

Jabalpur Engineering College, Jabalpur
Department of Electronics & Telecommunication Engineering

Notice

Date: 06.01.26

All the students of B. Tech. (AICTE) are informed that those students who want to avail B. Tech. Honours degree, they have to score additional 20 credits by SWAYAM/NPTEL/MOOC online courses in addition to the curriculum. Following NPTEL courses are recommended for the students of IV and VI semesters. Maximum 8 credits could be earned in each respective semester. Selection of courses must be strictly done among the approved list itself for the session January-June 2026.

List of NPTEL Courses for Session: January-June 2026

B. Tech IV Semester

S. No.	Course Name	Discipline	Duration	Instructor	Start Date
1.	Semiconductor Devices for Next Generation Field Effect Transistors (More than Moore): A Physics Perspective	Electrical and Electronics Engineering	12 Weeks	Prof. Sudeb Dasgupta (IIT Roorkee)	19 th January 2026
2.	Analog Electronic Circuits - IITM	Electrical and Electronics Engineering	12 Weeks	Prof. Shanthi Pavan (IIT Madras)	19 th January 2026
3.	Semiconductor Device Modeling and Simulation	Electrical and Electronics Engineering	12 Weeks	Prof. Vivek Dixit (IIT Kharagpur)	19 th January 2026
4.	Basic Overview of Semiconductor Device Processing and IC Fabrication	Electrical and Electronics Engineering	12 Weeks	Prof. S. Sundar Kumar Iyer (IIT Kanpur)	19 th January 2026
5.	Artificial Intelligence: Knowledge Representation And Reasoning	Computer Science and Engineering	12 Weeks	Prof. Deepak Khemani (IIT Madras)	19 th January 2026
6.	Deep Learning	Computer Science and Engineering	12 Weeks	Prof. Prabir Kumar Biswas (IIT Kharagpur)	19 th January 2026
7.	Electromagnetic Waves in Guided and Wireless Media	Electrical and Electronics Engineering	8 Weeks	Prof. Pradeep Kumar K (IIT Kanpur)	19 th January 2026
8.	Evolution of Air Interface towards 5G	Electrical and Electronics Engineering	8 Weeks	Prof. Suvra Sekhar Das (IIT Kharagpur)	19 th January 2026
9.	Programming, Data Structures And Algorithms Using Python	Computer Science and Engineering	8 Weeks	Prof. Madhavan Mukund (Chennai Mathematical Institute, CMI), IIT Madras	19 th January 2026
10.	Data Science for Engineers	Computer Science and Engineering	8 Weeks	Prof. Ragunathan Rengasamy, Prof. Shankar Narasimhan (IIT Madras)	19 th January 2026

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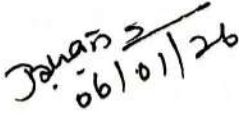
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B. Tech VI Semester

S. No.	Course Name	Discipline	Duration	Instructor	Start Date
1.	The MOS Transistor Modeling	Electronics and Communication, Electrical Engineering	12 Weeks	Prof. Navjeet Bagga(IIT Bhubaneswar)	19 th January 2026
2.	Physics of Nanoscale Devices	Electrical and Electronics Engineering	12 Weeks	Prof. Vishvendra Singh Poonia (IIT Roorkee)	19 th January 2026
3.	Memory Device Technology for AI/ML Computing	Electrical and Electronics Engineering	12 Weeks	Prof. Shubhadeep Bhattacharjee (IIT Hyderabad)	19 th January 2026
4.	FPGA Based Signal Processing Systems	Electrical and Electronics Engineering	12 Weeks	Prof. P. Sumathi (IIT Roorkee)	19 th January 2026
5.	GPU Architectures and Programming	Computer Science and Engineering	12 Weeks	Prof. Soumyajit Dey (IIT Kharagpur)	19 th January 2026
6.	Embedded Systems Design	Computer Science and Engineering	12 Weeks	Prof. Anupam Basu (IIT Kharagpur)	19 th January 2026
7.	Fundamentals of MIMO Wireless Communication	Electrical and Electronics Engineering	8 Weeks	Prof. Suvra Sekhar Das (IIT Kharagpur)	19 th January 2026
8.	Electronics Equipment Integration and Prototype Building	Electrical and Electronics Engineering	8 Weeks	Prof. N.V Chalapathi Rao (IISc Bangalore)	19 th January 2026
9.	Introduction To Soft Computing	Computer Science and Engineering	8 Weeks	Prof. Debasis Samanta (IIT Kharagpur)	19 th January 2026
10.	Data Base Management System	Computer Science and Engineering	8 Weeks	Prof. Partha Pratim Das Prof. Samiran Chattopadhyay (IIT Kharagpur)	19 th January 2026

Note: Enrollment for the above courses will be closed on 26th January 2026.


Prof-in-charge
(Dr. Kanchan Cecil)
(E & TC Engg.)


H.O. D
(E& TC Engg.)

