



भारतीय प्रौद्योगिकी संस्थान इन्दौर
Indian Institute of Technology Indore

Minutes of the 36th meeting of the Senate held on 30 November 2023 (Thrusday) 3.00 p.m. at Maitreyi Seminar Hall, IIT Indore.

Following members attended the meeting:

Chairperson		
1	Prof. Suhas S. Joshi	Director, IIT Indore
External Experts		
2	Dr. Shankar V. Nakhe (Present online)	Director, RRCAT
3	Prof. Ajay Kumar Jain (present online)	Professor, Management Development Institute, Gurgaon
Deans		
4	Prof. Vipul Singh	Dean, Academic Affairs
5	Prof. Sandeep Chaudhary	Dean, Administration
6	Prof. Avinash Sonawane (present online)	Dean, International Relation
7	Prof. I. A. Palani	Dean, Research and Development
8	Professor Suman Mukhopadhyay	Dean, Alumni and Corporate Relations
9	Prof. Abhishek Srivastava	Dean, Faculty Affairs
10	Prof. Devendra L. Deshmukh	Dean, Educational Outreach
Head of Departments		
11	Dr. Abhishek Rajput	HoD, Civil Engineering
12	Dr. Aniruddha Singh Kushwaha	Acting HoD, Computer Science and Engineering
13	Prof. Vivek Kanhangad	HoD, Electrical Engineering
14	Prof. Shanmugam Dhinakaran	HoD, Mechanical Engineering
15	Prof. Ajay Kumar Kushwaha	HoD, Metallurgical Engineering and Materials Science
16	Prof. Amit Kumar	HoD, Biosciences and Biomedical Engineering
17	Prof. Abhirup Datta	HoD, Astronomy, Astrophysics and Space Engineering
18	Prof. Tushar Kanti Mukherjee	HoD, Chemistry
19	Prof. Niraj Kumar Shukla	HoD, Mathematics
20	Prof. Preeti A. Bhobe	HoD, Physics
21	Prof. Ruchi Sharma	HoS, Humanities and Social Sciences



Professors		
22	Prof. Narendra S. Choudhary (present online)	Computer Science and Engineering
23	Prof. Abhinav Kranti	Electrical Engineering
24	Prof. Vimal Bhatia (present online)	Electrical Engineering
25	Prof. Rajneesh Misra (present online)	Chemistry
26	Prof. Suman Mukhopadhyay	Chemistry
27	Prof. Krushna R. Mavani	Physics
28	Prof. Sarika Jalan	Physics
29	Prof. Prabhat Kumar Upadhyay (present online)	Electrical Engineering
30	Prof. I. A. Palani	Mechanical Engineering
31	Prof. Bhupesh Kumar Lad	Mechanical Engineering
32	Prof. Santosh Kumar Sahu	Mechanical Engineering
33	Prof. Ritunesh Kumar	Mechanical Engineering
34	Prof. Aruna Tiwari	Computer Science and Engineering
35	Prof. Kapil Ahuja	Computer Science and Engineering
36	Prof. Abhirup Datta	Astronomy, Astrophysics and Space Engineering
37	Prof. Amit Kumar	Biosciences and Biomedical Engineering
38	Prof. Prashant Kodgire (present online)	Biosciences and Biomedical Engineering
39	Prof. Sk. Safique Ahmad	Mathematics
40	Prof. Apurba Kumar Das	Chemistry
41	Prof. Sanjay Kumar Singh	Chemistry
42	Prof. Nirmala Menon (present online)	Humanities and Social Sciences
43	Prof. Pritee Sharma	Humanities and Social Sciences
44	Prof. Ruchi Sharma	Humanities and Social Sciences
45	Prof. Preeti Anand Bhobe	Physics
46	Prof. Parasharam Maruti Shirage	Metallurgical Engineering and Materials Science
47	Prof. Swadesh Kumar Sahoo	Mathematics
48	Prof. Raghunath Sahoo	Physics
49	Dr. Amod C. Umarikar	Electrical Engineering
50	Prof. Pankaj Ramesh Sagdeo	Physics
51	Prof. Ankhi Roy	Physics
52	Prof. Somaditya Sen	Physics
53	Prof. Mobin Shaikh	Chemistry
54	Prof. Anjan Chakraborty	Chemistry
55	Prof. Kiran Bala	Biosciences and Biomedical Engineering



