

JABALPUR ENGINEERING COLLEGE , JABALPUR

Department of Information Technology

List of NPTEL Courses for the students of B.Tech IV Sem and VI SEM for the session January to April 2025.

S.No.	Course Name	Institute	Duration	Start date	End date	Exam date
1	Large Applications Practicum	IIT Mandi	4 Weeks	February 17, 2025	March 14, 2025	April 26, 2025
2	Advanced Computer Architecture	IIT Delhi	12 Weeks	January 20, 2025	April 11, 2025	April 26, 2025
3	Advanced Computer Networks	IIT Indore	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
4	Advanced Graph Theory	IIT Patna	8 Weeks	January 20, 2025	March 14, 2025	March 22, 2025
5	Affective Computing	IIT Delhi	12 Weeks	January 20, 2025	April 11, 2025	April 26, 2025
6	AI Constraint Satisfaction	IIT Madras	8 Weeks	January 20, 2025	March 14, 2025	March 22, 2025
7	Artificial Intelligence: Knowledge Representation And Reasoning	IIT Madras	12 Weeks	January 20, 2025	April 11, 2025	May 3, 2025
8	Blockchain and its Applications	IIT Kharagpur	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
9	Business Intelligence & Analytics	IIT Madras	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
10	Cloud Computing and Distributed Systems	IIT Patna	8 Weeks	January 20, 2025	March 14, 2025	March 22, 2025
11	Cryptography and Network Security	IIT Kharagpur	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
12	Data Analytics with Python	IIT Roorkee	12 Weeks	January 20, 2025	April 11, 2025	May 4, 2025
13	Data Science for Engineers	IIT Madras	8 Weeks	January 20, 2025	March 14, 2025	March 22, 2025
14	Deep Learning - IIT Ropar	IIT Ropar	12 Weeks	January 20, 2025	April 11, 2025	May 3, 2025
15	Design and Engineering of Computer Systems	IIT Bombay	8 Weeks	January 20, 2025	March 14, 2025	March 23, 2025
16	Digital Design with Verilog	IIT Guwahati	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
17	Edge Computing	IIT Patna	8 Weeks	January 20, 2025	March 14, 2025	March 22, 2025
18	Embedded System Design with ARM	IIT Kharagpur	8 Weeks	January 20, 2025	March 14, 2025	March 22, 2025
19	Embedded Systems Design	IIT Kharagpur	12 Weeks	January 20, 2025	April 11, 2025	April 26, 2025
20	Foundations of Cyber Physical Systems	IIT Kharagpur	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
21	Getting Started with Competitive Programming	IIT Gandhinagar	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
22	GPU Architectures and Programming	IIT Kharagpur	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
23	Human Computer Interaction (In English)	IIT Delhi	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
24	Introduction To Haskell Programming	CMI	8 Weeks	January 20, 2025	March 14, 2025	March 22, 2025
25	Introduction To Soft Computing	IIT Kharagpur	8 Weeks	January 20, 2025	March 14, 2025	March 22, 2025
26	Natural Language Processing	IIT Kharagpur	12 Weeks	January 20, 2025	April 11, 2025	April 26, 2025
27	Parallel Computer Architecture	IIT Guwahati	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
28	Quantum Algorithms and Cryptography	IIT Madras	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
29	Systems and Usable Security	IIT Indore	4 Weeks	January 20, 2025	February 14, 2025	March 22, 2025
30	User-centric Computing For Human-Computer Interaction	IIT Guwahati	8 Weeks	January 20, 2025	March 14, 2025	March 23, 2025
31	VLSI Physical Design	IIT Kharagpur	12 Weeks	January 20, 2025	April 11, 2025	May 4, 2025
32	Wireless Ad Hoc and Sensor Networks	IIT Kharagpur	8 Weeks	January 20, 2025	March 14, 2025	March 22, 2025
33	Real Time Operating System	IIT Kharagpur	4 Weeks	February 17, 2025	March 14, 2025	April 26, 2025
34	Deep Learning	IIT Kharagpur	12 Weeks	January 20, 2025	April 11, 2025	April 27, 2025
35	Privacy and Security in Online Social Media	IIT Hyderabad	12 weeks	January 20, 2025	April 11, 2025	April 27, 2025

Note: Before joining the course you have to make sure that you have not opted the same course for which you have already earned the credits for any SWAYAM /MOOC /NPTEL courses in previous semesters.

