



Indian Institute of Technology Indore

Minutes of the 37th meeting of the Senate held on 12 December 2023 (Tuesday)
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

Deans

3 Prof. Vipul Singh Dean, Academic Affairs

4 Prof. Avinash Sonawane
(present online) Dean, International Relation

5 Prof. I. A. Palani
(present online) Dean, Research and Development

6 Prof. Suman Mukhopadhyay Dean, Alumni and Corporate Relations

Head of Departments

7 Dr. Mayur Shirish Jain Acting HoD, Civil Engineering

8 Dr. Ranveer Singh HoD, Computer Science and Engineering

9 Prof. Vivek Kanhangad HoD, Electrical Engineering

10 Prof. Shanmugam Dhinakaran HoD, Mechanical Engineering

11 Prof. Ajay Kumar Kushwaha HoD, Metallurgical Engineering and Materials Science

12 Prof. Amit Kumar (present online) HoD, Biosciences and Biomedical Engineering

13 Prof. Abhirup Datta (present online) HoD, Astronomy, Astrophysics and Space Engineering

14 Prof. Niraj Kumar Shukla HoD, Mathematics

Professors

15 Prof. Neelesh Kumar Jain Mechanical Engineering

16 Prof. Abhinav Kranti (present online) Electrical Engineering

17 Prof. Rajneesh Misra (present online) Chemistry

18 Prof. Suman Mukhopadhyay Chemistry

19 Prof. Avinash Sonawane (present online) Biosciences and Biomedical Engineering

20 Prof. Santosh Kumar Vishvakarma
(present online) Electrical Engineering

21 Prof. Prabhat Kumar Upadhyay
(present online) Electrical Engineering



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22	Prof. Trapiti Jain (present online)	Electrical Engineering
23	Prof. I. A. Palani (present online)	Mechanical Engineering
24	Prof. Dhinakaran Shanmugam	Mechanical Engineering
25	Prof. Kapil Ahuja (present online)	Computer Science and Engineering
26	Prof. Abhirup Datta (present online)	Astronomy, Astrophysics and Space Engineering
27	Prof. Amit Kumar (present online)	Biosciences and Biomedical Engineering
28	Prof. Prashant Kodgire (present online)	Biosciences and Biomedical Engineering
29	Prof. Sampak Samanta	Chemistry
30	Prof. Parasharam M. Shirage	Metallurgical Engineering and Materials Science
31	Prof. Amod C. Umarikar	Electrical Engineering
32	Prof. Vivek Kanhangad	Electrical Engineering
33	Prof. Ankhi Roy	Physics
34	Prof. Chelvam Venkatesh (present online)	Chemistry
35	Prof. Anirban Sengupta	Computer Science and Engineering
36	Prof. Antony Vijesh Villavarayan	Mathematics
37	Prof. Niraj Kumar Shukla	Mathematics
38	Prof. Kazi Sabiruddin (present online)	Mechanical Engineering
39	Prof. Pavan Kumar Kankar	Mechanical Engineering

Other Authorities

40	Dr. Anand Petare	Workshop Superintendent, Central Workshop
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Special Invitees

41	Dr. Ayan Mondal	Computer Science and Engineering
42	Mr. Rajesh Kumar	Assistant Librarian
43	Mr. Neeraj Kumar	Assistant Registrar, Academic Affairs
44	Mr. Nitin Parashar	Senior Assistant, Academic Office

Secretary

45	Mr. S. P. Hota	Registrar, IIT Indore
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Leave of absence

46	Prof. Himanshu Rai	Director, IIM Indore
47	Mr. B Anil Baliga	Ex Executive Vice President, VE Commercial Vehicles Ltd,
48	Prof. Abhiram G. Ranade	Professor, Department of Computer Science and Engineering, IIT Bombay
49	Prof. Ajay Kumar Jain	Professor, Management Development Institute, Gurgaon
50	Prof. Sandeep Chaudhary	Dean, Administration
51	Prof. Manish Kumar Goyal	Dean of Infrastructure Development
52	Prof. Srivathsan Vasudevan	Dean, Student Affairs