56	Prof. Mirza Saqib Baig	Biosciences and Biomedical Engineering
57	Prof. Anirban Sengupta (present online)	Computer Science and Engineering
58	Prof. Neminath Hubballi	Computer Science and Engineering
59	Prof. Santosh Sattappa Hosmani	Metallurgical Engineering and Materials Science
60	Prof. Satyajit Chatterjee	Mechanical Engineering
61	Prof. Kazi Sabiruddin	Mechanical Engineering
Other Authorities		
62	Dr. Anand Petare	Workshop Superintendent, Central Workshop
Special Invitees		
63	Mr. Rajesh Kumar	Assistant Librarian
64	Mr. Neeraj Kumar	Assistant Registrar, Academic Affairs
65	Mr. Tapesh Parihar	Section Officer, Academic Office
Secretary		
66	Mr. S. P. Hota	Registrar, IIT Indore
Leave of absence		
67	Prof. Himanshu Rai	Director, IIM Indore
68	Mr. B Anil Baliga	Ex Executive Vice President, VE Commercial Vehicles Ltd,
69	Prof. Abhiram G. Ranade	Professor, Department of Computer Science and Engineering, IIT Bombay
70	Prof. Manish Kumar Goyal	Dean of Infrastructure Development
71	Prof. Srivathsan Vasudevan	Dean, Student Affairs
72	Prof. Neelesh Kumar Jain	Mechanical Engineering
73	Prof. Anand Parey	Mechanical Engineering
74	Prof. Ram Bilas Pachori	Electrical Engineering
75	Prof. Subhendu Rakshit	Physics
76	Prof. G. S. Murthy	Biosciences and Biomedical Engineering
77	Prof. Santosh Kumar Vishvakarma	Electrical Engineering
78	Prof. Shaibal Mukherjee	Electrical Engineering
79	Prof. Trapti Jain	Electrical Engineering
80	Prof. Mukesh Kumar	Electrical Engineering
81	Prof. Neelima Devarakonda Satyam	Civil Engineering
82	Prof. Sampak Samanta	Chemistry
83	Prof. Biswarup Pathak	Chemistry
84	Prof. Rajesh Kumar	Physics
85	Prof. Sudeshna Chattopadhyay	Physics
86	Prof. Satya Silendra Bulusu	Chemistry
87	Prof. Chelvam Venkatesh	Chemistry



88	Prof. Rupesh Shivaji Devan	Metallurgical Engineering and Materials Science
89	Prof. Antony Vijesh Villavarayan	Mathematics
90	Prof. Pavan Kumar Kankar	Mechanical Engineering
91	Dr. Jayaprakash Murugesan	Chief Warden
92	Dr. Sharad Gupta	Convener, Health Center Advisor Committee
93	Dr. Eswara Prasad Korimill	Special Invitee
94	Dr. Dan Sathiaraj	Special Invitee

ITEM 36.1: Welcome and Opening remarks by the Chairman of the Senate.

The Chairman, Senate welcomed all the members and special invitees to the meeting.

He also welcomed newly joined 15 senate members as listed in Annexure , by the virtue of their position as Professors and Head of Departments. He also thankfully acknowledged the valuable contributions of outgoing HoDs of Computer Science and Engineering as well as Physics.

ITEM 36.2: Confirmation of the minutes of 35th Meeting of Senate held on 7 July 2023.

The Senate confirmed the Minutes of its 35th Meeting of Senate held on 7 July 2023 with one correction:

- i) Dropping the name of Mr. Palzor Lepcha, Roll no. 2103151019, M.Sc. Physics from the list of graduating students due to non-completion of minimum prescribed academic requirements for graduating out of the academic programs=.

Accordingly, the total number of students who were conferred the degree in the 2023-Convocation stands as 553 instead of 554.