Jabalpur Engineering College, Jabalpur
Department of Computer Science and Engineering
MOOCS/SWAYAM Courses offered for B.Tech. CSE

Session Jan-June 2026

List of courses for 4th and 6th Semester students.

(Note: Before joining any course, make sure that you have not already earned credits for the same course in previous semester(s))

S#	Course Name	Mentor Institute	Duration (Weeks)	Start Date
1.	AI: Constraint Satisfaction	IIT Madras	8	19/01/2026
2.	Advanced Computer Networks	IIT Indore, IIT Gandhi nagar	12	19/01/2026
3.	Affective Computing	IIIT Delhi, IIT Ropar	12	19/01/2026
4.	Algorithms in Computational Biology and Sequence Analysis	IISc Bangalore	12	19/01/2026
5.	Basics of Computational Complexity	IIT Kanpur	12	19/01/2026
6.	Bayesian Data Analysis for the Behavioral Sciences	IIT Kanpur	12	19/01/2026
7.	Blockchain and its Applications	IIT Kharagpur	12	19/01/2026
8.	Circuit Complexity Theory	IIT Kanpur	12	19/01/2026
9.	Data Science for Engineers	IIT Madras	8	19/01/2026
10.	Deep Learning for Natural Language Processing	IIT Kharagpur	12	19/01/2026
11.	Digital Design with Verilog	IIT Guwahati	12	19/01/2026
12.	Edge Computing	IIT Patna	8	19/01/2026
13.	Embedded System Design with ARM	IIT Kharagpur	8	19/01/2026
14.	Embedded Systems Design	IIT Kharagpur	12	19/01/2026
15.	Exploratory Data Analysis for Data Science with R Software (English)	IIT Kanpur	12	19/01/2026
16.	Foundation for Virtual and Augmented Reality Systems	IIT Guwahati	12	19/01/2026
17.	Foundations of Cyber Physical Systems	IIT Kharagpur	12	19/01/2026
18.	GPU Architectures And Programming	IIT Kharagpur	12	19/01/2026
19.	Getting Started with Competitive Programming	IIT Gandhinagar	12	19/01/2026
20.	Human Computer Interaction	IIIT Delhi	12	19/01/2026
21.	Information Security - 5 - Secure Systems Engineering	IIT Madras	8	19/01/2026
22.	Introduction To Haskell Programming	CMI	12	19/01/2026
23.	Introduction To Industry 4.0 And Industrial Internet Of Things	IIT Kharagpur	12	19/01/2026
24.	Introduction To Soft Computing	IIT Kharagpur	8	19/01/2026
25.	Introduction to Embedded System Design	Netaji Subhas University of Technology, IIT Jammu	12	19/01/2026
26.	Introduction to Information Retrieval	Indian Institute of Science Education and Research, Kolkata	12	19/01/2026
27.	Introduction to Quantum Computing: Quantum Algorithms and Qiskit	IIT Madras, IBM Research, IBM Systems	4	19/01/2026
28.	Large Applications Practicum	IIT Mandi	4	16/02/2026
29.	Matlab Programming for Numerical Computation	IIT madras	12	19/01/2026
30.	Natural Language Processing	IIT Kharagpur	12	19/01/2026
31.	Optimisation for Machine Learning: Theory and Implementation	IIIT Delhi	8	19/01/2026
32.	Parallel Computer Architecture	IIT Guwahati	12	19/01/2026
33.	Predictive Modelling with Applications: Supervised and Unsupervised Learning	IIT Hyderabad	8	16/02/2026

34.	Probability for Computer Science	IIT Kanpur	8	16/02/2026
35.	Problem Solving Through Programming In C	IIT Kharagpur	12	19/01/2026
36.	Reinforcement Learning	IIT Madras	12	19/01/2026
37.	Secure Computation: Part I	IIT Bangalore	12	19/01/2026
38.	Social Networks	IIT Ropar	12	19/01/2026
39.	Software Testing	IIT Kharagpur	4	16/02/2026
40.	Statistical Foundation for Big Data Analysis	IIT Kharagpur	12	19/01/2026
41.	Systems and Usable Security	IIT Indore	4	19/01/2026
42.	Time Series Modelling and Forecasting with Applications in R	IIT Bombay	12	19/01/2026
43.	User-centric Computing for Human-Computer Interaction	IIT Guwahati	8	19/01/2026



NPTEL Co-ordinator (CSE)



HOD (CSE)

Jabalpur Engineering College, Jabalpur

Electrical Engineering Department

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Following NPTEL courses are recommended for the students of IV & VI semesters.

Maximum 8 credits could be earned in each respective semester. Selection of courses must be strictly done among the approved list itself for session Jan-April 2026.