NPTEL Coordinator (IT)

HOD IT

Department of Civil Engineering
Jabalpur Engineering College, Jabalpur

List of NPTEL Courses for the students of B. Tech (AICTE) Civil Engineering – IV/VI Semester. And / B.Tech (PTDC) -II/IV/VI the Semester (Session Jan-April, 2025). Enrollment end date is January 27, 2025.

<u>Sr. No</u>	<u>Course ID</u>	<u>Course Name</u>	<u>Instructure Name and Institute</u>	<u>Dura. (Weeks)</u>	<u>Start date</u>
1.	noc25-ce12	Development and Applications of Special Concretes	IIT Kanpur	8	20-01-2025
2	noc25-ce14	Earthquake Resistant Design of Foundations	IIT Roorkee	8	20-01-2025
3	noc25-ce15	Electronic Waste Management - Issues and Challenges	IIT Kharagpur	4	20-01-2025
4	noc25-ce16	Energy Efficiency, Acoustics and Daylighting in Building	IIT Delhi	12	20-01-2025
5	noc25-ce19	Environmental Remediation of Contaminated Sites	IIT Roorkee	12	20-01-2025
6	noc25-ce31	GPS Surveying	IIT Roorkee	4	20-01-2025
7	noc25-ce38	Maintenance and Repair of Concrete Structures	IIT Madras	12	20-01-2025
8	noc25-ce39	Mechanical Characterization of Bituminous Materials	PSG Tech., Coimbatore MBCET, Trivandrum SRM IST, Kattankulathur IIT Madras	12	20-01-2025
9	noc25-ce41	Modern Construction Materials	IIT Madras	12	20-01-2025
10	noc25-ce45	Plastic Waste Management	IIT Kharagpur	8	20-01-2025
11	noc25-ce49	Retrofitting and Rehabilitation of Civil Infrastructure	IIT Kharagpur	12	20-01-2025
12	noc25-ce51	Soil Dynamics	IIT Kharagpur	12	20-01-2025
13	noc25-ce52	Soil Structure Interaction	IIT Kharagpur	12	20-01-2025
14	noc25-ce53	Stability Aspects of Structural Steel Design: Concepts and Applications	IIT Hyderabad	12	20-01-2025
15	noc25-ce58	Sustainable Engineering Concepts and Life Cycle Analysis	IIT Kharagpur	8	20-01-2025
16	noc25-ce62	Urban Transportation Systems Planning	IIT Kharagpur	12	20-01-2025
17	noc25-ce64	Advanced Topics in Science and Technology of Concrete	IIT Madras	4	17-02-2025
18	noc25-ce69	Structural Dynamics for Civil Engineers - SDOF Systems	IIT Kanpur	4	17-02-2025
19	noc25-ge15	Fuzzy Logic and Neural Networks	IIT Kharagpur	8	20-01-2025
20	noc25-ge16	Groundwater hydrology and management	IIT Bombay	12	20-01-2025
21	noc25-ge21	Multi-Criteria Decision Making and Applications	IIT Kanpur	12	20-01-2025

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.

Shailza Verma
NPTEL Coordinator
Civil Engg.

18/1/24
HOD,
Civil Engg.

