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HINDUSTAN
INSTITUTE OF TECHNOLOGY & SCIENCE
(DEEMED TO BE UNIVERSITY)

Revision - 1.0
8.11.2023
WEF : 2023-24 AY

B.TECH - ELECTRONICS AND COMMUNICATION ENGINEERING CURRICULUM - 2023-24 (NEP R2022)

Semester-I

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	I	BS	TP	EMA51001	Matrices and Calculus	3	0	2	4	2	5
2	I	BS	TP		**Any one course to be opted**	3	0	2	4	2	5
				EPH51001	Engineering Physics						
				ECT51001	Engineering Materials						
3	I	HS	TP		**Any one course to be opted**	2	0	1	2	1	3
				GLS51001	Communication Skills						
				GLS51002	Personality Development and Soft Skills						
4	I	ES	TP		**Any one course to be opted**	2	0	2	3	2	4
				ECS51009	Programming Fundamentals using C						
					Or						
				EME51001	Engineering Graphics and Computer Aided Design						
5	I	ES	TP	EGE51002	Design Thinking	2	0	2	3	2	4
6	I	ES	PR		**Any one course to be opted**	0	0	4	2	2	4
				EGE51406	Engineering Practices Lab						
				EGE51409	Fab Lab for Circuit Engineering						
7	I	HS	PR		**Any one course to be opted (Outreach)**	0	0	2	1	4	2
				GGE51401	Outreach (NCC) – Level I #						
				GGE51402	Outreach (NSS, Y's Men, Rotaract) – Level I #						
8	I	HS	TH		**Any one course to be opted (Indian/Foreign Language)**	2	0	0	2	2	2
				GLS51008	Tamil						
				GLS51009	Hindi						
				GLS51010	Telugu						
				GLS51011	French						
				GLS51012	German						
				GLS51013	Spanish						
				GLS51014	Korean						
				GLS51015	Mandarin						
				GLS51016	Japanese						
					OR						
				GGE51001	Universal Human Values						
9	I	HS	TH	GLS51017	Tamil Culture and Technology	1	0	0	1	2	1
					Total	**15**	**0**	**15**	**22**	**19**	**30**

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

#Students should choose Level – I and Level - II of same outreach course in the semester 1 and 2 respectively

Semester-II

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	II	BS	TP	EMA51002	Analytical Mathematics	3	0	2	4	2	5
2	II	BS	TP		**Any one course to be opted**	3	0	2	4	2	5
				EPH51001	Engineering Physics						
				ECT51001	Engineering Materials						

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3	II	HS	TP	**Any one course to be opted**		2	0	1	2	1	3
				GLS51001	Communication Skills						
				GLS51002	Personality Development and Soft Skills						
4	II	PC	TP	EEC51001	Electric Circuits and Machines	3	0	2	4	2	5
5	II	ES	TP	**Any one course to be opted**		2	0	2	3	2	4
				ECS51009	Programming Fundamentals using C						
				OR							
				EME51001	Engineering Graphics and Computer Aided Design						
6	II	ES	PR	**Any one course to be opted**		0	0	4	2	2	4
				EGE51406	Engineering Practices Lab						
				EGE51409	Fab Lab for Circuit Engineering						
7	II	HS	PR	**Any one course to be opted(Outreach)**		0	0	2	1	4	2
				GGE51403	Outreach (NCC) – Level II #						
				GGE51404	Outreach (NSS, Y's Men, Rotaract) – Level II #						
8	II	HS	TH	**Any one course to be opted (Indian/Foreign Language)**		2	0	0	2	2	2
				GLS51008	Tamil						
				GLS51009	Hindi						
				GLS51010	Telugu						
				GLS51011	French						
				GLS51012	German						
				GLS51013	Spanish						
				GLS51014	Korean						
				GLS51015	Mandarin						
				GLS51016	Japanese						
				OR							
				GGE51001	Universal Human Values						
9	II	MC	TH	********	Mandatory Course I is a Non-credit course (Student shall select one course from the list given under Mandatory Course I)	3	0	0	*	2	3
					Total	18	0	15	22	19	33

