission process and selection criteria for the new M.Tech. in Dam Safety and Rehabilitation Programme. (Item No.: 101.2.17, 101st IAPC dt: 19/21.03.2021)

17. Proposals of Department of Biotechnology due to change in the name of B.Tech. Programme from Biotechnology to Biosciences and Bioengineering: -

    A. To change the prefix of the course title from BT to BE
    B. New Programme name to be reflected in the grade sheets w.e.f First Sem 2020-21 onwards. (Item No.: 101.3.3, 101st IAPC dt: 19/21.03.2021)

18. Plans received from various Departments for conduct/ shift of practical courses/ lab components during Spring 2020-21 for UG I Yr. (Item No.: 102.2.1, 102nd IAPC dt: 21.04.2021)

19. Following proposals of Department of Electronics & Communication Engg. regarding M.Tech. (VLSI) for industry professionals:

    a) A summer term to be allowed for the program coinciding with the summer vacation of the Institute.
    b) In view of the current pandemic, only interview for the shortlisted candidates to be conducted this year for final selection. There will be no physical written examination as proposed earlier.

20. Requests of students regarding Addition/deletion of courses after the last date, Continuation of program in spite of not fulfilling minimum SGPA, Request to waive off 01-02 credit for completion of Degree and Name restoration (Item No.: 102.2.5, 102nd IAPC dt: 21.04.2021)

21. To review the plan for the conduct of Spring Semester 2020-21 for all UG students due to the prevailing pandemic situation and the proposal for considering a special term break for UG 1 yr and MBA Term 4 students (Item No.: 103.1, 103rd (emergency) IAPC dt: 28.04.2021)

22. Spring Semester 2020-21 completion plan and Academic Calendar for all students in view of the prevailing pandemic situation. (Item No.: 104.2.1, 104th IAPC dt: 12.05.2021)

23. Change(s) in plan received from various Departments to conduct practical courses/lab components for the Spring Semester 2020-21 for all students (excluding UG-1 Yr). (Item No.: 104.2.2, 104th IAPC dt: 12.05.2021)

24. Requests of students regarding addition/change or deletion of course after the last date, deletion of courses after grading, name restoration and final evaluation/presentation of Dissertation (Item No.: 104.2.5, 104th IAPC dt: 12.05.2021)

25. Proposal of Deptt. of Paper Technology to rename M.Tech. (Pulp & Paper Technology) programme as M.Tech. (Pulp and Paper Engineering) w.e.f. session 2021-2022 onwards and to correct the PG Admission Brochure accordingly. (Item No.: 104.2.8, 104th IAPC dt: 12.05.2021)

26. Requests of students regarding name restoration, to opt for minor specialization in 4th Yr Autumn Sem, extension for evaluation of Dissertation and to waive off credits (Item No.: 105.2.1, 105th IAPC dt: 0.06.2021)

27. Request received from PME, ARTRAC, Integrated HQ of MoD to grant one-time waiver to armed forces officers on study leave w.r.t. admission process 2021 for M. Tech programmes. (Item No.: 106.1, 106th (emergency) IAPC dt: 30.06.2021)

28. Admission of foreign nationals in MBA programme (2021-22). (Item No.: 106.2, 106th (emergency) IAPC dt: 30.06.2021)

29. Revision in the Course Structure of M.Tech. (Dam Safety and Rehabilitation) programme (Item No.: 107.2.2 (ii), 107th (emergency) IAPC dt: 07.07.2021)

30. Revision in the Course Structure of 2-year MSc (Chemistry) program (Item No.: 107.2.6 (ii), 107th (emergency) IAPC dt: 07.07.2021)

31. MoU between SAMEER Mumbai and IIT Roorkee for M.Tech. programmes. (Item No.: 107.3.1), 107th (emergency) IAPC dt: 07.07.2021)

32. Autumn Semester 2021-22 completion plan for all students (excluding UG I Yr).

33. Following proposal with respect to the admission for the session 2021-22 for PG/Ph.D. students:

    'As per the provisions of the PG and Ph.D. admissions 2021, candidates are allowed to get admitted provisionally if they do not submit the mandatory documents during the time of admission registration against an affidavit/ undertaking to this effect. However, such candidates must submit the required documents by Sep 15, 2021, failing which their names be terminated automatically'.