Jabalpur Engineering College, Jabalpur

Mechanical Engineering Department

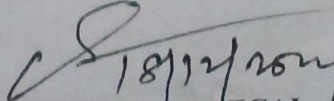
List of NPTEL courses for session January 2025- April 2025:

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

S.No	Course Code	Course Name	Duration	SME Name	Exam date
1	noc25_me38	Industrial Hydraulic and Automation	12 Week	Prof. Niranjan Kumar, Prof. Ajit Kumar IIT (ISM) Dhanbad	04 May 2025
2	noc25_me15	Design of Mechanical Transmission System	12 Week	Prof. Ramkumar P IIT Madras	03 May 2025
3	noc25_me64	Principles of Industrial Engineering	12 Week	Prof. D K Dwivedi IIT Roorkee	04 May 2025
4	noc25_me30	Fundamentals of combustion for propulsion	8 Week	By Prof. S Varunkumar, Prof. H S Mukunda IIT Madras, IISc Bangalore	22 March 2025
5	noc25_me31	Fundamentals Of Compressible Flow	12 Week	Prof. Niranjan Sahoo IIT Guwahati	04 May 2025

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

S.No	Course Code	Course Name	Duration	SME Name	Exam date
1	noc25_me29	Fundamental Of Combustion	12 Week	Prof. V. Raghavan IIT Madras	04 May 2025
2	noc25_me59	Operations Management	12 Week	By Prof. Inderdeep Singh IIT Roorkee	26 April 2025
3	noc25_me58	Oil Hydraulics And Pneumatics	12 Week	Prof. Somashekhar IIT Madras	03 May 2025
4	noc25_me75	Theory of Composite Shells	8 Week	By Prof. Poonam Kumari IIT Guwahati	23 March 2025
5	noc25_me67	Product Design and Manufacturing	12 Week	Prof. J. Ramkumar, Prof. Amandeep Singh IIT Kanpur	04 May 2025


HOD MECHANICAL

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 January 2025- April 2025:

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	noc25_me11	Computer Integrated Manufacturing	12 Week	By Prof. J. Ramkumar, Prof. Amandeep Singh Oberoi IIT Kanpur
2		ME801M E	noc25_me14	Data-Enabled Tribological Engineering: From Experiments to Predictive Models	12 Week	By Prof. (HAG) Harish Hirani IIT Delhi
3		ME801M F	noc25_me02	Advanced Machining Processes	12 Week	By Prof. Shantanu Bhattacharya IIT Kanpur
						03 May 2025
						27 April 2025

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	noc25_bt15	Conservation Economics	12 Week	Prof. Ankur Awadhiya IIT Kanpur
2		ME802M E	nou25_me03	Quality Engineering & Management	12 Week	Dr. N. Venkateshwarlu Indira Gandhi National Open University
3		ME802M F	noc25_cs49	Machine Learning for Engineering and science applications	12 Week	Prof. Balaji Srinivasan, Prof. Ganapathy Krishnamurthi IIT Madras
						26 April 2025
						27 April 2025

HOD MECHANICAL
18/12/2024

Jabalpur Engineering College, Jabalpur

Electrical Engineering Department

Notice

All the students of B.Tech (AICTE) are informed that those students who want to avail B.Tech Honours degree, have to score additional 20 credits by SWAYAM/NPTEL/MOOC online course in addition to the curriculum.

Following NPTEL courses are recommended for the students of IV, VI and VIII 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 2025.

List of NPTEL Course for Session Jan - April 2025

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	20-Jan-25
2	Analog Ic Design	Prof. Aniruddhan S	IIT Madras	12 Weeks	20-Jan-25
3	Advanced Computer Architecture	Prof. Smruti R.Sarangi	IIT Delhi	12 Weeks	20-Jan-25
4	Data Base Management System	Prof. Partha Pratim Das Prof. Samiran Chattopadhyay	IIT Kharagpur	8 Weeks	20-Jan-25
5	Cloud Computing	Prof. Soumya Kanti Ghosh	IIT Kharagpur	12 Weeks	20-Jan-25
6	An Introduction to Information Theory	Prof. Adrish Banerjee	IIT Kanpur	8 Weeks	20-Jan-25
7	Digital Electronic Circuits	Prof. Goutam Saha	IIT Kharagpur	12 Weeks	20-Jan-25

[Signature]
23/12/24

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	20-Jan-25
2	Power System Dynamics, Control and Monitoring	Prof. Debapriya Das	IIT Kharagpur	12 Weeks	20-Jan-25
3	A brief introduction of Micro - Sensors	Prof. Santanu Talukder	IISER Bhopal	4 Weeks	20-Jan-25