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

* Non Credit Course

#Students should choose Level – I and Level - II of same outreach course in the semester 1 and 2 respectively

Semester-III

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	III	BS	TH	EMA51003	Partial Differential Equations and Transforms	3	1	0	4	2	4
2	III	HS	TP	GLS51003	Advanced Academic Writing	1	0	1	1	1	2
3	III	PC	TP	EEC51002	Analog Electronics	3	0	2	4	2	5
4	III	PC	TP	EEC51003	Digital System Design	2	0	2	3	2	4
5	III	PC	TH	EEC51004	Electromagnetic Fields and Transmission Lines	2	1	0	3	2	3
6	III	DE	TP	EEC515**	Department Elective-1	2	0	2	3	2	4
7	III	ES	TH	GGE51003	Environmental Science and Sustainable Development	2	0	0	2	2	2
8	III	EEC	DP	EEC51800	Design Project – 1	0	0	2	1	6	2
9	III	EEC	IN	EEC51801	Internship -1 (To be carried out in summer after 2nd semester and evaluated in 3rd semester)	#	#	#	1	2	0
10	III	MC	TH	********	Mandatory Course- II is a Non-credit course (Student shall select one course from the list given under Mandatory Course II)	3	0	0	*	2	3
					Total	**18**	**2**	**9**	**22**	**23**	**29**

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

15 days minimum

* Non Credit Course

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Semester-IV											
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	IV	BS	TH	EMA51008	Random Process	3	1	0	4	2	4
2	IV	HS	TP	GLS51004	Professional Editing and Project Writing	1	0	1	1	1	2
3	IV	PC	TP	EEC51005	Signals and Systems	3	0	2	4	2	5
4	IV	PC	TP	EEC51006	VLSI Design	2	0	2	3	2	4
5	IV	PC	TP	EEC51007	Microcontroller for Embedded System Design (Industry Collaborated Course)	2	0	2	3	2	4
6	IV	DE	TP	EEC515**	Department Elective-2	2	0	2	3	2	4
7	IV	NE	TP	Exx517**	Non-Department Elective-1	2	0	2	3	2	4
8	IV	EEC	DP	EEC51802	Design Project – 2	0	0	2	1	6	2
9	IV	MC	TH	********	Mandatory Course- III is a Non-credit course (Student shall select one course from the list given under Mandatory Course III)	3	0	0	*	2	3
					Total	**18**	**1**	**13**	**22**	**21**	**32**
L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours											

* Non Credit Course

Semester-V											
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	V	HS	TP	GLS51005	Public Speaking	1	0	1	1	1	2
2	V	PC	TP	EEC51008	Digital Signal Processing	3	0	2	4	2	5
3	V	PC	TP	EEC51009	Communication Systems	2	0	2	3	2	4
4	V	PC	TH	EEC51010	Control Systems	2	1	0	3	2	3
5	V	DE	TP	EEC515**	Department Elective-3	2	0	2	3	2	4
6	V	NE	TP	Exx517**	Non-Department Elective-2	2	0	2	3	2	4
7	V	EEC	DP	EEC51803	Design Project – 3	0	0	2	1	6	2
8	V	ES	TH	EGE51004	Entrepreneurship	2	0	0	2	6	2
9	V	EEC	IN	EEC51804	Internship -2 (to be evaluated in 5th semester. To be carried out in summer after 4th semester)	#	#	#	1	0	0
					Total	**14**	**1**	**11**	**21**	**23**	**26**
L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours											