34. Revision in following dates of Department of Design for Masters in Innovation Management (MIM) in Academic Calendar: (Item No.: 107.3.5), 107th (emergency) IAPC dt: 07.07.2021)

    1. Online Admission cum Academic Registration - 22.07.2021 to 28.07.2021
    2. Commencement of classes - 31.07.2021

35. Academic Calendars for the Autumn Semester 2021-22- All students (excluding UG I yr and MBA) and Students of MBA (Terms 1,2,5 and 6). (Notification dated 08.06.2021)

36. Revised Academic Calendar of Spring Semester 2020-21 for UG I Year due to cancellation of MTE (Item No.: 104.2.1, 104th IAPC dt: 12.05.2021)

37. Extension of last date of academic registration Spring 2020-21 for all existing students (excluding UG I Yr) (Academic Calendar Spring 2020-21)

38. Admission to DBT supported MSc (BT) programme through GAT-B exam from 2021-2022 onwards and Seat Matrix for admissions under GAT-B 2021 (academic session 2021-2023) for DBT supported Post Graduate Programme in Biotechnology/ allied areas. (Item No.: 104.2.9, Reported in 104th IAPC dt: 12.05.2021)

(b) Recommendations of 38th, 39th, 43rd, 44th, 45th and 46th meeting of IRC.

1. Request of Ph.D. students to grant an extension up to the end of February 2021 to complete course work seminar or shift the same from the Autumn Semester 2020-21 to the Spring Semester 2020-21. (Item No.: 43.2.2, 43rd IRC dt: 22.01.2021)

2. Recommendation of HRE department regarding Ph.D. admission of the selected candidates for MNRE fellowship be made along with regular Ph.D. admission process (Spring Semester 2020-21). Further Ph. D. admission may be given to the eligible candidates also for MNRE fellowship in future through the regular Ph.D. admission

process. (Item No.: 43.2.3, 43rd IRC dt: 22.01.2021)

3. Proposal received from the Chairperson, DRC (Chemical Engg.) for increasing the Ph.D. seats. (Item No.: 43.2.4, 43rd IRC dt: 22.01.2021)

4. Admission of provisionally admitted Ph.D. students of Autumn semester 2020-2021 due to conduction of their examinations or declaration of their results after the date of admission (date of registration). (Item No.: 44.2.1, 44th IRC dt: 30.03.2021)

5. Proposed Seat-Matrix for admission to Ph.D. Programme (Autumn Semester 2021-22). (Item No.: 44.3.1, 44th IRC dt: 30.03.2021)

6. Action in respect of Ph.D. students admitted in Ph.D. programme in Autumn semester 2020-2021 and failed to submit their remaining mandatory documents till date.(Item No.: 45.2.3, 45th IRC dt: 05.05.2021)

7. Period for submission of remaining documents of Ph. D. students admitted in Spring semester 2020-2021. (Item No.: 45.2.4, 45th IRC dt: 05.05.2021)

8. Notification dated 8th April, 2020 regarding relaxation to Ph. D. students in time limits of candidacy requirements and thesis submission and regarding video conferencing mode for presentations related to research proposal, yearly presentation, pre-synopsis and final viva-voce. (Item No.: 46.2.1, 46th IRC dt: 02.06.2021)

9. Item No. 45.2.2 of 45th IRC held on 5th May, 2021, regarding request of Mr. Shiva Singh, Ph.D. student, Deptt. of Polymer and Process Engineering to change his fellowship scheme from DST-INSPIRE to Institute Assistantship. (Item No.: 46.2.2, 46th IRC dt: 02.06.2021)

10. Date of Oral Defense Committee (ODC) for the award of Ph. D. degree. (Item No.: 46.2.4, 46th IRC dt: 02.06.2021)

11. Appointment of Foreign Examiner in the Ph. D. Oral Defense Committee (ODC) as External Examiner. (Item No.: 46.2.5, 46th IRC dt: 02.06.2021)

12. Request of students and faculty members to make hard copy submission of Ph. D. Thesis Optional. (Item No.: 46.2.6, 46th IRC dt: 02.06.2021)

13. Request of the students for addition and withdrawal of courses after due date. (45th IRC dt: 05.05.2021 and 46th IRC dt: 02.06.2021) Items No.: 45.2.1 and 46.2.8 respectively.

14. Recommendations of SRC in respect of Mr. Arun Gangwar (En. No. 18910006), Ph.D. student, Department of Civil Engineering to convert his status from full time to part time before his date of candidacy. (Item No.: 44.2.3, 44th IRC dt: 30.03.2021)

15. Mercy appeal of Mr. Arun Gangwar (En. No. 18910006), Ex-Ph.D. student, Department of Civil Engineering for reinstatement of Academic Registration. (Item No.: 46.2.3, 46th IRC dt: 02.06.2021)

16. Proposal for progress reports to be considered for the period December 01, 2019, to March 15, 2020. (Item No.: 38.1.3, 38th IRC dt: 04.04.2020)

17. Proposal to accept the progress reports of Ph.D. students for Spring semester 2019-2020 up to end of July 2020 or one week before the date of academic registration in Autumn semester 2020-2021, whichever is earlier. (Item No.: 39.2.5, 39th IRC dt: 13.06.2020)

(c) Institution of new scholarships/awards/prizes.

