IIITDM Jabalpur

Electronics and Communication Engineering

COURSE CURRICULUM(ELECTRONICS AND COMMUNICATION ENGINEERING-1st year and 2nd year							
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
NS1 (3L+2T, 4C) Mathematics I	NS3 (3L+2T, 4C) Mathematics II	ES3 (2L+3P, 3C) DS101 Engineering Graphics	DC4: (3L+2P=4C) Digital Signal Processing	DS2 (1L+6P, 4C) DS302 Engineering Design	MN2 (8P, 4C) Fabrication Project	OE07 (3L, 3C)	Project-based Internship (16C)
NS2 (3L+1T+2P, 4C) Physics I	NS4 (3L+1T+2P, 4C) NS104 Physics II	DC1:(3L+2P,4C) Digital Electronics and Microprocessor Interfacing	DC5: (3L+2P=4C) Control Systems	DC8: (3L=3C) VLSI System Design (VLSI IC desien, logic synthesis using VHDL)	OE04 (3L, 3C)	OE08 (3L, 3C)	**OR**
HS1 (1L+2T, 2C) HS101 Effective Communications OR HS2 Alternative	HS3 (2L+2T, 3C) HS102 Indian Culture, Ethics and Human Values	DC2a: (2L=2C) Principle of Analog Communications + DC2a: (2L=2C) Network Theory(Analysis and synthesis)	DC6a: (2L=2C) AI and its application + DC6b: (2L=2C) Architecture of Cellular Systems(1G-5G)	DC9: (3L=3C) Fundamentas of Electromagnetic Theory	OE05 (3L, 3C)	OE09(3L, 3C)	BTP(10C) + 2 Oes(3-0-03)(Total: 6C)
ES1 (2L+3P, 3C) Introduction to Programming	ES4 (3L+2P, 4C) ES101 Basic Electronics	DC3a: (2L=2C) Electronics Devices and Circuits + DC3b:(2L=2C) Instrumentation and Measurement	DC7: (3L+2L=4C) Analog Integrated Circuit	DC8: (3L=3C) digital Communications	OE06 (3L, 3C)	OE10 (3L, 3C)	(PBI: Optional in 7thsemester)
Prof C1/ SM1 (1L, 1C) EC101 Introduction to Profession	ES5 (2L+2P, 3C) IT102 Data Structure	OE01 (3C)	OE02 (3C)	OE03 (3C)	HS3(2L, 2C) Ecology and Envirment	OE11 (3L, 3C)	
		NS5 (2L, 2C) Biology for Engineers					
		IT Workshop I (2P, 2 C) Matlab and Simulink,Pspice	IT Workshop II (2P, 2 C) CST, Labview	IT Workshop III (2P, 2 C) Tanner Tool(Tspice), VHDL and Verilog	IT Workshop IV (2P, 2 C) Cadence, Silvaco, Xylink,Sentaurus Tcad		
ES2 Innovation Theory and Practice (1L+2P, 2C)		PR1 Discipline Project (2C)	PR2 Discipline Project (2C) (optional)				
PC1 Professional Development Course (1C)	PC1 Professional Development Course (1C)			PC3 Professional Development Course (1C)		PC4 Professional Development Course (1C)	
14	21	22	24	18	18	16	16
							149
The Electives are floated as per report of different groups like Mckensy and different industry. It is also consider the feedback of placement cell.							

OPEN ELECTIVES

OPEN ELECTIVES to UG		PG Electives Open to UG		PhD Elective Open to PG/UG	
Biomedical Instrumentation	Optical Communication	Random Variables and Processes	Application of Signal and Image proceessing	Advanced Signal Processing	Fuzzy logic and Neural Networks
Advanced Filter Design and its application	RF and Microwave Engineering	Advanced antena theory design	Radar system and Communication	Advanced Time frequency analysis	RF and Microwave Active Circuits
Radio Frequency Integrated Circuits Design	Satelite communication	Digital VLSI design	Electrical Drives and Control	Advanced Engineering Electromagnetics	Advanced Semiconductor Devices
Computer Networks	Time frequency analysis	Information theory and coading	VLSI Test and Testibility	VLSI Device Modelling	Selected Topics in Wireless Communication
Physics of Semiconductor Devices	VLSI Test and Testability	Power System Engineering	RF MEMS design	Electromagnetics Interference and Compatibility	Optoelectronics Devices and Application
Introduction to machine learning	Antenna Theory & Design	Adaptive technology development	Brain Computer Interface	Simulation of Modern Power Systems	Multidimensional Signal Processing
Image Processing	Wavelet and Filter Bank	Autonomus vehicle and robotics	Internet of Things		
Advanced Control Systems	Wireless Communications	Smart grid and future of energy sector	Energy storage technologies		
IC Fabrication	CMOS Memory Design	Electric vehicles and charging infrastructure	Optimization Techniques for Digital VLSI Design		
Nano photonics and plasmonics	Power Electronics	VLSI Physical Design	Foundations of Cognitive Robotics		
Photovoltaics; fundamentals and application	Introduction to deep learning				
Sensors and Actuators	Multimedia processing				
Numerical Techniques in Electromagnetics	Computer Vision				
Digital System Design	Industrial Microwave and Communication				
Detection and Estimation Theory	Mixed-Mode Circuit Design				