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53	Prof. Abhishek Srivastava	Dean, Faculty Affairs
54	Prof. Devendra L. Deshmukh	Dean, Educational Outreach
55	Prof. Tushar Kanti Mukherjee	HoD, Chemistry
56	Prof. Preeti A. Bhobe	HoD, Physics
57	Prof. Ruchi Sharma	HoS, Humanities and Social Sciences
58	Prof. Narendra S. Choudhary	Computer Science and Engineering
59	Prof. Anand Parey	Mechanical Engineering
60	Prof. Ram Bilas Pachori	Electrical Engineering
61	Prof. Vimal Bhatia	Electrical Engineering
62	Prof. Subhendu Rakshit	Physics
63	Prof. Krushna R. Mavani	Physics
64	Prof. Sarika Jalan	Physics
65	Prof. Sandeep Chaudhary	Civil Engineering
66	Prof. G. S. Murthy	Biosciences and Biomedical Engineering
67	Prof. Shaibal Mukherjee	Electrical Engineering
68	Prof. Mukesh Kumar	Electrical Engineering
69	Prof. Manish Kumar Goyal	Civil Engineering
70	Prof. Neelima Devarakonda Satyam	Civil Engineering
71	Prof. Bhupesh Kumar Lad	Mechanical Engineering
72	Prof. Santosh Kumar Sahu	Mechanical Engineering
73	Prof. Ritunesh Kumar	Mechanical Engineering
74	Prof. Aruna Tiwari	Computer Science and Engineering
75	Prof. Abhishek Srivastava	Computer Science and Engineering
76	Prof. Sk. Safique Ahmad	Mathematics
77	Prof. Apurba Kumar Das	Chemistry
78	Prof. Sanjay Kumar Singh	Chemistry
79	Prof. Biswarup Pathak	Chemistry
80	Prof. Nirmala Menon	Humanities and Social Sciences
81	Prof. Pritee Sharma	Humanities and Social Sciences
82	Prof. Ruchi Sharma	Humanities and Social Sciences
83	Prof. Preeti Anand Bhobe	Physics
84	Prof. Rajesh Kumar	Physics
85	Prof. Sudeshna Chattopadhyay	Physics
86	Prof. Swadesh Kumar Sahoo	Mathematics
87	Prof. Raghunath Sahoo	Physics
88	Prof. Srivathsan Vasudevan	Electrical Engineering
89	Prof. Abhishek Srivastava	Computer Science and Engineering
90	Prof. Devendra L. Deshmukh	Mechanical Engineering
91	Prof. Pankaj Ramesh Sagdeo	Physics
92	Prof. Somaditya Sen	Physics
93	Prof. Mobin Shaikh	Chemistry
94	Prof. Tushar Kanti Mukherjee	Chemistry
95	Prof. Anjan Chakraborty	Chemistry



96	Prof. Satya Bulusu	Chemistry
97	Prof. Kiran Bala	Biosciences and Biomedical Engineering
98	Prof. Mirza Saqib Baig	Biosciences and Biomedical Engineering
99	Prof. Rupesh Shivaji Devan	Metallurgical Engineering and Materials Science
100	Prof. Neminath Hubballi	Computer Science and Engineering
101	Prof. Santosh Sattappa Hosmani	Metallurgical Engineering and Materials Science
102	Prof. Satyajit Chatterjee	Mechanical Engineering
103	Dr. Jayaprakash Murugesan	Chief Warden
104	Dr. Sharad Gupta	Convener, Health Center Advisor Committee

ITEM 37.1: Welcome and Opening remarks by the Chairman of the Senate.

The Chairman, Senate welcomed all the members and special invitees to the meeting and also welcomed to the new members who joined this meeting first time in person.

He informed that this meeting is mainly for approval of Syllabi of courses for B.Tech. 2nd, 3rd and 4th year as per the revised UG Curriculum of Computer Science and Engineering w.r.t. the NEP guidelines.

He announced that the next Senate meeting will be held on 19 December 2023 to discuss the Syllabi of courses for B.Tech. 2nd, 3rd and 4th year as per the revised UG Curriculum of Mathematics and Computing w.r.t. the NEP guidelines. The revision of UG Curriculum of other departments will be carried out in the coming Senate meetings.

ITEM 37.2: Confirmation of the minutes of the 36th Meeting of Senate held on 30 November 2023.

The Senate confirmed the Minutes of its 36th Meeting of Senate held on 30 November 2023.

ITEM 36.3: Action Taken Report (ATR) on minutes of 36th Meeting of Senate held on 30 November 2023.

The Senate noted the actions taken on the decisions of the 36th Meeting of Senate held on 30 November 2023.

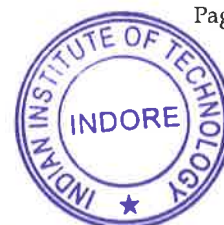
ITEM 37.4: Syllabi of courses for B.Tech. 2nd, 3rd and 4th year as per the revised UG Curriculum of Computer Science and Engineering w.r.t. the NEP guidelines.