\# 15 days minimum

Semester-VI											
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	VI	HS	TP	GLS51006	English for Competitive Examinations	1	0	1	1	1	2
2	VI	PC	TP	EEC51011	Antenna and Wave Propagation	2	1	2	4	2	5
3	VI	PC	TP	EEC51012	Automated Test Engineering for Electronics	2	0	2	3	2	4
4	VI	PC	TP	EEC51013	Computer Networks	2	0	2	3	2	4
5	VI	DE	TP	EEC515**	Department Elective-4	2	0	2	3	2	4
6	VI	NE	TP	Exx517**	Non-Department Elective-3	2	0	2	3	2	4
7	VI	PC	TP	EEC51014	Electronics System Design (Case Study / Field Study / Product study)	2	0	2	3	6	4
8	VI	EEC	DP	EEC51805	Design Project – 4	0	0	2	1	6	2
					Total	**13**	**1**	**15**	**21**	**23**	**29**
L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours											

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Semester-VII											
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	VII	HS	TP	GLS51007	Verbal Reasoning and Interview Skills	1	0	1	1	1	2
2	VII	PC	TP	EEC51015	Optical and Microwave Engineering.	2	1	2	4	2	5
3	VII	PC	TP	EEC51016	Machine Learning and Artificial Intelligence	2	0	2	3	2	4
4	VII	PC	TP	EEC51017	Next Generation Wireless Networks	2	0	2	3	2	4
5	VII	DE	TP	EEC515**	Department Elective-5	2	0	2	3	2	4
6	VII	NE	TP	Exx517**	Non-Department Elective-4	2	0	2	3	2	4
7	VII	ES	TH	EGE51005	Research Methodology & IPR	2	0	0	2	2	2
8	VII	EEC	PJ	EEC51806	Project Phase - 1	0	0	6	3	6	6
					Total	**13**	**1**	**17**	**22**	**19**	**31**
L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours											

Semester-VIII											
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	VIII	EEC	PJ	EEC51807	Project Phase - 2	0	0	26	13	10	26
					Total	**0**	**0**	**26**	**13**	**10**	**26**
L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours											

Mandatory Course-I											
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	II	MC	TH	GGE51011	Introduction to Women and Gender Studies	3	0	0	*	2	3
2	II	MC	TH	GGE51012	Public and Personal Administration	3	0	0	*	2	3
3	II	MC	TH	GGE51013	Constitution of India	3	0	0	*	2	3
4	II	MC	TH	EGE51006	Law for Engineers	3	0	0	*	2	3
5	II	MC	TH	GGE51015	Indian Knowledge System (IKS)	3	0	0	*	2	3
L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours											

* Non Credit Course

Mandatory Course-II											
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	III	MC	TH	GGE51021	Traditional Indian Systems of Medicine and Therapies	3	0	0	*	2	3
2	III	MC	TH	GGE51022	History of Science and Technology in India	3	0	0	*	2	3
3	III	MC	TH	GGE51023	Political and Economic Thought for a Humane Society	3	0	0	*	2	3
4	III	MC	TH	GGE51024	State, Nation-Building and Politics in India	3	0	0	*	2	3
5	III	MC	TH	GGE51025	Industrial Safety	3	0	0	*	2	3
L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours											

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Mandatory Course-III											
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	IV	MC	TH	GGE51031	Principles of Management	3	0	0	*	2	3
2	IV	MC	TH	GGE51032	Human Resource Management	3	0	0	*	2	3
3	IV	MC	TH	GGE51033	Green Technology	3	0	0	*	2	3
4	IV	MC	TH	GGE51034	Industrial Management	3	0	0	*	2	3
5	IV	MC	TH	GGE51035	Fintech and Financing new Business	3	0	0	*	2	3
L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours											