ITEM 36.3: Action Taken Report (ATR) on minutes of 35th Meeting of Senate held on 7 July 2023.

ATR was circulated to Senate members in advance. The Senate noted the actions taken on the decisions of the 35th Meeting of Senate held on 7 July 2023.

ITEM 36.4: Revised policy on Academic Standing

The academic standing policy was introduced via Senate resolution no. 9.12 in the year 2015. The policy was meant for underperforming undergraduate students, as it prescribed the maximum three credit theory courses they can register for based on their academic performance in the last two semesters. In this context the following points are to be noted:-



1. The revision of this policy was necessary because as per the NEP-2020 policy, the new NEP curriculum structure includes courses of 1/1.5/2 credits besides the usual 3 credit courses.
2. The earlier policy was prescribed the number of courses a student can take each of three credits based on his academic standing. Hence it was necessary to revise the existing policy on Academic Standing.
3. The proposed policy categorizes a student's academic standing based on credits earned over the preceding two academic semesters, instead of number of courses. The proposed policy also prescribes a maximum credit limit for a student to register based on his/her academic standing.
4. It was also decided that the credits used for classification/prescription would be **inclusive of all the credits in Major degree program/Minor degree program/Additional learning courses.**

The Associate Dean (UG), Academic Affairs, presented a proposal for revised policy on Academic Standing.

Maximum permissible number of credits by UG students according to the Academic Standing		
AS: Category	Maximum Permissible credits in a particular semester	Remarks
Category I (CPI ≥ 8 and no FR)	30	Including minor and additional learning courses available in the basket.
Category II (CPI < 8 and no FR)	28	Including minor and additional learning courses available in the basket.
Category III ($x \leq 3$)	26	Including regular, backlog and dropped courses. x represents non earned credits
Category IV ($3 < x \leq 6$)	22	
Category V ($6 < x$)	19	

The senate discussed and approved the revised policy on Academic Standing for implementation from the batches admitted in Academic Year 2023-24.

ITEM 36.5: Changes in Minor program for UG students in view of NEP

In the existing Minor program approved via **Senate resolution no. 7.6 in the year 2014**, the students were expected to take five theory courses of three credits each, which would eventually stretch till the eight semester (last semester of UG studies). Also considering

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emphasis on the experiential learning under the NEP-2020, it is proposed that one of the theory course be replaced by a minor project/field study/white paper/domain comprehension (Seminar)/Laboratory course of two credits. Dean of Academic Affairs presented the proposal to modify the Minor Programs in for Undergraduate students in view of NEP.

In view of the above discussion the following three major changes were proposed:

- There will be four minor theory courses instead of five and the fifth course will be a two-credit minor course based on minor project/field study/white paper/domain comprehension (Seminar)/Laboratory course
- Total credits of the minor program will be 14 instead of 15.
- Each of the four minor theory courses shall be placed in 3rd to 6th semester. It was also proposed that in the 7th semester, the minor course related to minor project/field study/white paper/domain comprehension (Seminar)/Laboratory course will be placed along with the mandatory BTP.

The changes made in the structure and the order of Minor program related courses is listed below for comparison purposes

Semester	1	2	3	4	5	6	7	8
Existing distribution of Minor program courses	-	-	M-1	M-2	M-3	-	-	M-4 & M-5
Proposed distribution of Minor program courses	-	-	M-1	M-2	M-3	M-4	M-5 (0-0-4-2) (minor project/field study/white paper/domain comprehension (Seminar)/Lab course)	-

The senate discussed and approved the revision in Minor Program as listed above, for implementation for all **UG batches admitted in and after Academic Year 2023-24.**

ITEM 36.6: Policy on Academic Bank of Credits (ABC).

As per the mandate of the Ministry of Education, the institute has registered for the Academic Bank of Credit. This will enable students to explore multi-disciplinary courses, and would also allow them to customize courses in an academic program based on their interests and thus provide flexibility to customize their academic progress.