1) **Subodh Kumar Kansal and Sudha Kansal MCM Scholarship:** Mr. Ruchin Kansal, S/o Mr. Subodh Kumar Kansal (an alumnus of 1967 Batch of B.E. (Electrical Engineering)), has created a corpus to support one (01) MCM scholarship of Rs. 10,000/- per year. This scholarship will be given to a deserving student of any year of B.Tech. (Electrical Engineering). The awardee will be selected as per the prevailing

procedure adopted by SCSP to award MCM scholarships of the Institute.

2) **1969-Batch MCM Scholarship:** Alumni of 1969-Batch have created a corpus to support two (02) MCM scholarships of Rs. 10,000/- each per year. This scholarship will be given to the deserving students of any year and any department. The awardees will be selected as per the prevailing procedure adopted by SCSP to award MCM scholarships of the Institute.

3) **Maj. J.G. Medley, Royal Engineers, MCM Scholarship:** Lt. Col. Kuldeep Singh Dahiya (Retd.) has created a corpus to support one (01) MCM scholarship of Rs. 10,000/- per year. This scholarship will be given to a deserving student of any year of B.Tech. (Civil Engineering). The awardee will be selected as per the prevailing procedure adopted by SCSP to award MCM scholarships of the Institute.

4) **Narendra Kumar Jain Scholarship:** Prof. Sudhir K. Jain, an alumnus of 1979 Batch of B.E. (Civil Engineering), has created a corpus to support one (01) MCM scholarship of Rs. 10,000/- per year. This scholarship will be given to a deserving student of any year and any department. The awardee will be selected as per the prevailing procedure adopted by SCSP to award MCM scholarships of the Institute.

5) **Madan Gopal Agarwal MCM Scholarship (formerly Madan Gopal Agarwal Memorial Prize):** Mrs. Savita Agarwal and Mr. Rahul Agarwal, S/o Late Shri Madan Gopal Agarwal (an alumnus of 1949 batch), have created a corpus to support one (01) MCM scholarship of Rs. 10,000/- per year. This scholarship will be given to a deserving student of final year of B.Tech. (Civil Engineering). The awardee will be selected as per the prevailing procedure adopted by SCSP to award MCM scholarships of the Institute. This scholarship will replace the existing "Madan Gopal Agarwal Memorial Prize".

6) **D.C. Rastogi MCM Scholarship (formerly D.C. Rastogi Scholarship):** Mr. D.C. Rastogi has created a corpus to support four (04) MCM scholarships of Rs. 10,000/- each per year. This scholarship will be given to the deserving students of final year of B.Tech. (Chemical Engineering). The awardees will be selected

as per the prevailing procedure adopted by SCSP to award MCM scholarships of the Institute. This scholarship will replace the existing "D.C. Rastogi Scholarship".

7) **A.K. Goel Hydropower Award:** Mr. Ashwani Kumar Goel, an alumnus of 1970 Batch, has established a corpus to create one (01) award of Rs. 11,000/- per year. This award will be given to a deserving student having best Masters dissertation in Hydropower Subject in the Department of Hydro and Renewable Energy and not receiving any award of similar or higher amount. The recommendation for this award will be obtained from the concerned department.

8) **Prof. Kumkum Garg Gold Medal:** Prof. Kumkum Garg, an alumnus of 1971 batch of B.E. (Electronics & Computer Engineering), has established a corpus to create one (01) Gold medal per year. This medal will be awarded to a graduating student of M.Tech. (Artificial Intelligence) of Centre for Artificial Intelligence and Data Science for obtaining the highest CGPA. This award will carry a gold-plated medal.

9) **Sh. Darshan Lal Gautam & Smt. Kamla Gautam Award:** Mr. Ved Pal, an alumnus of 1978 batch of B.E. (Electrical Engineering) and 1980 batch of M.E. (Electrical Engineering), has established a corpus to create two (02) annual cash prizes, each of Rs. 10,000/- , per year. These cash prizes will be awarded to two deserving graduating students (one male & one female) of UG programmes on the basis of their involvement/projects for the upliftment of rural India oriented technology innovation.

Eligibility: Final year students of B.Tech./B.Arch./Integrated M.Sc./IDD/Integrated M.Tech. programmes admitted through JEE.

Selection Process: The selection process will be based on inviting the application from the students at individual level. These applications will be shortlisted by a committee, proposed by Chairperson, SCSP and approved by Chairman, Senate. The shortlisted candidates will be asked to make a presentation in front of the committee constituted. The final recommendation of the committee will be sent to the Senate for the approval.