* Non Credit Course

LIST OF DEPARTMENT ELECTIVES											
DEPARTMENT ELECTIVE-1											
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	III	DE -1	TP	EEC51500	IDE Based Programming and its applications [1]	2	0	2	3	2	4
2	III	DE -1	TP	EEC51501	Interfacing Techniques for General Purpose Processors [1]	2	0	2	3	2	4
3	III	DE -1	TP	EEC51502	Linear and Electronic Switching Circuits [2]	2	0	2	3	2	4
4	III	DE -1	TP	EEC51503	Electronic Instrumentation [2]	2	0	2	3	2	4
5	III	DE -1	TP	EEC51504	Verilog HDL [3]	2	0	2	3	2	4
6	III	DE -1	TP	EEC51505	DSP Processor and Architecture [3]	2	0	2	3	2	4
7	III	DE -1	TP	EEC51506	Data Structures and Algorithms with C [4]	2	0	2	3	2	4
8	III	DE -1	TP	EEC51507	Circuit Simulation Using Pspice - Project based learning [4]	2	0	2	3	2	4
9	III	DE -1	TP	EEC51508	Introduction to Ocean engineering [5]	2	0	2	3	2	4
10	III	DE -1	TP	EEC51509	Tools, Components, equipment for Electronics Manufacturing [6]	2	0	2	3	2	4
11	III	DE -1	TP	EEC51510	Consumer and Industrial Electronics [6]	2	0	2	3	2	4
L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours											

[1] EMBEDDED SYSTEM, [2] COMMUNICATION SYSTEM AND SIGNAL PROCESSING, [3] VLSI TECHNOLOGY, [4] SOFTWARE AND SYSTEM MODELLING, [5] UNDERWATER COMMUNICATION AND SENSORS, [6] ELECTRONICS MANUFACTURING TECHNOLOGY

DEPARTMENT ELECTIVE-2											
SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	IV	DE -2	TP	EEC51511	Embedded System Software [1]	2	0	2	3	2	4
2	IV	DE -2	TP	EEC51512	Robotics and Control [1]	2	0	2	3	2	4
3	IV	DE -2	TP	EEC51513	Fundamentals of Nanoscience [2]	2	0	2	3	2	4
4	IV	DE -2	TP	EEC51514	Opto Electronic Devices [2]	2	0	2	3	2	4
5	IV	DE -2	TP	EEC51515	Digital System Design Using FPGA Board [3]	2	0	2	3	2	4
6	IV	DE -2	TP	EEC51516	Semiconductor Modelling [3]	2	0	2	3	2	4
7	IV	DE -2	TP	EEC51517	Object Oriented Programming Languages with C++ [4]	2	0	2	3	2	4
8	IV	DE -2	TP	EEC51518	PCB Design – Idea to Product [4]	2	0	2	3	2	4
9	IV	DE -2	TP	EEC51519	Ocean Acoustics [5]	2	0	2	3	2	4
10	IV	DE -2	TP	EEC51520	PCB Design, Layout and Placement [6]	2	0	2	3	2	4
11	IV	DE -2	TP	EEC51521	1D Simulation [6]	2	0	2	3	2	4
L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours											

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DEPARTMENT ELECTIVE-3

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	V	DE-3	TP	EEC51522	System Design Using Raspberry Pi Processor [1]	2	0	2	3	2	4
2	V	DE-3	TP	EEC51523	Embedded Automotive Systems [1]	2	0	2	3	2	4
3	V	DE-3	TP	EEC51524	Neural Networks [2]	2	0	2	3	2	4
4	V	DE-3	TP	EEC51525	Virtual and Augmented Reality [2]	2	0	2	3	2	4
5	V	DE-3	TP	EEC51526	Analog VLSI [3]	2	0	2	3	2	4
6	V	DE-3	TP	EEC51527	ASIC Design [3]	2	0	2	3	2	4
7	V	DE-3	TP	EEC51528	Advanced Python Programming [4]	2	0	2	3	2	4
8	V	DE-3	TP	EEC51529	Optimization Techniques for Signal Processing [4]	2	0	2	3	2	4
9	V	DE-3	TP	EEC51530	Nano Electronic Devices and Sensors [5]	2	0	2	3	2	4
10	V	DE-3	TP	EEC51531	Design for Manufacturability [6]	2	0	2	3	2	4
11	V	DE-3	TP	EEC51532	Electronic Product Design – Industrial case study [6]	2	0	2	3	2	4