ABOUT

Home (https://www.iiitdmj.ac.in/)
PBI (pbi.iiitdmj.ac.in)
RTI (https://www.iiitdmj.ac.in/rti.php)
IIIT Act (https://www.iiitdmj.ac.in/downloads/IIIT%20Act%2030_of_2014.pdf)
Statutes (https://www.iiitdmj.ac.in/downloads/The Gazette publication of Statutes of IIITDM Jabalpur.pdf)
Maps & Directions (https://www.iiitdmj.ac.in/maps_direction.php)
Taxi Services (https://www.iiitdmj.ac.in/downloads/taxi%20services.pdf)
Bus Time Table (https://www.iiitdmj.ac.in/downloads/time table Detailed.pdf)
Organizational Chart (https://www.iiitdmj.ac.in/downloads/Organizational Chart.pdf)
Recruitment and Promotion Norms-2016 (https://www.iiitdmj.ac.in/downloads/RPN-2016(1).pdf)

IMPORTANT LINKS

Electronics and ICT Academy (ict.iiitdmj.ac.in)
Study in India (https://studyinindia.gov.in)
Annual Report (https://www.iiitdmj.ac.in/annual_report.php)
Annual Account (https://www.iiitdmj.ac.in/annual_account.php)
World e-book library (https://community.worldlibrary.in/?Affiliatikey=NDL-ZY1239)
Consortium for Educational Communication(CEC) (https://cec.nic.in/Pages/Home.aspx)
National Academic Depository(NAD) (https://nad.gov.in/index.html)
Building Materials & Technology Promotion Council(BMTPC) (https://bmtpc.org/topics.aspx?mid=56&Mid1=180)
Intellectual Property Policy(IPR) (https://www.iiitdmj.ac.in/downloads/IPR Policy Final V1 16_6_2020.pdf)
Equal opportunity policy for persons with disabilities (https://www.iiitdmj.ac.in/downloads/Equal_Opportunity Policy_IIITDM
Jabalpur.pdf)
Accessibility (accessibility.php)
Asi@Connect (https://www.iiitdmj.ac.in/asia-connect.iiitdmj.ac.in/)
Visvesvaraya PhD Scheme portal (https://phd.dic.gov.in/)

OTHERS

SC/ST and Minority Cell (https://www.iiitdmj.ac.in/STSCCell/)
Women Cell (https://www.iiitdmj.ac.in/womencell/index.html)
Internal Complaints Committee of the Institute (https://www.iiitdmj.ac.in/downloads/Internal Complaints Committee of the
Institute-2429-31-jan-2024.pdf)
Grievance Redressal Cell (https://www.iiitdmj.ac.in/grievance_cell.php)
Scholarship (scholarship.php)
Anti-Ragging Committee and Squad (https://www.iiitdmj.ac.in/downloads/Anti-Ragging-Committee-and-Squad-2024.pdf)
Revista (revista.iiitdmj.ac.in)
Fit India (https://www.iiitdmj.ac.in/fitindia.iiitdmj.ac.in/Home.html)
Azadi Ka Amrit Mahotsava (AKAM) 2022 (https://www.iiitdmj.ac.in/AKAM.php)
Contacts (https://www.iiitdmj.ac.in/contact.php)
Press Releases (https://www.iiitdmj.ac.in/press-releases.php)
Closed   Holiday   2024   (https://www.iiitdmj.ac.in/downloads/Closed-Holiday-2024.pdf) | 2025
(https://www.iiitdmj.ac.in/downloads/Closed-Holiday-2025.pdf)
Restricted   Holiday   2024   (https://www.iiitdmj.ac.in/downloads/Restricted-Holiday-2024.pdf) | 2025
(https://www.iiitdmj.ac.in/downloads/RH-2025.pdf)

CONTACT US

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Phone Directory (https://www.iiitdmj.ac.in/downloads/IIITDMJ%20Telephone%20Directory.pdf)

(https://twitter.com/iiitdmjbp)   (https://www.facebook.com/iiitdm.jbp/)
(https://www.youtube.com/channel/UCODKL--xMCqXIK31cRdOWOw) (https://www.instagram.com/iiitdm_jabalpur/)
(https://www.linkedin.com/in/iiitdm-jabalpur/)

Moodle E-Learning Portal (https://moodle.iiitdmj.ac.in/)

ERP Faculty Login (https://iiitdm.iweb.ltd/)

प्रशासनिक शब्दबोध

स्वीकार्य
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