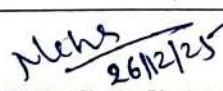
List of NPTEL Course for Session Jan - April 2026

B.Tech IV Semester

S. No.	Course Name	SME Name	Institute	Duration	Start date
1	Introduction to Internet Of Things	Prof. Sudip Misra	IIT Kharagpur	12 Weeks	19-Jan-26
2	Environmental Planning and Management	Prof. Sonal K. Thengane	IIT Roorkee	8 Weeks	16-Feb-26
3	Advanced Computer Architecture	Prof. Smruti R. Sarangi	IIT Delhi	12 Weeks	19-Jan-26
4	Analog IC Design	Prof. Aniruddhan S Prof. Nagendra Krishnapura	IIT Madras	12 Weeks	19-Jan-26
5	Programming in Java	Prof. Debasis Samanta	IIT Kharagpur	12 Weeks	19-Jan-26
6	An Introduction to Information Theory	Prof. Adrish Banerjee	IIT Kanpur	8 Weeks	19-Jan-26

B.Tech VI Semester

S. No.	Course Name	SME Name	Institute	Duration	Start date
1	Recent Advances in Transmission Insulators	Prof. Subba Reddy B	IISc Bangalore	4 Weeks	19-Jan-26
2	Operation and Planning Of Power Distribution Systems	Prof. Sanjib Ganguly	IIT Guwahati	12 Weeks	19-Jan-26
3	Real Time Operating System	Prof. Rajib Mall	IIT Kharagpur	4 Weeks	16-Feb-26
4	Digital Protection of Power System	Prof. Bhaveshkumar R. Bhalja	IIT Roorkee	8 Weeks	19-Jan-26
5	Digital System Design	Prof. Neeraj Goel	IIT Ropar	12 Weeks	19-Jan-26
6	Cloud Computing	Prof. Soumya Kanti Ghosh	IIT Kharagpur	12 Weeks	19-Jan-26
7	Integrated Circuits and Applications	Prof. Shaik Rafi Ahamed	IIT Guwahati	12 Weeks	19-Jan-26


NPTEL Coordinator
 EE Dept


HOD
 EE Dept

B.Tech VIII Semester session Jan-April 2026

For those students who are going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator. (One from each PE & OE category)

Professional Elective Course-IV

S. No.	Course Name	SME Name	Institute	Duration	Start date
1	Smart Grid: Basics to Advanced Technologies	Prof. N.P. Padhy Prof. Premalata Jena	IIT Roorkee	12 Weeks	19-Jan-26
2	Power Quality	Prof. Bhim Singh	IIT Delhi	12 Weeks	19-Jan-26
3	EV - Vehicle Dynamics and Electric Motor Drives	Prof. Amit Jain Prof. Avanish Tripathi	IIT Delhi	12 Weeks	19-Jan-26

Open Elective Course-III

S. No.	Course Name	SME Name	Institute	Duration	Start date
1	Natural Language Processing	Prof. Pawan Goyal	IIT Kharagpur	12 Weeks	19-Jan-26
2	Communication Networks	Prof. Goutam Das	IIT Kharagpur	12 Weeks	19-Jan-26
3	Optical Fiber Sensors	Prof Balaji Srinivasan	IIT Madras	12 Weeks	19-Jan-26

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NPTEL Coordinator
EE Dept

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Jabalpur Engineering College, Jabalpur
Mechanical Engineering Department

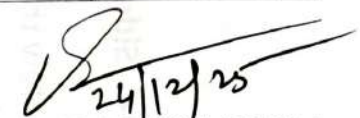
List of NPTEL courses for session December 2025- April 2026:

B. Tech (AICTE) VI SEM / B. Tech (PTDC) VI SEM

S.NO	Course Code	Course Name	Duration	SME Name	Exam date
1	noc26_me51	Industrial Hydraulic and Automation	12 Week	Prof.Niranjan Kumar, Prof.Ajit Kumar IIT (ISM) Dhanbad	25 April 2026
2	noc26_me62	Design of Mechanical Transmission System	12 Week	Prof. Ramkumar P IIT Madras	17 April 2026
3	noc26_me78	Principles of Industrial Engineering	12 Week	Prof. D K Dwivedi IIT Roorkee	19 April 2026
4	noc26_me64	Fundamentals of combustion for propulsion	8 Week	Prof. S Varunkumar, Prof. H S Mukunda IIT Madras, IISc Bangalore	28 March 2026
5	noc26_me20	Fundamentals Of Compressible Flow	12 Week	Prof. Niranjan Sahoo IIT Guwahati	26 April 2026

B. Tech (AICTE) IV SEM / B. Tech (PTDC) IV SEM

S.NO	Course Code	Course Name	Duration	SME Name	Exam date
1	noc26_me65	Fundamental Of Combustion	12 Week	Prof. V. Raghavan IIT Madras	17 April 2026
2	noc26_me74	Operations Management	12 Week	Prof. Inderdeep Singh IIT Roorkee	19 April 2026
3	noc26_me69	Oil Hydraulics And Pneumatics	12 Week	Prof. Somashekhar IIT Madras	18 April 2026
4	noc26_me30	Theory of Composite Shells	8 Week	Prof. Poonam Kumari IIT Guwahati	29 March 2026
5	noc26_me49	Product Design and Manufacturing	12 Week	Prof. J. Ramkumar, Prof. Amandeep Singh IIT Kanpur	18 April 2026