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

[1] EMBEDDED SYSTEM, [2] COMMUNICATION SYSTEM AND SIGNAL PROCESSING, [3] VLSI TECHNOLOGY, [4] SOFTWARE AND SYSTEM MODELLING, [5] UNDERWATER COMMUNICATION AND SENSORS, [6] ELECTRONICS MANUFACTURING TECHNOLOGY

DEPARTMENT ELECTIVE-4

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	VI	DE -4	TP	EEC51533	Wearable Sensors and Devices [1]	2	0	2	3	2	4
2	VI	DE -4	TP	EEC51534	IOT and its applications [1]	2	0	2	3	2	4
3	VI	DE -4	TP	EEC51535	Wireless Adhoc Sensor Networks [2]	2	0	2	3	2	4
4	VI	DE -4	TP	EEC51536	Satellite and RADAR Communication [2]	2	0	2	3	2	4
5	VI	DE -4	TP	EEC51537	Low Power VLSI [3]	2	0	2	3	2	4
6	VI	DE -4	TP	EEC51538	VLSI Signal Processing [3]	2	0	2	3	2	4
7	VI	DE -4	TP	EEC51539	RF Components and System Design [4]	2	0	2	3	2	4
8	VI	DE -4	TP	EEC51540	Embedded C Programming [4]	2	0	2	3	2	4
9	VI	DE -4	TP	EEC51541	Underwater Robotics - PBL [5]	2	0	2	3	2	4
10	VI	DE -4	TP	EEC51542	PCB Design Verification [6]	2	0	2	3	2	4
11	VI	DE -4	TP	EEC51543	Electronic Packaging [6]	2	0	2	3	2	4

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

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DEPARTMENT ELECTIVE-5

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	VII	DE -5	TP	EEC51544	Electronic Standards, Codes and Specifications [1]	2	0	2	3	2	4
2	VII	DE -5	TP	EEC51545	Security Issues in IOT [1]	2	0	2	3	2	4
3	VII	DE -5	TP	EEC51546	Smart Antennas [2]	2	0	2	3	2	4
4	VII	DE -5	TP	EEC51547	High Speed Communication Networks [2]	2	0	2	3	2	4
5	VII	DE -5	TP	EEC51548	System on Chip Design [3]	2	0	2	3	2	4
6	VII	DE -5	TP	EEC51549	CAD for VLSI [3]	2	0	2	3	2	4
7	VII	DE -5	TP	EEC51550	Foundation of Quantum Computing [4]	2	0	2	3	2	4
8	VII	DE -5	TP	EEC51551	Speech and Image Processing [4]	2	0	2	3	2	4
9	VII	DE -5	TP	EEC51552	Marine Navigational Systems [5]	2	0	2	3	2	4
10	VII	DE -5	TP	EEC51553	Reliability on Electronic Systems [6]	2	0	2	3	2	4
11	VII	DE -5	TP	EEC51554	Future trends in Electronics Manufacturing [6]	2	0	2	3	2	4

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

[1] EMBEDDED SYSTEM, [2] COMMUNICATION SYSTEM AND SIGNAL PROCESSING, [3] VLSI TECHNOLOGY, [4] SOFTWARE AND SYSTEM MODELLING, [5] UNDERWATER COMMUNICATION AND SENSORS, [6] ELECTRONICS MANUFACTURING TECHNOLOGY

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LIST OF NON-DEPARTMENT ELECTIVES

NON-DEPARTMENT ELECTIVE-1

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	IV	NE	TP	EEC51700	Arduino Programming and Interfacing	2	0	2	3	2	4
2	IV	NE	TP	EEC51701	Electronics in media Studies	2	0	2	3	2	4
3	IV	NE	TP	EEC51702	Smart Health Care Systems	2	0	2	3	2	4
4	IV	NE	TP	EEC51703	Introduction to Bio Inspired Robots	2	0	2	3	2	4
5	IV	NE	TP	EEC51704	Foundation on PCB Design and Testing	2	0	2	3	2	4