4	Deep Learning	Prof. Prabir Kumar Biswas	IIT Kharagpur	12 Weeks	20-Jan-25
5	Digital System Design	Prof. Neeraj Goel	IIT Ropar	12 Weeks	20-Jan-25
6	Industrial Automation and Control	Prof. Alokanti Deb	IIT Kharagpur	12 Weeks	20-Jan-25
7	Network Security	Prof. Gaurav S. Kasbekar	IIT Bombay	12 Weeks	20-Jan-25
8	Operation and Planning Of Power Distribution Systems	Prof. Sanjib Ganguly	IIT Guwahati	12 Weeks	20-Jan-25

Neha
23/12/24

NPTEL Coordinator

Dr Neha Nema
Assistant Professor
EE Dept

Shailja
23/12/24

HOD

Dr Shailja Shukla
EE Dept

B.Tech VIII Semester session Jan-April 2025

For those students who are going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator.

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	20-Jan-25
2	Computer-Aided Design of Electrical Machines	Prof. Bhim Singh	IIT Delhi	12 Weeks	20-Jan-25
3	EV - Vehicle Dynamics and Electric Motor Drives	Prof. Amit Jain	IIT Delhi	8 Weeks + 4 Weeks (New)	20-Jan-25
4	Sensors and Actuators	Prof. Hardik Jeetendra Pandya	IISc Bangalore	12 Weeks	20-Jan-25

Open Elective Course-III

S. No.	Course Name	SME Name	Institute	Duration	Start date
1	Embedded Systems Design	Prof. Anupam Basu	IIT Kharagpur	12 Weeks	20-Jan-25
2	Biomedical Signal Processing	Prof. Sudipta Mukhopadhyay	IIT Kharagpur	12 Weeks	20-Jan-25
3	Communication Networks	Prof. Goutam Das	IIT Kharagpur	12 Weeks	20-Jan-25
4	Natural Language Processing	Prof. Pawan Goyal	IIT Kharagpur	12 Weeks	20-Jan-25

Neha
23/12/24
NPTEL Coordinator

Dr Neha Nema
Assistant Professor
EE Dept

Shailja
23/12/24
HOD

Dr Shailja Shukla
EE Dept

Jabalpur Engineering College, Jabalpur
Department of Electronics & Telecommunication Engineering

Notice

Date: 25.11.24

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 2025.

List of NPTEL Courses for Session: January-June 2025

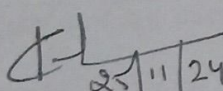
B. Tech IV Semester

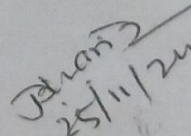
S. No.	Course Name	Discipline	Duration	Instructor	Start Date
1	Semiconductor Devices for Next Generation Field Effect Transistors (More than Moore): A Physics Perspective	Electrical and Electronics Engineering	12 Weeks	Prof. Sudeb Dasgupta (IIT Roorkee)	20 th January 2025
2	EMI /EMC and Signal Integrity: Principles, Techniques and Applications	Electrical and Electronics Engineering	12 Weeks	Prof. Amitabha Bhattacharya (IIT Kharagpur)	20 th January 2025
3	Artificial Intelligence: Knowledge Representation And Reasoning	Computer Science and Engineering	12 Weeks	Prof. Deepak Khemani (IIT Madras)	20 th January 2025
4	Deep Learning	Computer Science and Engineering	12 Weeks	Prof. Prabir Kumar Biswas (IIT Kharagpur)	20 th January 2025
5	Evolution of Air Interface towards 5G	Electrical and Electronics Engineering	8 Weeks	Prof. Suvra Sekhar Das (IIT Kharagpur)	20 th January 2025
6	Design and analysis of algorithms	Computer Science and Engineering	8 Weeks	Prof. Madhavan Mukund (Chennai Mathematical Institute, CMI)	20 th January 2025