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HOD MECHANICAL

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Jabalpur Engineering College, Jabalpur
Mechanical Engineering Department

Those Students going for internship must have to opt MOOC/NPTEL, as decided / listed by HOD / Coordinator as follows:-

List of NPTEL courses for session December 2025- April 2026:

B. Tech (AICTE) VIII SEM

Opt any one of the following MOOC/NPTEL courses as Professional Elective Course-III						
S.NO	Course Category	Subject Code	Course Code	Course Name	Duration	SME Name
1	Professional Elective Course-III	ME801M D	noc26_me48	Computer Integrated Manufacturing	12 Week	Prof. J. Ramkumar. Prof. Amandeep Singh Oberoi IIT Kanpur
2		ME801M E	noc26_me12	Data-Enabled Tribological Engineering: From Experiments to Predictive Models	12 Week	Prof. (HAG) Harish Hirani IIT Delhi
3		ME801M F	noc26_me45	Advanced Machining Processes	12 Week	Prof. Shantanu Bhattacharya, IIT Kanpur
						Exam date
						18 April 2026
						24 April 2026
						19 April 2026

Opt any one of the following MOOC/NPTEL courses as Open Elective Course- IV						
S.NO	Course Category	Subject Code	Course Code	Course Name	Duration	SME Name
1	Open Elective Course- IV	ME802M D	noc26_bt22	Conservation Economics	12 Week	Prof. Ankur Awadhiya IIT Kanpur
2		ME802M E	nou26_me03	Quality Engineering & Management	12 Week	Dr. N. Venkateshwarlu Indira Gandhi National Open University, New Delhi
3		ME802M F	noc26_cs76	Machine Learning for Engineering and science applications	12 Week	Prof. Balaji Srinivasan, Prof. Ganapathy Krishnamurthi, IIT Madras
						Exam date
						19 April 2026
						-
						18 April 2026


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24/12/25
HOD MECHANICAL

Department of Civil Engineering
Jabalpur Engineering College, Jabalpur

List of NPTEL Courses for the students of B. Tech (AICTE) -IV/VIth Sem, and B.Tech (PTDC)- II/IV/VIth Semester for the Session of Jan-June 2026. Last date of Enrollment is 26/01/2026.

Sr. No	Course ID	Course Name	Instructure Name and Institute	Duration (Weeks)	Start date
1	noc26-ce18	Energy Efficiency, Acoustics and Daylighting in Building	Prof. B. Bhattacharjee, IIT Delhi	12	Jan 19, 2026
2	noc26-ce31	Development and Applications of Special Concretes	Prof. Sudhir Misra, IIT Kanpur	8	Jan 19, 2026
3	noc26-ce45	Retrofitting and Rehabilitation of Civil Infrastructure	Prof. Swati Maitra, Prof. Sriman Bhattacharya, IIT Kharagpur	12	Jan 19, 2026
4	noc26-ce48	Urban Transportation Systems Planning	Prof. Bhargab Maitra, IIT Kharagpur	12	Jan 19, 2026
5	noc26-ce49	Electronic Waste Management - Issues And Challenges	Prof. Brajesh Kumar Dubey, IIT Kharagpur	4	Jan 19, 2026
6	noc26-ce68	Analysis and Design of Bituminous Pavements	M. R. Nivitha (MRN) Neethu Roy (NR) A. Padmarekha (APR) J. Murali Krishnan (JMK), IIT Madras	12	Jan 19, 2026
7	noc26-ar07	Building Energy Systems and Auditing	Prof. Shankha Pratim Bhattacharya, IIT Kharagpur	8	Feb 16, 2026
8	noc26-ce11	Smart Cities	Prof. Neelima Satyam Prof. Priyansh Singh, IIT Madras	12	Jan 19, 2026
9	noc26-ce33	निर्माण प्रबंधन (Construction Management) के सिद्धांत [Nirman prabandhan (Construction Management) ke Siddhant]	Prof. Sudhir Misra, IIT Kanpur	8	Feb 16, 2026
10	noc26-ce80	GPS Surveying	Prof. J. K. Ghosh (Late) Prof. Ajanta Goswami, IIT Roorkee	4	Jan 19, 2026
11	noc26-ce81	Digital Land Surveying and Mapping (DLS&M)	Prof. J. K. Ghosh (Late) Prof. Siddhartha Khare, IIT Roorkee	8	Jan 19, 2026
12	noc26-ar01	Urban Informatics	Prof. Debapratim Pandit, IIT Kharagpur	12	Jan 19, 2026
13	noc26-ce07	Theory of Plasticity for Engineers: Concepts and Applications	Prof. Amirtham Rajagopal, IIT Madras	12	Jan 19, 2026
14	noc26-ce12	Drone Surveying	Prof. Pradeep Kumar Garg, Prof. Prakhar Misra, IIT Roorkee	4	Feb 16, 2026
15	noc26-cs74	Introduction to Machine Learning	Prof. Balaraman Ravindran, IIT Madras	12	Jan 19, 2026

Note : If any students have already successfully completed and earned credits for any SWAYAM/MOOC/NPTEL course in previous semester, can't opt the same course again for getting B. Tech honours degree certificate.


