

JNTUH eLSDM - Version 2.0 - List of Subjects and eLABs - Branches: ECE, EEE, Mech., CSE, IT			
B.Tech. ECE - R13 - I, II & III Year & R09 - IV Year			
S.No.	Subjects	Availability	
		Status	No. of Units
I Year			
1	English	Not Applicable	
2	Mathematics - I	Available	5
3	Mathematical Methods	Available	5
4	Engineering Physics	Available	5
5	Engineering Chemistry	Available	5
6	Computer Programming	Available	5
7	Engineering Drawing	Available	5
8	Engineering Mechanics	Available	5
9	Computer Programming Lab	Available	
10	Engineering Chemistry and Physics Lab	Available	
11	English Language Communication Skills Lab	Not Applicable	
12	IT Workshop / Engineering Workshop	Not Applicable	
II Year - Semester I			
1	Mathematics – III	Available	5
2	Probability Theory & Stochastic Processes	Available	5
3	Switching Theory and Logic Design	Available	5
4	Electrical Circuits	Available	5
5	Electronic Devices and Circuits	Available	5
6	Signals & Systems	Available	5
7	Electronic Devices and Circuits Lab	Available	
8	Basic Simulation Lab	Available	
II Year - Semester II			
1	Principles of Electrical Engineering	Available	5
2	Electronic Circuit Analysis	Available	5
3	Pulse and Digital Circuits	Available	5
4	Environmental Studies	Available	5
5	Electromagnetic Theory and Transmission Lines	Available	5
6	Digital Design using Verilog HDL	Not Available	
7	Electrical Technology Lab	Available	
8	Electronic Circuit and Pulse Circuits Lab	Available	
III Year - Semester I			
1	Control Systems Engineering	Available	5
2	Computer Organization and Operating systems	Available	5
3	Antennas and Wave Propagation	Available	5
4	Electronic Measurements and Instrumentation	Available	5
5	Analog Communications	Available	5
6	Linear and Digital IC Applications	Available	5
7	Analog Communications Lab	Available	
8	IC Applications and HDL Simulation Lab	Available	
III Year - Semester II			
1	Managerial Economics & Financial Analysis	Available	5
2	Intellectual Property Rights-Open Elective	Available	5
3	Digital Communications	Available	5

4	Microprocessors & Microcontrollers	Available	5
5	Digital Signal Processing	Available	5
6	VLSI Design	Available	5
7	Microprocessors & Microcontrollers Lab	Available	
8	Digital Signal Processing Lab	Available	
IV Year - Semester I			
1	Management Science	Available	5
2	VLSI Design	Available	5
3	Microwave Engineering	Available	8
4	Computer Networks	Available	5
ELECTIVE-II			
5	Optical Communications	Available	8
6	e-CAD and VLSI Lab	Available	
7	Microwave Engg and Digital Communications Lab	Available	
IV Year - Semester II			
ELECTIVE-III			
1	Cellular and Mobile Communications	Available	8
ELECTIVE-IV			
2	Radar Systems	Available	7
B.Tech. EEE - R13 - I, II & III Year & R09 - IV Year			
S.No.	Subjects	Availability	
I Year		Status	No. of Units
1	English	Not Applicable	
2	Mathematics - I	Available	5
3	Mathematical Methods	Available	5
4	Engineering Physics	Available	5
5	Engineering Chemistry	Available	5
6	Computer Programming	Available	5
7	Engineering Drawing	Available	5
8	Engineering Mechanics	Available	5
9	Computer Programming Lab	Available	
10	Engineering Chemistry and Physics Lab	Available	
11	English Language Communication Skills Lab	Not Applicable	
12	IT Workshop / Engineering Workshop	Not Applicable	
II Year - Semester I			
1	Mathematics – III	Available	5
2	Fluid Mechanics & Hydraulic Machinery	Available	5
3	Electronic Devices and Circuits	Available	5
4	Electrical Circuits	Available	5
5	Electromagnetic Fields	Available	5
6	Electrical Machines - I	Available	5
7	Fluid Mechanics & Hydraulic Machinery Lab	Available	
8	Electronic Devices & Circuit Lab	Available	
II Year - Semester II			
1	Managerial Economics & Financial Analysis	Available	5
2	Power Systems - I	Available	5