Dean of Academic Affairs presented a proposal for adopting the Policy on Academic Bank of Credits (ABC) by the institute in the following ways:



- ABC provides credit accumulation, credit transfer and credit redemption to the students of the Institute.
- Credits deposited in ABC can not be redeemed against a core course of an academic program.
- All additional credits earned by a student (over and above the prescribed credits in a semester) can be deposited in the ABC.
- For the usual theory courses in any of the major UG program, the redemption will apply if and only if a Department Elective (DE) in ABC replaces Department Elective (DE) in the academic program, an Open Elective(OE) in ABC replaces an Open Elective(OE) in the academic program, and also provided they are courses at the same level. However, for internship, immersion program, entrepreneurship and other such courses a separate mechanism for redemption needs to be worked out.
- Validity duration will be the maximum duration for completion of academic program.
- Online courses through NPTEL / SWAYAM etc. will be permitted a max of one for PG/Ph.D. and two for UG students. However, prior permission will be mandatory for the same.

The Senate noted the concept and scope of Academic Bank of Credits proposed to be adopted by the Institute thus far and approved the same for implementation w.e.f. 30/11/2023 for all UG/PG students.

ITEM 36.7: Proposed new courses.

The Senate discussed and approved the following courses with remarks as given below:

- 438/ CS 638: Network Softwarization and Management - Cross listed with 4 & 6 level are allowed only.
- ME 612- Theory and Applications of Sprays: Include some recent reference books.
- CH 607: Solid State Chemistry -Application in photo detectors and solar cells can be separated as another topic of course content.

S. No.	Course Code and Title of the Course	Contact Hours	Program for which course is offered	Senate remarks
1	CE 620: Climate Applications and Practices	2-0-2-3	PG	Approved
2	CE 640: Industrial Wastewater Management	2-0-0-2	PG	Approved
3	CE 444/644: Solid Waste Engineering and Management	2-0-2-3	UG, PG and PhD	Approved
4	CE 646: Climate Hazards and Disaster Mitigation	2-0-0-2	PG	Approved



5	CS 438/CS 638: Network Softwarization and Management	2-0-2-3	UG, PG and PhD	Cross listing at 4 and 6 level is only permitted, Otherwise approved in principle.
6	CS 440/640: Distributed Network Algorithms	2-1-0-3	UG, PG and PhD	Approved
7	CS 642: Algebraic Graph Theory	2-0-2-3	PG and PhD	Approved
8	EE 484/684: Power System Protection	2-1-0-3	UG, PG and PhD	Approved
9	EE 686: Applied Optimization for Advanced Wireless Communication Systems	2-0-2-3	PG & PhD	Approved
10	ME 612: Electronics Cooling (It was recommended by SPGC as <i>Thermal Management of Electronics</i>)	2-1-0-3	PG and PhD	Senate recommended inclusion of recent textbooks and in principle approved the course.
11	ME 622: Theory and Applications of Sprays	2-0-2-3	PG and PhD	Approved
12	ME 624: Introduction to Turbulent Flow	2-1-0-3	PG and PhD	Approved
13	ME 626: Experimental Fluid Mechanics	2-0-2-3	PG and PhD	Approved
14.	CH 607: Solid State Chemistry	2-1-0-3	PG and PhD	Application in photo detectors and solar cells can be separated as another topic of course content. In principle the course was approved.
15.	CH 616: Chemical Kinetics and Electrochemistry	2-1-0-3	PG and PhD	Approved

ITEM 36.8: Cross-listing of existing course.

The senate approved to cross-list the existing course **CE 601: Mechanics of Composite Materials and Structures** to cross listed as **CE 401/ CE 601**.

ITEM 36.9: Correction in the credit structure of the course CE 648/ CE 484: Advanced Concrete Technology.



The senate approved the change of the contact hours of the course **CE 648/ CE 484: Advanced Concrete Technology** from 2-1-0-3 to 2-0-2-3. Accordingly, the total number of credits for **M. Tech. in Structural Engineering** will be reduced from 76 to 75.

ITEM 36.10: Items for information:

36.10.1: Additional list of students who have completed all the prescribed requirements for the award of degree during 11th Convocation of the Institute.