B. Tech VI Semester

S. No.	Course Name	Discipline	Duration	Instructor	Start Date
1	Semiconductor device modeling and Simulation	Electrical and Electronics Engineering	12 Weeks	Prof. Vivek Dixit (IIT Kharagpur)	20 th January 2025
2	Analog IC Design	Electrical and Electronics Engineering	12 Weeks	Prof. Aniruddhan.S (IIT Madras)	20 th January 2025
3	GPU Architectures and Programming	Computer Science and Engineering	12 Weeks	Prof. Soumyajit Dey (IIT Kharagpur)	20 th January 2025
4	Embedded Systems Design	Computer Science and Engineering	12 Weeks	Prof. Anupam Basu (IIT Kharagpur)	20 th January 2025
5	Fundamentals of MIMO Wireless Communication	Electrical and Electronics Engineering	8 Weeks	Prof. Suvra Sekhar Das (IIT Kharagpur)	20 th January 2025
6	Introduction To Soft Computing	Computer Science and Engineering	8 Weeks	Prof. Debasis Samanta (IIT Kharagpur)	20 th January 2025

Note: Enrollment for the above courses will be closed on 27th January 2025.


25/11/24.
Prof-in-charge
(Dr. Kanchan Cecil)
(E & TC Engg.)


25/11/24
H.O. D
(E & TC Engg.)

Copy to : NPTEL Coordinator, JGC, JBP, (M.P)

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

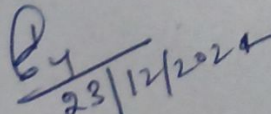
Session Jan-June 2025

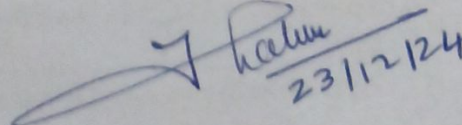
List of courses for 4th and 6th Semester students.

(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	20/01/2025
2.	Advanced Graph Theory	IIT Patna	8	20/01/2025
3.	Advanced Computer Networks	IIT Indore, IIT Gandhi nagar	12	20/01/2025
4.	Affective Computing	IIIT Delhi, IIT Ropar	12	20/01/2025
5.	Algorithms in Computational Biology and Sequence Analysis	IISc Bangalore	12	20/01/2025
6.	Blockchain and its Applications	IIT Kharagpur	12	20/01/2025
7.	Circuit Complexity Theory	IIT Kanpur	12	20/01/2025
8.	Computational Number Theory and Algebra	IIT Kanpur	12	20/01/2025
9.	Data Science for Engineers	IIT Madras	8	20/01/2025
10.	Design and Engineering of Computer Systems	IIT Bombay	8	20/01/2025
11.	Digital Design with Verilog	IIT Guwahati	12	20/01/2025
12.	Edge Computing	IIT Patna	8	20/01/2025
13.	Embedded System Design with ARM	IIT Kharagpur	8	20/01/2025
14.	Embedded Systems Design	IIT Kharagpur	12	20/01/2025
15.	Foundation of Cloud IoT Edge ML	IIT Patna	8	17/02/2025
16.	Foundations of Cyber Physical Systems	IIIT Kharagpur	12	20/01/2025
17.	GPU Architectures And Programming	IIT Kharagpur	12	20/01/2025
18.	Getting Started with Competitive Programming	IIT Gandhinagar	12	20/01/2025
19.	Human Computer Interaction	IIIT Delhi	12	20/01/2025
20.	Introduction To Haskell Programming	CMI	8	20/01/2025