The above is reported to the Senate.

भारतीय प्रौद्योगिकी संस्थान रूड़की
रूड़की – 247 667 (भारत)
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
ROORKEE - 247 667 (INDIA)

सीनेट की सत्तासीवीं बैठक हेतु अनुपूरक कार्यसूची
SUPPLEMENTARY AGENDA FOR THE 87th MEETING OF THE SENATE OVER WebEx

बैठक सं0	: सत्तासीवीं
MEETING NO.	**: 87th**
स्थान	: वैबेक्स के द्वारा
VENUE	**: Over WebEx**
दिनांक	: 28 जुलाई 2021
DATE	**: 28th July 2021**
समय	: 04.00 बजे अपरान्ह
TIME	**: 04.00 P.M.**

भारतीय प्रौद्योगिकी संस्थान रूड़की

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

रूड़की 247 667

ROORKEE – 247 667

अनुपूरक कार्यसूची/SUPPLEMENTARY AGENDA

मुद्दा सं0/ **Item No.**	विवरण/**Particulars**	पृष्ठ/ **Page(s)**
87.12	अध्यक्ष, सीनेट द्वारा दी गई मंजूरी को रिपोर्ट करना। To report the approvals accorded by the Chairman, Senate	61
87.13	शैक्षणिक प्रदर्शन के आधार पर दिए जाने वाले अवार्डस/पुरस्कारों के लिए टाई ब्रेकिंग पद्धति पर विचार करना। To consider a tie-breaking method for the awards/prizes to be given solely based on academic performance.	62
87.14	एग्जीक्युटीव एमबीए (ईएमबीए) कार्यक्रम शुरू करने के लिए प्रबंधन अध्ययन विभाग के संशोधित प्रस्ताव पर विचार करना। To consider the revised proposal of Department of Management Studies to introduce Executive MBA (EMBA) program.	63
अन्य मुददे अध्यक्ष की अनुमति से/Under any other item with the permission of the Chair.		

Item No. 87.12: To report the approvals accorded by the Chairman, Senate:

(c) Institution of new award.

(10) Kapil Garg Gold Medal: Mr. Kapil Garg, an alumnus of 1988 batch of B.E. (Chemical Engineering), has established a corpus to create one (01) Gold medal per year for a period of 10 years. It will be awarded as the Kapil Garg Department Gold Medal to the graduating B.Tech (Chemical Engineering) student with the highest CGPA.

Item No. 87.13: To consider a tie-breaking method for the awards/prizes to be given solely based on academic performance.

The Institute offers several awards/prizes to the students solely based on their academic performance (CGPA). So, it is possible that for a given award/prize, there may be two or more deserving students having an identical CGPA. Presently, there is no existing "tie breaker" method to decide the best deserving student for the award/prize under such event. Hence, it is proposed to adopt the following steps to break a tie:

1. The student, earning the maximum number of credits, will receive the award/prize.

2. In the event two or more students remain tied following step 1, the student, earning the maximum number of "A+" grade, will receive the award/prize.

3. In the event two or more students remain tied following step 2, the CGPA of such students will be recomputed and rounded off upto 6 digits after decimal (as per present practice, the CGPA is expressed upto 3 digits after decimal) and the student, securing the highest CGPA, will receive the award/prize.

4. In the event two or more students remain tied following all the previous steps, a committee of three members (Director's nominee, Head of concerned Department and Chairperson, SCSP) will meet to determine which student will receive the award/prize.

The above is submitted for the consideration of the Senate

Item No. 87.14: To consider the revised proposal of Department of Management Studies to introduce Executive MBA (EMBA) program.

The Senate in its 86th meeting held on 09.02.2021 considered the structure and admission eligibility criteria of a new academic program - Executive MBA (EMBA) proposed by the Department of Management Studies. The Senate recommended the EMBA program to the Board of Governors for approval.

Accordingly, the recommendations of the Senate were placed before the Board in its 62nd meeting held on 08.04.2021 vide item no. 62.14. The Board considered the recommendations of the Senate and resolved that the proposal needs to be revised to make it more flexible keeping in view the requirements of working persons.

The Department has now revised the proposal. The major flexibility features are:

- The working executive will have the flexibility to complete the 2-year program in five years.
- In a given term, a student can register between 1.5 (minimum) to 15.5 (maximum) credits.
- A student can take a break from some terms.

Total credits required to complete the EMBA program is 99. It may be noted that the students in the existing 2-year MBA program offered by the Department need to earn 99 credits in 8 terms over two years.

The proposal is placed before the Senate for consideration and recommendation to the BoG.