3	Electronic Circuits	Available	5
4	Switching Theory and Logic Design	Available	5
5	Network Theory	Available	5
6	Electrical Machines - II	Available	5
7	Electrical Machines Lab -I	Available	
8	Electrical Circuits and Simulation Lab	Available	
III Year - Semester I			
1	IC Applications	Available	5
2	Management Science	Available	5
3	Power Systems - II	Available	5
4	Control Systems	Available	5
5	Power Electronics	Available	5
6	Electrical Machines - III	Available	5
7	Electrical Machines Lab - II	Available	
8	Advanced Communication skills lab	Available	
III Year - Semester II			
1	Electrical and Electronics Instrumentation	Available	5
2	Static Drives	Available	5
3	Computer Methods in Power Systems	Available	5
4	Microprocessors and interfacing Devices	Available	5
5	Environmental Studies	Available	5
6	Intellectual property Rights-Open Elective	Available	5
7	Control systems and Simulation Lab	Available	
8	Power Electronics and Simulation Lab	Available	
IV Year - Semester I			
1	Switch Gear & Protection	Available	8
2	Utilization of Electrical Energy	Available	8
3	Instrumentation	Available	8
4	Power System Operation & Control	Available	8
	Elective - I		
5	High Voltage Engineering	Available	8
6	Digital Control Systems	Available	8
7	Microprocessors & Microcontrollers Lab	Available	
8	Electrical Measurements Lab	Available	
IV Year - Semester II			
1	HVDC Transmission	Available	8
	Elective -IV		
2	Computer Systems Organization	Available	8
B.Tech. MECH - R13 - I , II & III Year & R09 - IV Year			
S.No.	Subjects	Availability	
	I Year	Status	No. of Units
1	English	Not Applicable	
2	Mathematics - I	Available	5
3	Mathematical Methods	Available	5
4	Engineering Physics	Available	5
5	Engineering Chemistry	Available	5

6	Computer Programming	Available	5
7	Engineering Drawing	Available	5
8	Engineering Mechanics	Available	5
9	Computer Programming Lab	Available	
10	Engineering Chemistry and Physics Lab	Available	
11	English Language Communication Skills Lab	Not Applicable	
12	IT Workshop / Engineering Workshop	Not Applicable	
II Year - Semester I			
1	Environmental Studies	Available	5
2	Probability and Statistics	Available	2
3	Electrical and Electronics Engineering	Available	5
4	Mechanics of Solids	Available	5
5	Thermodynamics	Available	5
6	Metallurgy and Material Science	Available	5
7	Electrical and Electronics Engineering Lab	Available	
8	Metallurgy and Mechanics of Solids Lab	Available	
II Year - Semester II			
1	Production Technology	Available	5
2	Kinematics of Machinery	Available	5
3	Thermal Engineering - I	Available	5
4	Mechanics of Fluids and Hydraulic Machines	Available	5
5	Machine Drawing	Available	5
6	Mathematics - II	Available	5
7	Production Technology Lab	Available	
8	Mechanics of Fluids and Hydraulic Machines Lab	Available	
III Year - Semester I			
1	Managerial Economics and Financial Analysis	Available	5
2	Engineering Metrology	Available	5
3	Dynamics of Machinery	Available	5
4	Machine Tools	Available	5
5	Design of Machine Members - I	Available	5
6	Thermal Engineering-II	Available	5
7	Machine Tools and Metrology Lab	Available	
8	Thermal Engineering Lab	Available	
III Year - Semester II			
1	Automobile Engineering	Available	5
2	Finite element Methods	Available	5
3	Refrigeration and Air Conditioning	Available	5
4	Design of Machine Members - II	Available	5
5	Heat Transfer	Available	5
6	Intellectual Property Rights-Open Elective	Available	5
7	Heat Transfer Lab	Available	
8	Advanced English Communication Skills Lab	Not Applicable	
IV Year - Semester I			
1	Operations Research	Available	8
2	Power Plant Engineering	Available	8
3	CAD/CAM	Available	8

4	Instrumentation and Control Systems	Available	8
	ELECTIVE - I		
5	Robotics	Available	8
	ELECTIVE - II		
6	Unconventional Machining Processes	Available	8
7	Computer Aided Design & Manufacturing Lab	Available	
8	Production Drawing Practice and Instrumentation Lab	Available	
IV Year - Semester II			
1	Production Planning and Control	Available	8
B.Tech. CSE - R13 - I, II & III Year & R09 - IV Year			
S.No.	Subjects	Availability	
	I Year	Status	No. of Units
1	English	Not Applicable	
2	Mathematics - I	Available	5
3	Mathematical Methods	Available	5
4	Engineering Physics	Available	5
5	Engineering Chemistry	Available	5
6	Computer Programming	Available	5
7	Engineering Drawing	Available	5
8	Engineering Mechanics	Available	5
9	Computer Programming Lab	Available	
10	Engineering Chemistry and Physics Lab	Available	
11	English Language Communication Skills Lab	Not Applicable	
12	IT Workshop / Engineering Workshop	Not Applicable	
II Year - Semester I			
1	Probability and Statistics	Available	2
2	Mathematical Foundations of Computer Science	Available	5
3	Data Structures	Available	5
4	Digital Logic Design	Available	5
5	Electronic Devices and Circuits	Available	5
6	Basic Electrical Engineering	Available	5
7	Electrical and Electronics Lab	Available	
8	Data Structures Lab	Available	
II Year - Semester II			
1	Computer Organization	Not Available	
2	Database Management Systems	Available	5
3	Java Programming	Not Available	
4	Environmental Studies	Available	5
5	Formal Languages and Automata Theory	Available	5
6	Design and Analysis of Algorithms	Available	5
7	Java Programming Lab	Not Available	
8	Database Management Systems Lab	Available	
III Year - Semester I			
1	Principles of programming Languages	Available	5
2	Software Engineering	Available	5
3	Compiler Design	Available	5

