

# Government Polytechnic Nawada(Bihar)

(Department of Electronics Engineering)

## Lecture Plan

Name of the Faculty	PRATEEK PRASAD VIDYARTHI
Email-id and Mobile number	<a href="mailto:prateekvidyarthi128@gmail.com">prateekvidyarthi128@gmail.com</a> , 8471043599
Semester/Branch	3 <sup>rd</sup> / Electronics Engg.
Subject Name(Subject Code)	Electronics Drawing and Drafting(1621304)
Lecture/Week	3 Periods/Week + 1 Term Work(3 Periods/Week) = 6 hrs per week

## Theory

Units	Week	Lecture Day	Topics	Methods of Teaching	Remarks
<b>1 Symbols</b>	1	1	Basics of Active and Passive Devices	PPT/Video/Hand written notes(PDF)	
		2	Symbols and references of commonly used active devices.	PPT/Video/Hand written notes(PDF)	
		3	Symbols and references of commonly used active devices contd.	PPT/Video/Hand written notes(PDF)	
		4	Symbols and references of commonly used passive devices	PPT/Video/Hand written notes(PDF)	
		5	Symbols and references of commonly used passive devices contd.	PPT/Video/Hand written notes(PDF)	
		6	<b>Assignment on symbols and references of active and passive devices (2 sheets)</b>	PDF/Google form	
<b>2 Construction View of commonly used components and devices</b>	2	1	Construction view of commonly used components and devices	PPT/Video/Hand written notes(PDF)	
		2	Relay construction view showing all mechanical parts	PPT/Video/Hand written notes(PDF)	
		3	Relay construction view showing all electrical parts	PPT/Video/Hand written notes(PDF)	
		4	Microphones construction view showing all mechanical parts	PPT/Video/Hand written notes(PDF)	
		5	Microphones construction view showing all electrical parts	PPT/Video/Hand written notes(PDF)	
		6	Speaker construction view showing all mechanical parts	PPT/Video/Hand written notes(PDF)	

	3	1	Microphones construction view showing all mechanical parts	PPT/Video/Hand written notes(PDF)	
		2	Microphones construction view showing all electrical parts	PPT/Video/Hand written notes(PDF)	
		3	Trimmers construction view showing all mechanical parts	PPT/Video/Hand written notes(PDF)	
		4	Trimmers construction view showing all electrical parts	PPT/Video/Hand written notes(PDF)	
		5	Garg Condensor construction view showing all mechanical and electrical parts	PPT/Video/Hand written notes(PDF)	
		6	<b>Assignment on construction view of commonly used components and devices</b>	PDF/Google form	
<b>3 Block Diagrams</b>	4	1	Overview of Block Diagrams of Electronic Devices and Circuits	PPT/Video/Hand written notes(PDF)	
		2	Block Diagrams of Analog Electronics Circuits	PPT/Video/Hand written notes(PDF)	
		3	Block Diagrams of Analog Electronics Circuits contd.	PPT/Video/Hand written notes(PDF)	
		4	Block Diagrams of Digital Electronics Circuits	PPT/Video/Hand written notes(PDF)	
		5	Block Diagrams of Digital Electronics Circuits contd.	PPT/Video/Hand written notes(PDF)	
		6	System diagrams of Electronics communication circuits	PPT/Video/Hand written notes(PDF)	
	5	1	System diagrams of Electronics communication circuits contd.	PPT/Video/Hand written notes(PDF)	
		2	Sub- System diagrams of Electronics Circuits	PPT/Video/Hand written notes(PDF)	
		3	Sub- System diagrams of Electronics Circuits contd.	PPT/Video/Hand written notes(PDF)	
		4	General Layout of AM Transmitter	PPT/Video/Hand written notes(PDF)	
		5	General Layout of AM Receiver	PPT/Video/Hand written notes(PDF)	
		6	General Layout of FM Transmitter	PPT/Video/Hand written notes(PDF)	
	6	1	General Layout of FM Receiver	PPT/Video/Hand written notes(PDF)	
		2	General Layout of TV Transmitter	PPT/Video/Hand written notes(PDF)	
		3	General Layout of TV Transmitter	PPT/Video/Hand written notes(PDF)	