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



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Course Code	Course Name	Weekly Contact Hours L-T-P	Total Credits	Senate remarks
Semester 3				
ZZ xxx	Course-I for Minor Program	x-x-x	3	-
MA 205	Complex Analysis	3-1-0 (1/2 semester)	2	Approval of this course will be taken in next Senate meeting by the Department of Mathematics under the revised UG Course Curriculum of "Mathematics and Computing"
MA 207	Differential Equations-II	3-1-0 (1/2 semester)	2	Approval of this course will be taken in next Senate meeting by the Department of Mathematics under the revised UG Course Curriculum of "Mathematics and Computing"
CS 201	Discrete Mathematical Structures	2-1-0	3	Already approved course
CS 203	Data Structures and Algorithms	2-1-0	3	Already approved course
CS 207	Database and Information Systems	2-1-0	3	Already approved course
CS 209	Logic Design	2-0-2	3	Approved with suggestion to include more reference books.
CS 253	Data Structures and Algorithms Lab	0-0-3	1.5	Already approved course
CS 257	Database and Information Systems Lab	0-0-3	1.5	Already approved course
CS 2XX	Department Elective-I	x-x-x	3	-
	Total		22/25	
Semester 4				
ZZ xxx	Course-II for Minor Program	x-x-x	3	-
MA 204N	Numerical Methods	2-0-2	3	Approval of this course will be taken in next Senate meeting by the Department of Mathematics under the revised UG Course Curriculum of "Mathematics and Computing"
CS 202	Automata Theory and Logic	2-1-0	3	Already approved course
CS 204	Design and Analysis of Algorithms	2-1-0	3	Already approved course
CS 210	Computer Architecture	2-1-0	3	Approved
CS 254	Design and Analysis of Algorithms Lab	0-0-3	1.5	Already approved course



CS 264	Computer Architecture Lab	0-0-3	1.5	Approved with suggestion to include more reference books in the syllabus.
CS 2XX	Department Elective II	x-x-x	3	-
ZZ xxx	Institute Elective-I	x-x-x	3	-
	Total		21/24	
Semester 5				
ZZ xxx	Course III - Minor Program	x-x-x	3	-
CS 311	Parallel Computing	2-0-2	3	Approved
CS 303	Operating Systems	2-1-0	3	Already approved course
CS 307	Optimization Algorithms and Techniques	2-1-0	3	Already approved course
CS 313	Computer Networks	2-0-2	3	Approved
CS 353N	Operating Systems Lab	0-0-2	1	Approved
CS 357N	Optimization Algorithms and Techniques Lab	0-0-2	1	Approved
CS 3XX	Department Elective III	x-x-x	3	-
ZZ xxx	Institute Elective II	x-x-x	3	-
	Total		20/23	
Semester 6				
ZZ xxx	Course IV - Minor Program	x-x-x	3	-
CS 302N	Computer Graphics and Visualization	2-0-2	3	Approved
CS 304N	Computational Intelligence	2-1-0	3	Already approved course
CS 310	Software Engineering	2-0-2	3	Approved with suggestion to shift the reference book: 'Fundamentals of Software Engineering' as first textbook.
CS 308N	Compiler Techniques	2-0-2	3	Approved
CS 354N	Computational Intelligence Lab	0-0-3	1.5	Already approved course
CS 3XX	Departmental Elective IV	x-x-x	3	-
CS 3XX	Departmental Elective V	x-x-x	3	-



ZZ xxx	Institute Elective III	x-x-x	3	-
	Total		22.5/25.5	
Semester 7				
ZZ xxx	Course-V for Minor Program	x-x-x	2	-
CS 493N	B Tech Project (BTP)	0-0-32	16	-
CS 495	Internship - I	x-x-x	1	Will be discussed in one of the subsequent Senate meeting.
CS 497	Internship - II	x-x-x	1	Will be discussed in one of the subsequent Senate meeting
	Total		18/20	-
Semester 8				
CS 4XX	Department Elective VI	x-x-x	3	-
CS 4XX	Department Elective VII	x-x-x	3	-
ZZ xxx	Institute Elective IV	x-x-x	3	-
ZZ xxx	Institute Elective V	x-x-x	3	-
ZZ xxx	Institute Elective VI	x-x-x	3	-
	Total		15	-
Elective Courses				
CS 211	UX/UI Design	2-0-2	3	Approved
CS 213	Matrix Factorization and Applications	2-1-0	3	Approved with suggestion to shift the reference book: 'Fundamentals of Matrix Computations' as textbook and add more advance book in the list of reference book.
CS 215	Mathematics for AI and ML	2-1-0	3	Approved with suggestion to revised pre-requisite and one more book as textbook.
CS 212	Foundation of Algebraic Graph Theory	2-1-0	3	Approved with suggestion to add course category in the syllabus as Department Elective.
CS 315	Introduction to Complexity Theory	2-1-0	3	Approved with suggestion to add the publisher's name in the 3rd reference book.
CS 317	Introduction to Internet of Things	2-0-2	3	Approved
CS 319	Foundations of Cryptography	2-1-0	3	Approved with suggestion to add course category in the syllabus as Institute Elective.
CS 321	Introduction to Big Data Analysis	2-1-0	3	Approved



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CS 312	Foundations of Secure Computation	2-1-0	3	Approved with suggestion to add course category in the syllabus as Department Elective.
CS 314	Computer and Network Security	2-1-0	3	Approved
CS 442	Generative AI	2-1-0	3	Approved



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



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