NPTEL Coordinator
Civil Engg.


HOD,
Civil Engg.

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Department of Civil Engineering
Jabalpur Engineering College, Jabalpur

List of NPTEL courses for B.Tech- VIII Semester (Civil Engg.) Jan-June, 2026

Following courses are recommended for the students of B.Tech-VIII semester (Civil Engg.) going for Internship. Students would have to opt one subject from Professional Elective-III and one subject for Open Elective-III as per the scheme. Last date for enrollment is 26th Jan. 2026.

Professional Elective-III

Sr No.	Subject Code	Course ID	Course Name	SME Name	Duration (Weeks)	Start Date
1	CE801 M D	noc26-oe02	Advanced design of steel structures	Prof. Srinivasan Chandrasekaran, IIT Madras	12	Jan 19, 2026
2	CE801 M E	noc26-ce09	Seismic Design of Building Structures	Prof. Vishwajit Anand, IIT Madras	12	Jan 19, 2026
3	CE801 M F	noc26-oe02	Traffic Engineering	Prof. Bhargab Maitra, IIT Kharagpur	12	Jan 19, 2026

Optional Elective-III

1	CE 802 M D	noc26-ce69	Finite Element Analysis and Constitutive Modelling in Geomechanics	Prof. K Rajagopal, IIT Madras	12	Jan 19, 2026
2	CE 802 M E	noc26-ce74	Air Pollution and Control	Prof. Bhola Ram Gurjar, IIT Roorkee	12	Jan 19, 2026
3.	CE801 M F	noc26-ce10	Climate Hazards and Disaster Mitigation	Prof. Priyank J. Sharma, IIT Indore	12	Jan 19, 2026


HOD

Civil Engineering

DEPARTMENT OF INFORMATION TECHNOLOGY

JABALPUR ENGINEERING COLLEGE , JABALPUR

List of NPTEL/SWAYAM Courses for the students of B. Tech.(IT) for the session January to June-2026

(Note:-Before joining the course make sure that you have not already earned credits for the same

Course in previous semester)-

S. NO.	COURSE NAME	INSTITUTE	DURATION	START DATE	EXAM DATE
1.	Blockchain and its Applications	IIT Kharagpur	12 Weeks	Jan 19,2026	April 24, 2026
2.	Foundations of Deep Learning: Concepts and Applications	IISc Bangalore	12 Weeks	Jan 19,2026	April 25, 2026
3.	Quantum Computing: Algorithms and Limitations Through the Query Model	IIT Kanpur	12 Weeks	Jan 19,2026	April 24, 2026
4.	Social Networks	IIT Ropar	12 Weeks	Jan 19,2026	April 18, 2026
5.	Natural Language Processing	IIT Kharagpur	12 Weeks	Jan 19,2026	April 25, 2026
6.	The Joy of Computing using Python	IIT Ropar	12 Weeks	Jan 19,2026	April 18, 2026
7.	Statistical Foundation for Big Data Analysis	IIT Kharagpur	12 Weeks	Jan 19,2026	April 19, 2026
8.	Artificial Intelligence (AI) for Management	IIT Madras	12 Weeks	Jan 19,2026	April 17, 2026
9.	Introduction to Embedded System Design	IIT Jammu	12 Weeks	Jan 19,2026	April 19, 2026
10.	Basics of Computational Complexity	IIT Kanpur	12 Weeks	Jan 19,2026	April 19, 2026
11.	Algorithms in Computational Biology and Sequence Analysis	IISc Bangalore	12 Weeks	Jan 19,2026	April 19, 2026
12.	Practical High-Performance Computing	IIT Kanpur	12 Weeks	Jan 19,2026	April 25, 2026
13.	Wireless Ad Hoc and Sensor Networks	IIT Kharagpur	8 Weeks	Jan 19,2026	March 29, 2026
14.	Edge Computing	IIT Patna	8 Weeks	Jan 19,2026	March 29, 2026
15.	User-centric Computing For Human-Computer Interaction	IIT Guwahati	8 Weeks	Jan 19,2026	March 29, 2026
16.	Data Science for Engineers	IIT Madras	8 Weeks	Jan 19,2026	March 28, 2026
17.	Introduction to Quantum Computing: Quantum Algorithms and Qiskit	IBM and IIT Madras	4 Weeks	Jan 19,2026	March 28, 2026
18.	Systems and Usable Security	IIT Indore	4 Weeks	Jan 19,2026	March 28, 2026
19.	Data Mining for Decision Making	IIT Mandi	4 Weeks	Feb 16, 2026	April 25, 2026
20.	Large Applications Practicum	IIT Mandi	4 Weeks	Feb 16, 2026	April 18, 2026

02/01/26
Course Co-ordinator

Shivam Dhangra

02/01/26
H.O.D.