4	Operating Systems	Available	5
5	Computer Networks	Available	5
6	Operating Systems Lab	Available	
7	Compiler Design Lab	Not Available	
III Year - Semester II			
1	Distributed Systems	Available	5
2	Information Security	Available	5
3	Object Oriented Analysis and Design	Available	5
4	Software testing Methodologies	Available	5
5	Managerial Economics and Financial Analysis	Available	5
6	Web Technologies	Available	5
7	Casetools and Web Technologies Lab	Available	
8	Advanced communication Skills Lab	Not Applicable	
IV Year - Semester I			
1	Linux Programming	Available	5
2	Software Testing Methodologies	Available	5
3	Data Warehousing and Data mining	Available	5
4	Computer Graphics	Available	8
5	Linux Programming and Data Mining Lab	Available	
6	Case Tools & Software Testing Lab	Available	
ELECTIVE - I			
7	Cloud Computing	Available	8
IV Year - Semester II			
1	Management Science	Available	5
ELECTIVE - III			
2	Web Services	Available	8
B.Tech. IT - R13 - I, II & III Year & R09 - IV Year			
S.No.	Subjects	Availability	
I Year		Status	No. of Units
1	English	Not Applicable	
2	Mathematics - I	Available	5
3	Mathematical Methods	Available	5
4	Engineering Physics	Available	5
5	Engineering Chemistry	Available	5
6	Computer Programming	Available	5
7	Engineering Drawing	Available	5
8	Engineering Mechanics	Available	5
9	Computer Programming Lab	Available	
10	Engineering Chemistry and Physics Lab	Available	
11	English Language Communication Skills Lab	Not Applicable	
12	IT Workshop / Engineering Workshop	Not Applicable	
II Year - Semester I			
1	Probability and Statistics	Available	2
2	Mathematical Foundations of Computer Science	Available	5
3	Data Structures	Available	5
4	Digital Logic Design and Computer Organization	Available	5

5	Electronic Devices and Circuits	Available	5
6	Basic Electrical Engineering	Available	5
7	Electrical and Electronics Lab	Available	
8	Data Structures Lab	Available	
II Year - Semester II			
1	Principles of Programming Languages	Available	5
2	Database Management Systems	Available	5
3	Java Programming	Not Available	
4	Environmental Studies	Available	5
5	Data Communication	Available	5
6	Design and Analysis of Algorithms	Available	5
7	Java Programming Lab	Not Available	
8	Database Management Systems Lab	Available	
III Year - Semester I			
1	Automata and Compiler Design	Available	5
2	Linux Programming	Available	5
3	Software Engineering	Available	5
4	Operating Systems	Available	5
5	Computer Networks	Available	5
6	Managerial Economics and Financial Analysis	Available	5
7	Operating Systems Lab	Available	
8	Computer Networks Lab (Through Linux)	Available	
III Year - Semester II			
1	Web Technologies	Available	5
2	Intellectual Property Rights-Open Elective	Available	5
3	Object Oriented Analysis and Design	Available	5
4	Data Warehousing and Data Mining	Available	5
5	Software Testing Methodologies	Available	5
6	Cloud Computing	Not Available	
7	Data Mining and Web Technologies Lab	Available	
8	Advanced communication skills lab	Not Applicable	
IV Year - Semester I			
1	Software Testing Methodologies	Available	5
2	Object Oriented Analysis and Design	Available	5
3	Mobile Application Development	Available	8
4	VLSI Design	Available	5
5	Case Tools and Software Testing Lab	Available	
6	Mobile Application Development Lab	Available	
IV Year - Semester II			
1	Management Science	Available	5
	ELECTIVE - III		
2	Web Services	Available	8
	ELECTIVE - IV		
3	Cloud Computing	Available	8