		4	General layout of Computer	PPT/Video/Hand written notes(PDF)	
		5	General layout of other electronic devices e.g Calculator	PPT/Video/Hand written notes(PDF)	
		6	<b>Assignment on Block Diagrams</b>	PDF/Google form	
<b>4 Circuit Diagrams</b>	7	1	Circuit Diagram of Rectifier Circuit showing interconnections	PPT/Video/Hand written notes(PDF)	
		2	Circuit Diagram of Transistor biasing circuit	PPT/Video/Hand written notes(PDF)	
		3	Circuit Diagram of BJT as amplifier	PPT/Video/Hand written notes(PDF)	
		4	Circuit Diagram of FET amplifier	PPT/Video/Hand written notes(PDF)	
		5	Circuit Diagram of Operational Amplifier	PPT/Video/Hand written notes(PDF)	
		6	<b>Assignment on Circuits Diagrams</b>	PDF/Google form	
	8	1	Circuit Diagram of Monostable Circuit using BJT	PPT/Video/Hand written notes(PDF)	
		2	Circuit Diagram of Astable Circuit using BJT	PPT/Video/Hand written notes(PDF)	
		3	Filter and Attenuator circuit diagram	PPT/Video/Hand written notes(PDF)	
		4	Oscillator Circuit diagram	PPT/Video/Hand written notes(PDF)	
		5	Modulator Circuit diagram	PPT/Video/Hand written notes(PDF)	
		6	<b>Assignment on Circuits Diagrams</b>	PDF/Google form	
	9	1	Regulated DC power supply of non-linear wave shaping	PPT/Video/Hand written notes(PDF)	
		2	Detector Circuit diagram	PPT/Video/Hand written notes(PDF)	
		3	Wave shape generator	PPT/Video/Hand written notes(PDF)	
		4	Electric Machine and DC generator	PPT/Video/Hand written notes(PDF)	
		5	Inverter and converter circuit diagram	PPT/Video/Hand written notes(PDF)	
		6	<b>Assignment on Circuits Diagrams</b>	PDF/Google form	
10	1	Logic gate, Logic family, D/A converter, A/D converter circuit diagram	PPT/Video/Hand written notes(PDF)		
	2	Logic gate, Logic family, D/A converter, A/D converter circuit diagram contd..	PPT/Video/Hand written notes(PDF)		

<b>5 Logic Diagrams</b>		3	Elements of logic diagram	PPT/Video/Hand written notes(PDF)		
		4	Symbols of logic diagram	PPT/Video/Hand written notes(PDF)		
		5	Line work and labelling of logic gates	PPT/Video/Hand written notes(PDF)		
		6	Logic diagram of Shift Registers (SISO.SIPO,PIPO)	PPT/Video/Hand written notes(PDF)		
	11	1	Logic diagram of Counters (Asynchronous and Synchronous)	PPT/Video/Hand written notes(PDF)		
		2	Logic diagram of Multiplexers	PPT/Video/Hand written notes(PDF)		
		3	Logic diagram of De-Multiplexers	PPT/Video/Hand written notes(PDF)		
		4	Logic diagram of adder circuit	PPT/Video/Hand written notes(PDF)		
		5	Logic diagram of subtractor circuit	PPT/Video/Hand written notes(PDF)		
		6	Logic diagram of encoder circuit	PPT/Video/Hand written notes(PDF)		
	12	1	Logic diagram of decoder circuit	PPT/Video/Hand written notes(PDF)		
		2	<b>Assignment on Logic Diagrams</b>	PDF/Google form		
		3	Truth Tables of Combinational Circuits	PPT/Video/Hand written notes(PDF)		
		4	Truth Tables of Combinational Circuits contd...	PPT/Video/Hand written notes(PDF)		
		5	Truth Tables of Sequential Circuits	PPT/Video/Hand written notes(PDF)		
		6	Truth Tables of Sequential Circuits contd...	PPT/Video/Hand written notes(PDF)		
	<b>Unit 6 Outline Drawing</b>	13	1	Basics of Outline Drawing	PPT/Video/Hand written notes(PDF)	
			2	Outlining and Pin configuration of ICs	PPT/Video/Hand written notes(PDF)	
			3	Outlining and Pin configuration of ICs contd..	PPT/Video/Hand written notes(PDF)	
4			Outlining and Pin configuration of Semiconductor devices	PPT/Video/Hand written notes(PDF)		
5			Outlining and Pin configuration of Semiconductor devices	PPT/Video/Hand written notes(PDF)		
6			Electron Toys	PPT/Video/Hand written		