NPTEL MOOC Course for BTech Industrial & Production Engineering Session 2025 – 26

Jabalpur Engineering College, Jabalpur

S. No	Name of Course	Faculty/Institute Co-Ordinator	Duration	Registration Date
1	Optimization from fundamentals	IIT Bombay Prof. Ankur A. Kulkarni	12 WEEKS	2025-11-17 to 2026-01-26
2	Fundamentals Of Nuclear Power Generation	IIT Guwahati Prof. Dipankar N. Basu	12 WEEKS	2025-11-17 to 2026-01-26
3	Mechanics Of Fiber Reinforced Polymer Composite Structures	IIT Guwahati Prof. Debabrata Chakraborty	12 WEEKS	2025-11-17 to 2026-01-26
4	Engine system and performance	IIT Guwahati Prof. Pranab K. Mondal	12 WEEKS	2025-11-17 to 2026-01-26
5	Fundamentals of thermo-mechanical & fatigue analysis of welded structure	IIT Guwahati Prof. Pankaj Biswas	12 WEEKS	2025-11-17 to 2026-01-26
6	Introduction To Mechanical Micro Machining	IIT Kharagpur Prof. Ajay M Sidpara	12 WEEKS	2025-11-17 to 2026-01-26
7	Industrial Hydraulics and Automation	IIT-ISM Dhanbad Prof. Niranjana Kumar	12 WEEKS	2025-11-17 to 2026-01-26
8	Fundamentals of Surface Engineering: Mechanisms, Processes and Characterizations	IIT Roorkee Prof. D. K. Dwivedi	12 WEEKS	2025-11-17 to 2026-01-26
9	Supply Chain Digitization	IIT Bombay Prof. Priyanka Verma Prof. Sushmita Narayana	12 WEEKS	2025-11-17 to 2026-01-26
10	Business Fundamentals for Entrepreneurs	IIT Bombay Prof. Devdip Purkayastha	12 WEEKS	2025-11-17 to 2026-01-26
11	E-Business	IIT Kharagpur Prof. Mamata Jenamani	12 WEEKS	2025-11-17 to 2026-01-26
12	Leadership and Team Effectiveness	IIT Roorkee Prof. Santosh Rangnekar	12 WEEKS	2025-11-17 to 2026-01-26
13	Yoga and Positive Psychology for Managing Career and Life	IIT Bombay By Prof. Ashish Pandey	08 WEEKS	2026-02-16 (Reg. End Date)
14	Group Dynamics	IIT Bombay By Prof. Pooja Garg	08 WEEKS	2026-01-26 (Reg. End Date)
15	Effective Learning for Professional Development	IIT Kharagpur By Prof. Atasi Mohanty, Prof. Manas K. Mandal	08 WEEKS	2026-02-16 (Reg. End Date)
16	Interior Design	IIT Roorkee Prof. Smriti Saraswat	08 WEEKS	2026-02-16 (Reg. End Date)
17	Technology Commercialization & New Product Development	IIT Bombay By Prof. Devdip Purkayastha, Prof. Rajkumar Hirwani	04 WEEKS	2026-02-16 (Reg. End Date)
18	Technology Forecasting for strategic decision making - An Introduction	IIT Madras By Prof. Bala Ramadurai	04 WEEKS	2026-01-26 (Reg. End Date)
19	Patent Drafting for Beginners	IIT Madras By Prof. Feroz Ali	04 WEEKS	2026-01-26 (Reg. End Date)
20	Smart Materials and Intelligent System Design	IIT Kanpur Prof. Bishakh Bhattacharya	04 WEEKS	2024-11-15 to 2025-02-17

HOD
IP Department

[Signature]
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Jabalpur Engineering College, Jabalpur
Department of Artificial Intelligence & Data Science

MOOC (NPTEL Courses)

Following courses are recommended for AI & DS branch student of IV & VI SEM. Maximum 8 credits could be earned in each respective semester. Students have to score 20 credits till 7th Semester for getting B-tech Honours degree. Credit details-course of 12 week=4, 8 week=3, 4 week=2. Enrollment for the any courses will be closed on 26th January 2026 till 5 PM.

List of NPTEL Courses for Session: Jan 2026-Apr 2026

B.Tech IV Semester

S.No	Course Name	Duration	Institution	Instructor/Prof. Incharge	Start Date
1	Artificial Intelligence: Knowledge Representation And Reasoning	12 Weeks	IIT Madras	Prof. Deepak Khemani	19-01-2026
2	Data Analytics with Python	12 Weeks	IIT Roorkee	Prof. A Ramesh	19-01-2026
3	Exploratory Data Analysis for Data Science with R Software (English)	12Weeks	IIT Kanpur	Prof. Shalabh	19-01-2026
4	Predictive Modelling with Applications: Supervised and Unsupervised Learning	8 Weeks	IIT Hyderabad	Prof. Sayantee Jana	16-02-2026
5	Fuzzy Logic and Neural Networks	8 Weeks	IIT Kharagpur	Prof. Dilip Kumar Pratihari	19-01-2026
6	Internet Crimes and Cyber Security	8 Weeks	NALSAR University of Law	Prof. K.V.K. Santhy Prof. B Md Irfan	16-02-2026
7	Introduction to Quantum Computing: Quantum Algorithms and Qiskit	4 Weeks	IBM and IIT Madras	Prof. Prabha Mandayam Prof. Anupama Ray Prof. Sheshashayee Raghunathan	19-01-2026
8	Real Time Operating System	4 Weeks	IIT Kharagpur	Prof. Rajib Mall	16-02-2026