21.	Introduction To Industry 4.0 And Industrial Internet Of Things	IIT Kharagpur	12	20/01/2025
22.	Introduction To Soft Computing	IIT Kharagpur	8	20/01/2025
23.	Introduction to Embedded System Design	Netaji Subhas University of Technology, IIT Jammu	12	20/01/2025
24.	Large Applications Practicum	IIT Mandi	4	17/02/2025
25.	Linear programming and its applications to computer science	IIT Kanpur	8	17/02/2025
26.	Matlab Programming for Numerical Computation	IIT madras	12	20/01/2025
27.	Natural Language Processing	IIT Kharagpur	12	20/01/2025
28.	Optimisation for Machine Learning: Theory and Implementation	IIIT Delhi	8	20/01/2025
29.	Parallel Computer Architecture	IIT Guwahati	12	20/01/2025
30.	Privacy and Security in Online Social Media	IIIT Hyderabad	12	20/01/2025
31.	Quantum Algorithms and Cryptography	IIT Madras	12	20/01/2025
32.	Reinforcement Learning	IIT Madras	12	20/01/2025
33.	Secure Computation: Part I	IIIT Bangalore	12	20/01/2025
34.	Social Networks	IIT Ropar	12	20/01/2025
35.	Software Testing	IIT Kharagpur	4	20/01/2025
36.	Systems and Usable Security	IIT Indore	4	20/01/2025
37.	User-centric Computing for Human-Computer Interaction	IIT Guwahati	8	20/01/2025


 NPTEL Co-ordinator (CSE)


 HOD (CSE)

Department of Mechatronics Engineering

Jabalpur Engineering College, Jabalpur MP

List of NPTEL Courses 4th Sem , Session: Dec(2024) - June(2025)

S No	Course Name	Duration	Instructor	Start Date	Exam Date
1	Introduction to Internet of Things	12 Weeks	Prof. Sudip Mishra	20-Jan-2025	26-Apr-2025
2	Thermodynamics	12 Weeks	S.R. Kale	20-Jan-2025	4-May-2025
3	Physics of Nanoscale Devices	12 Weeks	Prof. Vishvendra Singh Poonia	20-Jan-2025	3-May-2025
4	Kinametics Of Mechanisms and Machines	8 Weeks	Prof. Anirvan DasGupta	20-Jan-2025	23-Mar-2025
5	Mechatronics	8 Weeks	Prof. Pushparaj mani Pathak	17-Feb-2025	4-May-2025
6	Inspection and Quality Control in Manufacturing	4 Weeks	Prof. Kausik Pal	20-Jan-2025	23-Mar-2025

List of NPTEL Courses 6th Sem , Session: Dec(2024) - June(2025)

S No	Course Name	Duration	Instructor	Start Date	Exam Date
1	Introduction to Industry 4.0 and industrial Internet of Things	12 Weeks	Prof. Sudip Mishra	20-Jan-2025	27-Apr-2025
2	Robotics: Basics and selected advanced concepts	12 Weeks	Prof. Ashtava Ghosal	20-Jan-2025	27-Apr-2025
3	Basics of Finite Element Analysis - II	8 Weeks	Prof. Nachiketa Tiwari	20-Jan-2025	22-Mar-2025
4	Basics of Finite Element Analysis and Electric Motor Drives	12 Weeks	Prof. Amit Jain, Prof. Avaniish Tripathi	20-Jan-2025	27-Apr-2025
5	EV - Vehicle Dynamics and Electric Motor Drives	4 Weeks	Prof. Sounak Kumar Choudhury	20-Jan-2025	23-Mar-2025
6	Manufacturing Automation	12 Weeks	Prof. Balaraman Ravindran	20-Jan-2025	4-May-2025
7	Reinforcement Learning	12 Weeks	Prof. M.K. bhuyan	20-Jan-2025	27-Apr-2025
8	Computer Vision and Image Processing -Fundamentals and applications	12 Weeks	Prof. M.K. bhuyan	20-Jan-2025	27-Apr-2025

HOD

Mechatronics Engineering

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. Enrollment for the above courses will be closed on 27th January 2025 till 5 PM.

