SCHEME OF INSTRUCTION & EXAMINATION (Semester System)

For

Electronics and InstrumentationEngineering

Effective From the Academic Year2018-2019(R18 Regulations)

First Year B. Tech (SEMESTER – I)

S.No	Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
			L	T	P	Total	CIE	SEE	Total Marks	
1	18MA001	Linear Algebra and Ordinary Differential Equations	3	1	0	4	50	50	100	3
2	18PH001	waves and optics (Physics - 1)	4	1	0	5	50	50	100	4
3	18CY001	Engineering Chemistry	4	0	0	4	50	50	100	3
4	18EL001	Communicative English	3	0	0	3	50	50	100	2
5	18MEL01	Engineering Graphics	2	0	4	6	50	50	100	3
6	18PHL01	Physics Lab	0	0	3	3	50	50	100	1
7	18ELL01	English communications and Skills laboratory	0	0	3	3	50	50	100	1
8	18MEL01	Workshop	0	0	3	3	50	50	100	1
		TOTAL	16	2	13	31	400	400	800	18

CIE: Continuous Internal Evaluation SEE: Semester End Examination

L: Lecture, T: Tutorial, P: Practical

SCHEME OF INSTRUCTION & EXAMINATION (Semester System)

For

Electronics and InstrumentationEngineering

Effective from the Academic Year2018-2019(R18 Regulations)

First Year B. Tech(SEMESTER – II)

S.No	Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
			L	T	P	Total	CIE	SEE	Total Marks	
1	18MA002	Numerical Methods and Advanced Calculus	4	0	0	4	50	50	100	3
2	18PH003	Semiconductor Physics and Nano Materials	4	0	0	4	50	50	100	3
3	18EI203	Instrumentation & Nanotechnology	4	0	0	4	50	50	100	3
4	18EE002	Basic Electrical Engineering	4	0	0	4	50	50	100	3
5	18CE001	Environmental Studies	3	0	0	3	50	50	100	2
6	18CS001	Programming for Problem Solving	4	0	0	4	50	50	100	3
7	18CYL01	Chemistry Lab	0	0	3	3	50	50	100	1
8	18EEL01	Basic Electrical Engineering Lab	0	0	3	3	50	50	100	1
9	18CSL01	Programming Lab	0	0	3	3	50	50	100	1
		TOTAL	23	0	9	32	450	450	900	20

CIE: Continuous Internal Evaluation SEE: Semester End Examination

L: Lecture, T: Tutorial, P: Practical

SCHEME OF INSTRUCTION & EXAMINATION (Semester System)
For
Electronics and InstrumentationEngineering
Effective From the Academic Year2018-2019(R18 Regulations)
Second Year B. Tech(SEMESTER – III)

S.No	Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
			L	T	P	Total	CIE	SEE	Total Marks	
1	18MA003	Probability and Statistics	3	1	0	4	50	50	100	3
2	18EI302	Electronic Devices Circuits	3	1	0	4	50	50	100	3
3	18EI303	Digital Electronics	3	1	0	4	50	50	100	3
4	18EI304	Network Theory	3	1	0	4	50	50	100	3
5	18ME001	Elements of Mechanical Engineering	4	0	0	4	50	50	100	3
6	18EI306	Professional Ethics and Human Values	3	0	0	3	50	50	100	2
7	18EIL31	Electronic Devices Lab	0	0	3	3	50	50	100	1
8	18EIL32	Digital Electronics Lab	0	0	3	3	50	50	100	1
9	18EIL 33	Simulation Lab (Net Works)	0	0	3	3	50	50	100	1
		TOTAL	**19**	**4**	**9**	**32**	**450**	**450**	**900**	**20**

CIE: Continuous Internal Evaluation SEE: Semester End Examination
L: Lecture T: Tutorial P: Practical

SCHEME OF INSTRUCTION & EXAMINATION (Semester System)
For
Electronics and InstrumentationEngineering
Effective From the Academic Year2018-2019(R18 Regulations)
Second Year B. Tech(SEMESTER – IV)