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Jabalpur Engineering College, Jabalpur

Department of Artificial Intelligence & Data Science


MOOC (NPTEL Courses)

Following courses are recommended for AI & DS branch student of IV & VI SEM. Maximum 8 credits could be earned in each respective semester. Students have to score 20 credits till 7th Semester for getting B-tech Honours degree. Credit details-course of 12 week=4, 8 week=3, 4 week=2. Enrollment for the any courses will be closed on 26th January 2026 till 5 PM.

List of NPTEL Courses for Session: Jan 2026-Apr 2026

B.Tech VI Semester

S.No	Course Name	Duration	Institution	Instructor/Prof. Incharge	Start Date
1	Games and Information	12Weeks	IIT Bombay	Prof. Ankur A. Kulkarni	19-01-2026
2	Blockchain and its Applications	12Weeks	IIT Kharagpur	Prof. Sandip Chakraborty Prof. Shamik Sural	19-01-2026
3	Foundation for Virtual and Augmented Reality Systems	12Weeks	IIT Guwahati	Prof Samit Bhattacharya	19-01-2026
4	Computer Vision and Image Processing - Fundamentals and Applications	12 Weeks	IIT Guwahati	Prof. M.K. Bhuyan	19-01-2026
5	Edge Computing	8 Weeks	IIT Patna	Prof. Rajiv Misra	19-01-2026
6	Internet Crimes and Cyber Security	8 Weeks	NALSAR University of Law	Prof. K.V.K. Santhy Prof. B Md Irfan	16-02-2026
7	Data Science for Engineers	8 Weeks	IIT Madras	Prof. Ragunathan Rengasamy, Prof. Shankar Narasimhan	19-01-2026
8	Experimental Robotics	4Weeks	IIT Kharagpur	Prof. Dilip Kumar Pratihari	16-02-2026
9	Medical Image Analysis	4Weeks	IIT Kharagpur	Prof. Debdeep Saha	16-02-2026
10	Introduction to Quantum Computing: Quantum Algorithms and Qiskit	4Weeks	IBM and IIT Madras	Prof. Prabha Mandayam Prof. Anupama Ray Prof. Sheshashayee Raghunathan	19-01-2026


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Jabalpur Engineering College, Jabalpur
Department of Artificial Intelligence & Data Science
MOOC (NPTEL Courses)

Following courses are recommended for B-tech VIII Semester AI & DS branch student who enrolled in internship program. Students going for internship would have to opt MOOC (NPTEL) subject listed by HOD. Each course carries 4 credits. Enrolled and report to HOD.

List of NPTEL Courses for Session: Jan 2026-June 2026
(For those who are submitting Internship option)

Professional Elective Course- III

Professional Elective Course-III						
S No.	Subject Code	Subject name	Duration	Institution	Instructor/Prof. Incharge	Start Date
1	AI801MD	Business Intelligence & Analytics	12 weeks	IIT Madras	Prof. Saji K Mathew	Jan 19-2026
2	AI801ME	Artificial Intelligence (AI) for Management	12 weeks	IIT Madras	Prof. Saji K Mathew	Jan 19-2026
3	AI801MF	Foundation for Virtual and Augmented Reality Systems	12 weeks	IIT Guwahati	Prof Samit Bhattacharya	Jan 19-2026

Open Elective Course- IV

Open Elective Course-IV						
S No.	Subject Code	Subject name	Duration	Institution	Instructor/Prof. Incharge	Start Date
1	AI802MD	Neural Networks for Computer Vision and Natural Language Processing	12 weeks	IIT Guwahati	Prof Arijit Sur	Jan 19-2026
2	AI802ME	BioInformatics: Algorithms and Applications	12 weeks	IIT Madras	Prof. Michael Gromiha	Jan 19-2026
3	AI802MF	Designing Work Organization	12 weeks	IIT Roorkee	Prof. Santosh Rangnekar	Jan 19-2026


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**Department of Mechatronics Engineering
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ist of NPTEL Courses for the students of B.Tech(AICTE) -IV/VI/ Semester Mechatronics Engineering, Session Jan -April 2026). Start Date is Nov 19,2025 and last Date for enrolment is 26/01/2026