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

NON-DEPARTMENT ELECTIVE-2

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	V	NE	TP	EEC51705	Programming and Application using Matlab	2	0	2	3	2	4
2	V	NE	TP	EEC51706	Ocean Sensor Technology	2	0	2	3	2	4
3	V	NE	TP	EEC51707	Neural Networks and Fuzzy Logic	2	0	2	3	2	4
4	V	NE	TP	EEC51708	Medical Imaging, Signals and Informatics	2	0	2	3	2	4
5	V	NE	TP	EEC51709	Smart materials for Electronics applications	2	0	2	3	2	4

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

NON-DEPARTMENT ELECTIVE-3

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	VI	NE	TP	EEC51710	Fun with Electronics - Project based learning	2	0	2	3	2	4
2	VI	NE	TP	EEC51711	Flexible Electronics	2	0	2	3	2	4
3	VI	NE	TP	EEC51712	Radar Communication	2	0	2	3	2	4
4	VI	NE	TP	EEC51713	Introduction to 5G Technology and IOT	2	0	2	3	2	4
5	VI	NE	TP	EEC51714	Design and fabrication of Underwater Robot - Project based learning	2	0	2	3	2	4

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

NON-DEPARTMENT ELECTIVE-4

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	VII	NE	TP	EEC51715	Music Signal Processing	2	0	2	3	2	4
2	VII	NE	TP	EEC51716	Space Electronics	2	0	2	3	2	4
3	VII	NE	TP	EEC51717	Project Management for Engineers	2	0	2	3	2	4
4	VII	NE	TP	EEC51718	AI & ML in Oceanography	2	0	2	3	2	4

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

8/11

9/11/23

CONTROL COPY

LIST OF HONORS COURSES

HONORS IN EMBEDDED SYSTEMS

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	V	HN	TH	EEC51900	ARM based Real Time Operating Systems	3	0	0	3	1	3
2	VI	HN	TH	EEC51901	Embedded IOT	3	0	0	3	1	3
3	VII	HN	TH	EEC51902	Embedded System Design Verification and Testing	3	0	0	3	1	3
4	VII	HN	TH	EEC51903	Embedded Software Testing	3	0	0	3	1	3

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

LIST OF MINORS COURSES

MINORS IN BIOMEDICAL ENGINEERING

SL. NO	SEM	COURSE CATEGORY	COURSE TYPE	COURSE CODE	NAME OF THE COURSE	L	T	P	C	S	TCH
1	V	MN	TH	EEC51951	Basic Human Anatomy and Physiology	3	0	0	3	1	3
2	VI	MN	TH	EEC51952	Bio- Sensors and Signal Processing	3	0	0	3	1	3
3	VII	MN	TH	EEC51953	Biomedical Nanotechnology	3	0	0	3	1	3

L – Lecture T – Tutorial P – Practical C – Credit S – Self Study TCH – Total Contact Hours

S. No.	Course Category	Course Category	Credits
1	HS	Humanities & Social Science Courses	16
2	BS	Basic Science Courses	24
3	ES	Engineering Science Courses	19
4	PC	Program Core Courses	57
5	DE	Department Elective	15
6	NE	Non Department Elective	12
7	EEC	Employment Enhancement Courses	22
8	MC	Mandatory Courses	*
		TOTAL	**165**
9	HN	Honors Courses	12
10	MN	Minors Courses	9

* Non Credit Course

COURSE TYPE	
TP	Theory with Practical Course
TH	Theory Course
PR	Practical Course
DP	Design Project
PJ	Project
IN	Internship

8/11/2023
Coordinator

8/11/23
HOD

8-11-23
DEAN E&T

IQAC Coordinator
08/11/2023

Vice Chancellor
9/11/23