K.E. Society'
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Department: Electronics and Telecommunication Engineering
Class: S. Y. B. Tech **Semester:** III

Course Code	Course Title	L	T	P	Credits	Scheme	Theory Marks Max Marks	Theory Min for Passing (%)	Practical Max Marks	Practical Min for Passing (%)
EC2012	Electronic Devices	3	--	--	3	ISE	20	40	-	-
						UT1	15		-	-
						UT2	15	40	-	-
						ESE	50	40	-	-
EC2032	Digital System Design	3	--	--	3	ISE	20	40	-	-
						UT1	15		-	-
						UT2	15	40	-	-
						ESE	50	40	-	-
EC2052	Analog Communication	3	--	--	3	ISE	20	40	-	-
						UT1	15		-	-
						UT2	15	40	-	-
						ESE	50	40	-	-
EC2072	Network Theory	3	--	--	3	ISE	20	40	-	-
						UT1	15		-	-
						UT2	15	40	-	-
						ESE	50	40	-	-
SH2112	Engineering Mathematics III	3	1	--	4	ISE	20	40	-	-
						UT1	15		-	-
						UT2	15	40	-	-
						ESE	50	40	-	-
EC2092	Comprehensive Exam I	--	--	--	1	ESE	100	50	-	-
EC2112	Electronic Devices Lab	--	--	2	1	ISE	-	-	50	50
						ESE	-	-	50	50
EC2132	Digital System Design Lab	--	--	2	1	ISE	-	-	50	50
						ESE	-	-	50	50
EC2152	Analog Communication Lab	--	--	2	1	ISE	-	-	50	50
						ESE	-	-	50	50
SH*	Open Elective Choice based Soft Skill Program-II	--	--	2	1	ISE	-	-	50	50
						ESE	-	-	50	50
Total		**15**	**01**	**08**	**21**					

Total Contact Hours/week   : 24
Total Credits   : 21
Comprehensive Exam Subjects : Electronic Devices, Digital System Design, Network Theory, Engineering Mathematics III , Analog Communication

ISE = In Semester Exam, MSE (UT1+UT2) UT-I = Unit Test-I, UT-Ii = Unit Test-II   ESE = End Semester Exam

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Open Elective II &III

Sr. No	Name of Course		Course Code
1		Personal Effectiveness and Body Language	SH2592
2		Interpersonal Skills (Work Life Balance)	SH2612
3	Choice based Soft Skill Program-II	Leadership and Public Speaking	SH2632
4		Innovation Tools and Method for Entrepreneurs	SH2692
5		German Language -Basic Level	SH2732
6		Japanese language -Basic Level	SH2712
7		German Language -Advanced Level	SH2642
8		Japanese language - Advanced Level	SH2622

Note:

1. A student has to complete any two courses out of six choices offered under Choice Based Soft Skills Programme. A course in each semester will be allocated without any repetition.

2. The students who have completed 'German Language Lab' or 'Japanese Language Lab' in F.Y.B.Tech should not give their choice for 'German Language – Basic Level' and 'Japanese Language – Basic Level'. Such students may give their choices for 'German Language – Advanced Level' and 'Japanese Language – Advanced Level' (batch sizes 40 each) in the SYBTech Sem-IV only.

3. The students who will select and will successfully complete 'German Language – Basic Level' and 'Japanese Language – Basic Level' in SYBTech Sem-III will by default (mandatorily) appear for Advance Levels of said courses in Semester-IV.