List of NPTEL Courses for Session: Jan 2025-Apr 2025

B.Tech VI Semester

S.No	Course Name	Duration	Institution	Instructor/Prof. Incharge	Commencement Date
1	Advanced Computer Networks	12Weeks	IIT Indore IIT Gandhi Nagar	Prof. Neminath Hubballi Prof. Sameer Kulkarni	20-01-2025
2	Games and Information	12Weeks	IIT Bombay	Prof. Ankur A. Kulkarni	20-01-2025
3	Introduction to Large Language Models (LLMs)	12Weeks	IIT Delhi	Prof. Tanmoy Chakraborty Prof. Soumen Chakraborti	20-01-2025
4	Foundation of Cloud IoT Edge ML	8Weeks	IIT Patna	Prof. Rajiv Misra	20-01-2025
5	Introduction To Soft Computing	8 Weeks	IIT Kharagpur	Prof. Debasis Samanta	20-01-2025
6	Edge Computing	8 Weeks	IIT Patna	Prof. Rajiv Misra	20-01-2025
7	Software Testing	4Weeks	IIT Kharagpur	Prof. Rajib Mall	20-01-2025
8	Real Time Operating System	4Weeks	IIT Kharagpur	Prof. Rajib Mall	20-01-2025

B.Tech IV Semester

S.No	Course Name	Duration	Institution	Instructor/Prof. Incharge	Commencement Date
1	Artificial Intelligence: Knowledge Representation And Reasoning	12 Weeks	IIT Madras	Prof. Deepak Khemani	20-01-2025
2	Introduction To Industry 4.0 And Industrial Internet Of Things	12Weeks	IIT Kharagpur	Prof. Sudip Misra	20-01-2025
3	Blockchain and its Applications	12Weeks	IIT Kharagpur	Prof. Sandip Chakraborty Prof. Shamik Sural	20-01-2025
4	Advanced Graph Theory	8Weeks	IIT Patna	Prof. Rajiv Misra	20-01-2025
5	Design and Engineering of Computer Systems	8 Weeks	IIT Bombay	Prof. Mythili Vutukuru	20-01-2025
6	Information Security - 5 - Secure Systems Engineering	8 Weeks	IIT Madras	Prof. Chester Robeiro	20-01-2025
7	Python for Data Science	4Weeks	IIT Kharagpur	Prof. Ragunathan Rengasamy	20-01-2025
8	Systems and Usable Security	4Weeks	IIT Indore	Prof. Neminath Hubballi	20-01-2025

AL
6/12/24
HOD
AI & DS

Jabalpur Engineering College, Jabalpur
(Declared Autonomous by MP Govt., Affiliated to RGPV, Bhopal)
(AICTE Model Curriculum Based Scheme)
Bachelor of Technology (B.Tech.) VIII Semester (Information Technology)
Proposed NPTEL courses for July 2024-June 2025

W.E.F:- JULY 2024

S.No	Subject Code	Category Code	Subject Name	Maximum Marks Allotted					Contact Hours Per Week			Total Credits	
				Theory			Practical		Total Marks	L	T		P
				End. Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Lab Work					
1	IT-801M	PEC-III	Professional Elective Course-III	70	20	10		-	100	3	1	-	4
2	IT-802M	OEC-IV	Open Elective Course-IV	70	20	10		-	100	3	1	-	4
3	IT-803M	PI	Major Project /Internship	-	-	-	150	100	250	-	-	-	8
Total				140	40	20	150	100	450	6	2	16	16

Note: Students going for internship would have to opt MOOC/NPTEL subjects decided / listed by the HOD / Coordinator.

Professional Elective Course-III			
S.No.	Subject Code	Subject Name	
1	IT801M D	NPTEL-1	Natural Language Processing
2	IT801M E	NPTEL-2	Cryptography and Network Security
3	IT801M F	NPTEL-3	Artificial Intelligence: knowledge representation and reasoning

Open Elective Course-IV			
S.No.	Subject Code	Subject Name	
1	IT 802M D	NPTEL-4	Introduction to internet of Things
2	IT 802M E	NPTEL-5	Computer Vision
3	IT 802M F	NPTEL-6	Block chain and its application

HOD IT

H.O.D.

Jabalpur Engineering College
Jabalpur (M.P.)