The Senate noted and approved the list of additional four students who fulfilled all the prescribed requirements for the award of degree in the 2023-Summer Semester.

36.10.2: Spot round admissions for the M.Tech. programs and inclusion of GATE XE paper in existing Qualifying Examination (QE) of

- i) **M.Tech. in Metallurgical Engineering.**
- ii) **M.Tech. in Applied Optics and Laser Technology.**

In AY 2023-24, IIT Indore conducted the Spot round of admissions for the M.Tech. programs. A total of 32 vacant seats (out of 68) were filled through the two rounds of spot admission. A minor inclusion in the Qualifying Examination (QE) of **M. Tech. Metallurgical Engineering** and **M. Tech. Applied Optics and Laser Technology** was proposed.

The Senate noted and approved the following changes in the QE of the following two programs:

M.Tech. program	Existing qualifying examination	Inclusion in existing qualifying examination
M.Tech. in Metallurgical Engineering	Valid GATE qualification in MT, ME, PI.	Valid GATE qualification in Engineering Sciences (XE)
M.Tech. in Applied Optics and Laser Technology	Valid GATE in EC, EE, IN, ME, PH, PI and MT.	Valid GATE qualification in Engineering Sciences (XE)

36.10.3: Modifications in the course structure of M.Tech. in Water, Climate and Sustainability.

The senate noted and approved the minor modification in the course structure and syllabus of the following four courses:

- (i) CE 623 : Glaciology
- (ii) CE 625 : Water Supply & Distribution Systems
- (iii) BSE 641 : Engineered Systems Analysis



(iv) CE 653 : Technical Site Visit(s)- Immersion Program

36.10.4: Information on the M.Sc. Biotechnology students transferred from IIT Kharagpur.

The Senate noted and approved the same.

36.10.5: Circular from Ministry of Education on revised emoluments for Ph.D. students.

The Senate noted and approved the same.

36.10.6: Rationalization of fees for OCI/ PIO students to consider the fee at par with Indian students.

The Senate noted and approved the same.

ITEM 36.11: Any other item with the permission of the Chair.

It was informed to the Senate members that several separate Senate meetings are planned to deliberate over the NEP course curriculum for 2nd, 3rd and 4th year of all the existing B. Tech. programs.


(Professor Suhas S. Joshi)
Director and Chairperson, Senate




(Mr. S. P Hota)
Registrar and Secretary, Senate

List of New Professors as Senate Members

S.NO	DEPT	FACULTY NAME	DESIGNATION AT JOINING	Present Designation	DOJ FOR PRESENT TENURE
1	BSBE	Dr. Kiran Bala	APG I	Professor	27-Oct-23
2	BSBE	Dr. Mirza Saqib Baig	APG I	Professor	27-Oct-23
3	Chemistry	Dr. Satya Silendra Bulusu	APG I	Professor	27-Oct-23
4	CSE	Dr. Anirban Sengupta	APG II	Professor	27-Oct-23
5	CSE	Dr. Neminath Hubballi	APG II	Professor	27-Oct-23
6	Maths	Dr. Antony Vijesh Villavarayan	APG I	Professor	27-Oct-23
7	Maths	Dr. Niraj Kumar Shukla	APG II	Professor	27-Oct-23
8	ME	Dr. Satyajit Chatterjee	APG II	Professor	27-Oct-23
9	ME	Dr. Kazi Sabiruddin	APG II	Professor	27-Oct-23
10	ME	Dr. Pavan Kumar Kankar	Associate Professor	Professor	27-Oct-23
11	MEMS	Dr. Rupesh Shivaji Devan	APG I	Professor	27-Oct-23
12	MEMS	Dr. Santosh Sattappa Hosmani	APG I	Professor	27-Oct-23
13	Chemistry	Dr. Chelvam Venkatesh	APG I	Professor	6-Nov-23

List of New Heads as Senate Members

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|---|--|-----------|
| 1 | Dr. Ranveer Singh - Head, Department of CSE | 7-Oct-23 |
| 2 | Prof. Preeti A. Bhobe - Head Department of Physics | 22-Nov-23 |