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Department: Electronics and Telecommunication Engineering
Class: S. Y. B. Tech   **Semester:** IV

Course Code	Course Title	L	T	P	Credits	Scheme	Theory Marks Max	Theory Min for Passing (%)		Practical Marks Max	Practical Min for Passing (%)
CE2262	Engineering Mechanics	2	--	--	2	ISE	20			-	-
						UT1	15	40	40	-	-
						UT2	15			-	-
						ESE	50	40		-	-
EC2022	Analog Circuits	3	--	--	3	ISE	20			-	-
						UT1	15	40	40	-	-
						UT2	15			-	-
						ESE	50	40		-	-
EC2042	Microcontrollers	3	--	--	3	ISE	20			-	-
						UT1	15	40	40	-	-
						UT2	15			-	-
						ESE	50	40		-	-
EC2062	Digital Communication	3	--	--	3	ISE	20			-	-
						UT1	15	40	40	-	-
						UT2	15			-	-
						ESE	50	40		-	-
EC2082	Signals and System	3	--	--	3	ISE	20		40	-	-
						UT1	15	40		-	-
						UT2	15			-	-
						ESE	50	40		-	-
EC2102	Comprehensive Exam II	--	--	0	1	ESE	100	50	-	-	-
CE2282	Engineering Mechanics Lab	--	--	2	1	ISE	-	-	-	50	50
						ESE	-	-	-	50	50
EC2122	Analog Circuits Lab	--	--	2	1	ISE	-	-	-	50	50
						ESE	-	-	-	50	50
EC2142	Microcontrollers Lab	--	--	2	1	ISE	-	-	-	50	50
						ESE	-	-	-	50	50
EC2162	Digital Communication Lab	--	--	2	1	ISE	-	-	-	50	50
						ESE	-	-	-	50	50
SH*	Open Elective Choice based Soft Skill Program-III	--	--	2	1	ISE	-	-	-	50	50
						ESE	-	-	-	50	50
SH2172	Environmental Science	1*	--	--	1	ISE	50	40	40	-	-
						ESE	50	40		-	-
SH2602	Environmental Science Project	--	--	2	1	ISE	-	-	-	100	50
Total		**15**	**00**	**12**	**22**						

Total Contact Hours/week   : 27
Total Credits   : 22
Comprehensive Exam Subjects: Analog Circuits, Digital Communication, Signals & Systems, Microcontroller
ISE = In Semester Exam, MSE (UT1+UT2) UT-I = Unit Test-I, UT-II = Unit Test-II ESE = End Semester Exam
Note: 1. * Department should allot one extra lecture to Environment Science in time Table
     2. Students are required to undergo industrial/field training of minimum 4 weeks in the vacation of semester IV, and its evaluation will be carried out in Semester V.

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Open Elective II & III

Sr. No	Name of Course		Course Code
1		Personal Effectiveness and Body Language	SH2592
2		Interpersonal Skills (Work Life Balance)	SH2612
3	Choice base soft Skill Program-III	Leadership and Public Speaking	SH2632
4		Innovation Tools and Method for Entrepreneurs	SH2692
5		German Language -Basic Level	SH2732
6		Japanese language -Basic Level	SH2712
7		German Language -Advanced Level	SH2642
8		Japanese language - Advanced Level	SH2622

Note:

1. A student has to complete any two courses out of six choices offered under Choice Based Soft Skills Programme. A course in each semester will be allocated without any repetition.

2. The students who have completed 'German Language Lab' or 'Japanese Language Lab' in F.Y.B.Tech should not give their choice for 'German Language – Basic Level' and 'Japanese Language – Basic Level'. Such students may give their choices for 'German Language – Advanced Level' and 'Japanese Language – Advanced Level' (batch sizes 40 each) in the SY B.Tech Sem-IV only.

3. The students who will select and will successfully complete 'German Language – Basic Level' and 'Japanese Language – Basic Level' in SY BTech Sem-III will by default (mandatorily) appear for Advance Levels of said courses in Semester-IV.