S.No	Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
			L	T	P	Total	CIE	SEE	Total Marks	
1	18MA004	Complex Analysis and Special functions	3	1	0	4	50	50	100	3
2	18EI402	Electrical & Electronic Measurements	4	1	0	4	50	50	100	4
3	18EI403	Signals & Systems	4	1	0	4	50	50	100	4
4	18EI404	Analog Electronic Circuits–1	4	1	0	4	50	50	100	4
5	18EL002	Technical English	3	0	0	3	50	50	100	2
6	18CE002	Biology for Engineers	3	0	0	4	50	50	100	2
7	18EIL41	Measurements Lab	0	0	3	3	50	50	100	1
8	18EIL42	Signals and Systems Lab	0	0	3	3	50	50	100	1
9	18EIL43	Analog Electronic Circuits Lab	0	0	3	3	50	50	100	1
		TOTAL	**21**	**4**	**9**	**34**	**450**	**450**	**900**	**22**

CIE: Continuous Internal Evaluation SEE: Semester End Examination
L: Lecture T: Tutorial P: Practical

MOOCS COURSE CREDITS - 2

SCHEME OF INSTRUCTION & EXAMINATION (Semester System)

For

Electronics and InstrumentationEngineering

Effective From the Academic Year2018-2019(R18 Regulations)

Third Year B. Tech(SEMESTER – V)

S.No	Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
			L	T	P	Total	CIE	SEE	Total Marks	
1	18EI501	Control Systems	4	1	0	5	50	50	100	4
2	18EI502	Transducers	3	1	0	4	50	50	100	3
3	18EI503	**Analog Electronic Circuits – II**	3	1	0	4	50	50	100	3
4	18EI504	Microcontrollers	3	1	0	4	50	50	100	3
5	**18EID11...4**	**Program Elective - 1**	**3**	**1**	**0**	**4**	**50**	**50**	**100**	**3**
6	18EI506	Analog and Digital Communications	3	1	0	4	50	50	100	3
7	18EIL51	Simulation Lab (Control Systems)	0	0	3	3	50	50	100	1
8	18EIL52	Transducers Lab	0	0	3	3	50	50	100	1
9	18EIL53	Micro Controllers Lab	0	0	3	3	50	50	100	1
10		MOOCS								2
		TOTAL	19	6	9	34	450	450	900	24

CIE: Continuous Internal Evaluation SEE: Semester End Examination

L: Lecture T: Tutorial P: Practical

Program Elective - I

1) Pulse switching Circuits
2) Noise and interference in instrumentation
3) Intelligent sensors and instrumentation
4) Telemetry and SCADA

SCHEME OF INSTRUCTION & EXAMINATION (Semester System)
For
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Effective From the Academic Year2018-2019(R18 Regulations)
Third Year B. Tech(SEMESTER – VI)

S.No	Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
			L	T	P	Total	CIE	SEE	Total Marks	
1	18EI601	Industrial Instrumentation	3	1	0	4	50	50	100	3
2	18EI602	Process Control	4	1	0	4	50	50	100	4
3	18EI603	Digital Signal Processing	3	1	0	4	50	50	100	3
4	**18EID21...4**	**Program Elective - 2**	**3**	**1**	**0**	**4**	**50**	**50**	**100**	**3**
5	18EI605	OOPS With JAVA	3	1	0	4	50	50	100	3
6	18EI606	Constitution of India	3	0	0	3	50	50	100	0
7	18EIL61	Process Control Lab	0	0	3	3	50	50	100	1
8	18EIL62	Digital Signal Processing Lab	0	0	3	3	50	50	100	1
9	18ELL02	Technical English Lab	0	0	3	3	50	50	100	1
		TOTAL	19	5	9	33	450	450	900	19

CIE: Continuous Internal Evaluation SEE: Semester End Examination
L: Lecture T: Tutorial P: Practical

Program Elective – 2
1) Digital Control Systems
2) Advanced Digital System Design
3) Robotics and Automation
4) Measurement errors and Statistical Analysis

SUMMMER INTURNSHIP – CREDITS - 2

SCHEME OF INSTRUCTION & EXAMINATION (Semester System)

For

Electronics and InstrumentationEngineering

Effective From the Academic Year2018-2019(R18 Regulations)

Fourth Year B. Tech(SEMESTER – VII)