Jabalpur Engineering College, Jabalpur

Department of Industrial & Production Engineering

Notice

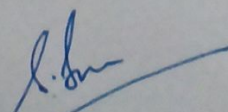
All the students of B. Tech (Industrial & Production Engineering) are informed that those students want to avail B. Tech Honor's degree they have to score additional 20 credits by SWAYAM/NPTEL/MooC online courses in addition to the Curriculum. He/She may Opt. maximum two additional courses (12 weeks) and one additional courses (8 weeks) in each respective semester.

Following NPTEL courses are recommended for the students of 4th, 6th ~~and 8th~~ semesters. In order to earn extra credits selections of courses must be strictly done among the approved list itself for the session January-June 2025.

List of NPTEL Courses for Session: January-June 2025

B. Tech All Semesters

S. No.	Course Name	Discipline	Duration	Instructor	Start Date
1	Mechanical Measurement System	Mechanical Engineering	08 Weeks	Prof. Ravi Kumar IIT Roorkee	27 January 2025
2	Product Design and Manufacturing	Mechanical Engineering	12 Weeks	Prof. J. Ramkumar Prof. Amandeep Singh IIT Kanpur	27 January 2025
3	Noise Management & Control	Mechanical Engineering	12 Weeks	Prof. Nachiketa Tiwari IIT Kanpur	27 January 2025
4	Carbon Materials and Manufacturing	Metallurgy and Material science & Mining Engineering	12 Weeks	Prof. Swati Sharma IIT Mandi	27 January 2025
5	Fundamentals of Automotive Systems	Mechanical Engineering	12 Weeks	Prof. C. S. Shankar Ram IIT Madras	27 January 2025
6	Finite element modeling of welding processes	Mechanical Engineering	12 Weeks	Prof. Swarup Bag IIT Guwahati	27 January 2025
7	Economic Growth and Development	Humanities and Social Sciences	08 Weeks	Prof. Rajshree Bedamatta IIT Guwahati	27 January 2025
8	Mechanical Behaviour of Materials (Part - 1)	Mechanical Engineering	12 Weeks	Prof. Shashank Shekhar IIT Kanpur	27 January 2025
9	Introduction To Mechanical Micro Machining	Mechanical Engineering	12 Weeks	Prof. Ajay M Sidpara IIT Kharagpur	27 January 2025
10	Nonlinear Vibration	Mechanical Engineering	12 Weeks	Prof. S. K Dwivedy IIT Guwahati	27 January 2025
11	IC Engines and Gas Turbines	Mechanical Engineering	12 Weeks	Dr. Vinayak Kulkarni, Prof. Pranab K. Mondal IIT Guwahati	27 January 2025



12	Fundamentals of combustion for propulsion	Mechanical Engineering	12 Weeks	Prof. S Varunkumar IIT Madras	27 January 2025
13	Education for Sustainable Development	Humanities and Social Sciences	12 Weeks	Prof. Atasi Mohanty IIT Kharagpur	27 January 2025
14	Material Characterization	Metallurgy and Material science & Mining Engineering	12 Weeks	Prof. Sankaran.S IIT Madras	27 January 2025
15	Introduction To Mineral Processing	Metallurgy and Material science & Mining Engineering	12 Weeks	Prof. Arun Kumar Majumder IIT Kharagpur	27 January 2025
16	Dealing with materials data : collection analysis and interpretation	Metallurgy and Material science & Mining Engineering	12 Weeks	Prof. M P Gururajan Prof. Hina Gokhale IIT Bombay	27 January 2025
17	An Introduction to Microeconomics	Humanities and Social Sciences	12 Weeks	Prof. Vimal Kumar IIT Kanpur	27 January 2025
18	Supply Chain Digitization	Humanities and Social Sciences	12 Weeks	Prof. Priyanka Verma, Prof. Sushmita Narayana, Prof. Debabrata Das IIT Bombay	27 January 2025
19	Textile Product Design and Development	Textile Engineering	12 Weeks	Prof. R Chattopadhyay IIT Delhi	27 January 2025
20	Industrial Wastewater Treatment	Civil Engineering	12 Weeks	Prof Alok Sinha , Prof S K Gupta IT-ISM Dhanbad	27 January 2025

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(IP Department)