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Department: Electronics and Telecommunication Engineering

Class: T.Y. B.Tech

Semester: V

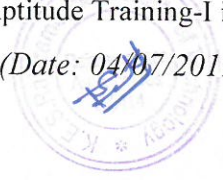| Course Code	Course Title	Teaching scheme L	T	P	Credits	Scheme	Theory Marks Max	Min for Passing (%)	Practical Marks Max	Min for Passing (%)
EC3012	Digital Signal Processing	3	--	--	3	ISE	20		-	-
						UT1	15	40	-	-
						UT2	15	40	-	-
						ESE	50	40	-	-
EC3032	Power Electronics	3	--	--	3	ISE	20		-	-
						UT1	15	40	-	-
						UT2	15	40	-	-
						ESE	50	40	-	-
EC3052	Product Design	3	--	--	3	ISE	20		-	-
						UT1	15	40	-	-
						UT2	15	40	-	-
						ESE	50	40	-	-
EC3072	Electromagnetic Waves & Antenna Theory	3	--	--	3	ISE	20		-	-
						UT1	15	40	-	-
						UT2	15	40	-	-
						ESE	50	40	-	-
PE I*	Program Elective – I	3	--	--	3	ISE	20		-	-
						UT1	15	40	-	-
						UT2	15	40	-	-
						ESE	50	40	-	-
EC3192	Comprehensive Exam III	--	--	--	1	ESE	100	50	-	-
EC3212	Digital Signal Processing Lab using MATLAB	--	--	2	1	ISE	-	-	50	50
						ESE	-	-	50	50
EC3232	Power Electronics Lab	--	--	2	1	ISE	-	-	50	50
						ESE	-	-	50	50
EC3252	Object Oriented Programming using C++ Lab	--	--	2	1	ISE	-	-	50	50
						ESE	-	-	50	50
EC3272	Antenna Lab	--	--	2	1	ISE	-	-	50	50
						ESE	-	-	50	50
SH3032	Aptitude Training I	2*	--	--	2	ISE	20		100	50
						UT1	15	40	-	-
						UT2	15	40	-	-
						ESE	50	40	-	-
EC3292	Summer Internship (4 weeks)	--	--	--	2	ISE	-	-	100	50
SH3012	Mandatory Course(Indian Constitution/Essence of Indian Traditional Knowledge	--	--	--	Audit	ISE	100	50	-	-
Total		**17**	**00**	**08**	**24**					

Total Contact Hours/week : 25

Total Credits : 24

Comprehensive Exam Subjects : Electromagnetic Waves & Antenna Theory, Digital Signal Processing, CMOS VLSI Design

ISE = In Semester Exam, MSE (UT1+UT2) UT-I = Unit Test-I, UT-II = Unit Test-II , ESE = End Semester Exam

Note*: Department should allot one extra lecture to Aptitude Training-I in time Table.

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PROGRAM ELECTIVE I

Sl.No	Course code	Domain	Course Name
1	EC3092	Communication	Information Theory and Coding
2	EC3112	Embedded System	Mixed Mode Controller
3	EC3132	Signal Processing	Audio Video Engineering
4	EC3152	VLSI DVT	RTL Simulation and Synthesis with PLDs
5	EC3172	Industrial Automation	Control System

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Department: Electronics and Telecommunication Engineering
Class: T.Y. B.Tech   **Semester:** VI

Course Code	Course Title	Teaching scheme			Credits	Scheme	Theory Marks			Practical Marks	
		L	T	P			Max	Min for Passing (%)		Max	Min for Passing (%)
EC3022	CMOS VLSI Design	3	--	--	3	ISE	20			-	-
						UT1	15	40	40	-	-
						UT2	15			-	-
						ESE	50	40		-	-
EC3042	Robotics	3	--	--	3	ISE	20			-	-
						UT1	15	40	40	-	-
						UT2	15			-	-
						ESE	50	40		-	-
EC3062	Artificial Intelligence	3	--	--	3	ISE	20			-	-
						UT1	15	40	40	-	-
						UT2	15			-	-
						ESE	50	40		-	-
PE II*	Program Elective – II	3	--	--	3	ISE	20			-	-
						UT1	15	40	40	-	-
						UT2	15			-	-
						ESE	50	40		-	-
SH3022	Biology for Engineers	3	--	--	3	ISE	20			-	-
						UT1	15	40	40	-	-
						UT2	15			-	-
						ESE	50	40		-	-
EC3182	Comprehensive Exam IV	--	--	--	1	ESE	100	50	-	-	-
EC3202	CMOS VLSI Design Lab	--	--	2	1	ISE	-	-	-	50	50
						ESE	-	-	-	50	50
EC3222	Python Programming Lab	--	--	2	1	ISE	-	-	-	50	50
						ESE	-	-	-	50	50
EC3242	Electronic Measurement Lab	--	--	2	1	ISE	-	-	-	50	50
						ESE	-	-	-	50	50
EC3262	Mini Project/Electronic Design workshop	--	--	2	1	ISE	-	-	-	50	50
						ESE	-	-	-	50	50
SH3052	Aptitude Training II	2*	--	--	2	ISE	20			100	50
						UT1	15	40	40	-	-
						UT2	15			-	-
						ESE	50	40		-	-
Total		**17**	**00**	**08**	**22**						