				notes(PDF)	
	14	1	Speakers	PPT/Video/Hand written notes(PDF)	
		2	Parts of Electric Machine and Winding of Stator and Rotor	PPT/Video/Hand written notes(PDF)	
		3	Parts of Electric Machine and Winding of Stator and Rotor contd.	PPT/Video/Hand written notes(PDF)	
		4	<b>Assignment on Outline Drawing</b>	PDF/Google form	
		5	Construction view of Relay Circuit, NPN Relay, Switch Circuit and PNP Relay Switch Circuit	PPT/Video/Hand written notes(PDF)	
		6	Sketch of NPN Darlington Relay switch circuit	PPT/Video/Hand written notes(PDF)	
<b>Unit 7 Sketch and Pictorial views</b>	15	1	Sketches of commonly used Electronic Devices and mechanical parts contd...	PPT/Video/Hand written notes(PDF)	
		2	Pictorial views of commonly used Electronic Devices e.g Microphone	PPT/Video/Hand written notes(PDF)	
		3	Pictorial views of commonly used Electronic Devices e.g. Moving coil microphone, crystal microphone	PPT/Video/Hand written notes(PDF)	
		4	<b>Assignment on sketch and pictorial views</b>	PDF/Google form	
		5	Basics of Wiring Diagram	PPT/Video/Hand written notes(PDF)	
		6	Wiring diagram of commonly used circuits	PPT/Video/Hand written notes(PDF)	
<b>Unit 8 Wiring Diagram</b>	16	1	Wiring diagram of commonly used circuits contd...	PPT/Video/Hand written notes(PDF)	
		2	Preparation of layouts	PPT/Video/Hand written notes(PDF)	
		3	Preparation of layouts contd...	PPT/Video/Hand written notes(PDF)	
		4	Wire Folds	PPT/Video/Hand written notes(PDF)	
		5	Wire Folds contd...	PPT/Video/Hand written notes(PDF)	
		6	Wire Folds contd...	PPT/Video/Hand written notes(PDF)	
	17	1	Representation of Joints in different ways	PPT/Video/Hand written notes(PDF)	
		2	Representation of Joints in different ways contd...	PPT/Video/Hand written notes(PDF)	
		3	Representation of Joints in different ways contd...	PPT/Video/Hand written notes(PDF)	
		4	Representation of Joints in different ways contd...	PPT/Video/Hand written	

				notes(PDF)	
		5	<b>Assignment on wiring diagram</b>	PDF/Google form	
		6	Introduction to PCB drawing	PPT/Video/Hand written notes(PDF)	
<b>Unit 9 PCB drawing</b>	18	1	Advantages of PCB drawing	PPT/Video/Hand written notes(PDF)	
		2	Drawing documents for PCB	PPT/Video/Hand written notes(PDF)	
		3	Drawing documents for PCB contd...	PPT/Video/Hand written notes(PDF)	
		4	Schematic Diagram using PCB	PPT/Video/Hand written notes(PDF)	
		5	Schematic Diagram using PCB contd...	PPT/Video/Hand written notes(PDF)	
		6	Art work	PPT/Video/Hand written notes(PDF)	
	19	1	Art work contd...	PPT/Video/Hand written notes(PDF)	
		2	Stencil Drawing	PPT/Video/Hand written notes(PDF)	
		3	Stencil Drawing contd...	PPT/Video/Hand written notes(PDF)	
		4	Marking Assembly Drawing (Pictorial and Part List)	PPT/Video/Hand written notes(PDF)	
		5	Marking Assembly Drawing (Pictorial and Part List)	PPT/Video/Hand written notes(PDF)	
		6	<b>Assignment on PCB drawing</b>	PDF/Google form	
<b>Unit 10 Nomography</b>	20	1	Introduction to Nomography	PPT/Video/Hand written notes(PDF)	
		2	Different parameters of Nomography	PPT/Video/Hand written notes(PDF)	
		3	Measurements used in Nomography	PPT/Video/Hand written notes(PDF)	
		4	Nomography of differet electrical variations in realistic circuits	PPT/Video/Hand written notes(PDF)	
		5	Nomography of differet electrical variations in realistic circuits contd..	PPT/Video/Hand written notes(PDF)	
		6	<b>Assignment on Nomography</b>	PDF/Google form	
<b>Total</b>		<b>120</b>			