No	Course ID	Course Name	SME Name	Institut e	Duration
1.	noc26-me83	Mechatronics	Prof. Pushparaj Mani Pathak	IIT Roorkee	8 weeks
2.	noc26-ae03	Aeromechanics of Unmanned Aerial Vehicles / Drones	Prof. Abhishek	IIT Kanpur	12 Weeks
3.	noc26-ae04	Fluid Mechanics	Prof. Sanjay Mittal	IIT Kanpur	12 weeks
4.	noc26-ae12	Aircraft Design	Prof. A.K.Ghosh	IIT Kanpur	12 weeks
5.	noc26-cs18	Foundations of Cryptography, IIIT Bangalore	Prof. Ashish Choudhury	IISc Bangalore	12 Weeks
6.	noc26-cs22	Introduction to Embedded System Design	Prof. Dhananjay V. Gadre Prof. Badri N Subudhi	IIT Delhi	12 Weeks
7.	noc26-cs34	Blockchain and its Applications	Prof. Sandip Chakraborty Prof. Shamik Sural	IIT Kharagpur	12 Weeks
8.	noc26-cs58	Data Mining	Prof. Pabitra Mitra	IIT Kharagpur	8 Weeks
9.	noc26-cs65	Data Science for Engineers	Prof. Ragunathan Rengasamy, Prof. Shankar Narasimhan	IIT Madras	8 Weeks
10.	noc26-ee02	Control Engineering for Robotics	Prof. Chayan Bhawal	IIT Guwahati	12 Weeks
11.	noc26-ee13	Sensors and Actuators	Prof. Hardik Jeetendra Pandya	IISc Bangalore	12 Weeks
12.	noc26-ee15	Fundamental of Power Electronics	Prof. L.Umanand	IISc Bangalore	12 Weeks
13.	noc26-ee27	EV - Vehicle Dynamics and Electric Motor Drive	Prof. Amit Jain Prof. Avanish Tripathi	IIT Delhi	12 Weeks
14.	noc26-ee47	Industrial Automation and Control	Prof. Alokanti Deb	IIT Kharagpur	12 Weeks
15.	noc26-ee89	Intelligent Control of Robotic Systems	Prof. M. Felix Orlando	IIT Roorkee	4 Weeks
16	noc26-me01	Robotics: Basics and Selected Advanced Concepts	Prof. Ashitava Ghosal	IISc Bangalore	12 Weeks

17	noc26-me101	Autotronics	Prof. Palani Iyamperumal Anand	IIT Madras	12 Weeks
18	noc26-me42	Elements of Solar Energy Conversion	Prof. Jishnu Bhattacharya	IIT Kanpur	12 Weeks
19	noc26-me72	Robotics and Control : Theory and Practice	Prof. N. Sukavanam Prof. M. Felix Orlando	IIT Roorkee	8 Weeks
20	noc26-me39	Manufacturing Automation	Prof. Sounak Kumar Choudhury	IIT Kanpur	4 Weeks

Note-If any student have already successfully completed any SWAYAM/MOOC/NPTEL course in previous semesters, can't opt the same course again for getting B.Tech honours degree certificate.



 Prof. Abhilash Kumar Patel, Prof. Shudharshu Dole

NPTEL Co-Ordinator

Department of Mechatronics Engineering


 HOD

Department of Mechatronics Engineering

Department of Mechatronics Engineering
Jabalpur Engineering College, Jabalpur

List of NPTEL Courses for the students of B.Tech(AICTE) -VIII Semester Mechatronics Engineering, (Session Jan-April 2026). Start Date is Nov 19,2025 and last Date for enrolment is 26/01/2026.

Students undergoing internships must complete the NPTEL/SWAYAM 12 week courses offered by the department under the following categories (one from each):

Professional Elective Course -III

S.No	Subject Code	Course ID	Course Name/Subject Name	SME Name	Institute
1.	MT 801M D	noc26-mg47	Quality Design and Control	Prof. Pradip Kumar Ray	IIT Kharagpur
2.	MT 801M E	noc26-ch26	Renewable Energy Engineering: Solar, Wind and Biomass Energy Systems	Prof. Vaibhav Vasant Goud, Prof. R. Anandalakshmi	IIT Guwahati
3.	MT 801M F	noc26-me102	Advanced Refrigeration Systems	Prof. Jahar Sarkar	IIT BHU Varanasi


Open Elective Course -IV

S.No	Subject Code	Course ID	Course Name/Subject Name	SME Name	Institute
1.	MT 802M D	noc26-ee31	Computer Vision and Image Processing - Fundamentals and Applications	Prof. M.K. Bhuyan	IIT Guwahati
2.	MT 802M E	noc26-ee04	Basic Overview of Semiconductor Device Processing and IC Fabrication	Prof. S. Sundar Kumar Iyer	IIT Kanpur
3.	MT 802M F	noc26-mg66	Production and Operation Management	Prof. Rajat Agrawal	IIT Roorkee

Note- Students must submit their NPTEL/SWAYAM test and assignment marks as proof of completion.


Prof. Abhilash Kumar Patel
NPTEL Co-Ordinator

Department of Mechatronics Engineering


Prof. Shudhanshu Dole


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Department of Mechatronics Engineering