S.No	Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
			L	T	P	Total	CIE	SEE	Total Marks	
1	18ME002	Industrial Management and Entrepreneurship developmentManagement-1	4	0	0	4	50	50	100	3
2	18EI702	Biomedical Instrumentation	4	0	0	4	50	50	100	3
3	18EI703	Analytical Instrumentation	4	0	0	4	50	50	100	3
4	**18EID31...4**	**Program Elective -3**	**3**	**1**	**0**	**4**	**50**	**50**	**100**	**3**
5	**18EID41...4**	**Program Elective – 4**	**3**	**1**	**0**	**4**	**50**	**50**	**100**	**3**
6	**18...I11..2**	**Institutional Elective-– 1**	**3**	**1**	**0**	**4**	**50**	**50**	**100**	**3**
7	18EIL71	Project - 1	0	0	5	5	50	50	100	2
8	18EIL72	BMI Lab	0	0	1	3	50	50	100	1
9	18EIL73	AI Lab	0	0	1	3	50	50	100	1
10		INTEURN SHIP					100	-	100	2
		TOTAL	21	3	7	35	550	450	1000	24

CIE: Continuous Internal Evaluation SEE: Semester End Examination

L: Lecture T: Tutorial P: Practical

Program Elective – 3

1) Optoelectronics and laser Instrumentation
2) Embedded Systems
3) Optimization Techniques.
4) Non Linear and Robust Control

Program Elective -4

1) Data Communications
2) Bio signal processing
3) Microprocessor based medical instruments
4) Wireless Sensor Networks.

SCHEME OF INSTRUCTION & EXAMINATION (Semester System)

For

Electronics and InstrumentationEngineering

Effective From the Academic Year2018-2019(R18 Regulations)

Forth Year B. Tech(SEMESTER – VII)

S.No	Code No.	Subject	Scheme of Instruction (Periods per week)				Scheme of Examination (Maximum marks)			No. of Credits
			L	T	P	Total	CIE	SEE	Total Marks	
1	18EID5 1...4	Program Elective-5	3	1	0	4	50	50	100	3
2	18EID6 1...4	Program Elective-6	3	1	0	4	50	50	100	3
3	18..I2 1..2	Institutional Elective-– II	3	1	0	3	50	50	100	3
4	18EIP81	Project-II	0	0	20	20	75	75	150	10
		TOTAL	9	3	20	31	225	225	450	19

CIE: Continuous Internal Evaluation SEE: Semester End Examination
L: Lecture T: Tutorial P: Practical

Program Elective - 5

1) virtual instrumentation
2) Instrumentation for Aerospace and Navigation
3) Medical Imaging
4) Programmable Logic Controllers

Program Elective - 6

1) Digital Image Processing
2) Graph Theory and applications
3) Advanced Sensors
4) Adaptive Control Systems

Institutional Elective-I

S.No.	Code	Course Title
1	**18CEI01**	Air Pollution & Control
2	**18CEI02**	Sustainable Water and Sanitation
3	**18CSI01**	Java Programming
4	**18CSI02**	Database Management Systems
5	**18ECI01**	Consumer Electronics
6	**18ECI02**	Embedded Systems
`7	**18EEI01**	Application of Wavelets to Engineering Problems
8	**18EEI02**	Industrial Electrical Systems
9	**18ITI01**	Data Analytics
10	**18ITI02**	Cyber Security
11	**18MEI01**	Fluid Power and Control Systems
12	**18MEI02**	Project Management
13	**18MAI01**	Linear Algebra
14	**18PHI01**	Nano-Materials and Technology
15	**18PHI02**	Fiber Optic Communication
16	**18HUI01**	System Thinking
17	**18ELI01**	English for Competitive Examinations
18	**18ELI02**	Professional Communication

Institutional Elective-II

S.No.	Code	Course Title
1	**18CEI03**	Disaster Management
2	**18CEI04**	Remote sensing & GIS
3	**18CSI03**	Python Programming
4	**18CSI04**	Computer Networks
5	**18ECI03**	Artificial Neural Network
6	**18ECI04**	Internet of things(IoT)
`7	**18EEI03**	High Voltage Engineering
8	**18EEI04**	Energy Auditing and Conservation
9	**18ITI03**	Mobile Application Developments
10	**18ITI04**	Web Technology
11	**18MEI03**	Non-Conventional Energy Sources
12	**18MEI04**	Automobile Engineering
13	**18MAI02**	Graph Theory
14	**18PHI03**	Advanced Materials
15	**18PHI04**	Optical Electronics
16	**18HUI02**	Organizational Psychology
17	**18HUI03**	Telugu Modern Literature
18	**18ELI03**	English Through Media