Total Contact Hours/week   : 25
Total Credits   : 22
Comprehensive Exam Subjects   : Power Electronics, Robotics, Electronic Measurement
ISE = In Semester Exam, MSE (UT1+UT2) UT-I = Unit Test-I, UT-II = Unit Test-II, ESE = End Semester Exam
Note*: Department should allot one extra lecture to Aptitude Training-II in time Table.

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PROGRAM ELECTIVE II

Sl.No	Course code	Domain	Course Name
1	EC3082	Communication	Scientific Computing
2	EC3102	Embedded System	MEMS
3	EC3122	Signal Processing	Wavelets
4	EC3142	VLSI DVT	Nano electronics
5	EC3162	Industrial Automation	Automotive Electronics

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Department: Electronics and Telecommunication Engineering
Class: Final Year B. Tech   **Semester:** VII

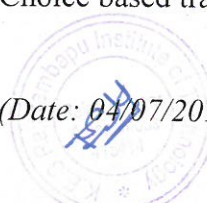| Course Code	Course Title	Teaching scheme			Credits	Scheme	Theory Marks			Practical Marks	
		L	T	P			Max	Min for Passing (%)		Max	Min for Passing (%)
EC4012	Computer Network	3	--	--	3	ISE	20	40	40	-	-
						UT1	15			-	-
						UT2	15			-	-
						ESE	50	40		-	-
EC4032	Internet of Things	3	--	--	3	ISE	20	40	40	-	-
						UT1	15			-	-
						UT2	15			-	-
						ESE	50	40		-	-
PE III*	Program Elective-III	3	--	--	3	ISE	20	40	40	-	-
						UT1	15			-	-
						UT2	15			-	-
						ESE	50	40		-	-
PE IV*	Program Elective - IV	3	--	--	3	ISE	20	40	40	-	-
						UT1	15			-	-
						UT2	15			-	-
						ESE	50	40		-	-
OE-I*	Open Elective -IV	3	--	--	3	ISE	20	40	40	-	-
						UT1	15			-	-
						UT2	15			-	-
						ESE	50	40		-	-
EC4252	Computer Networks and IoT Lab	--	--	2	1	ISE	-	-	-	50	50
						ESE	-	-	-	50	50
PEL III*	Program Elective – III Lab	--	--	2	1	ISE	-	-	-	50	50
						ESE	-	-	-	50	50
	Phase I	--	--	2	1	ISE	-	-		100	50
Total		**15**	**--**	**06**	**18**						

Total Contact Hours/week   : 21
Total Credits   : 18
ISE = In Semester Exam, MSE (UT1+UT2) UT-I = Unit Test-I, UT-II = Unit Test-II, ESE = End Semester Exam

Sr.No.	Choice Based Track	Phase –I Details	Course Code
1	Internship & Project (IIP)	Liberal Learning	IP4012
2	Undergraduate Research Experience (URE)	URE Synopsis	RE4012
3	Entrepreneurship Development (ED)	Prefeasibility Report	ED4012
4	Regular Capstone Project (CP)	CP Synopsis	EC4372

Note: Students should work on Phase I of Choice based track allotted to them.

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PROGRAM ELECTIVE III

Sl.No	Course code	Domain	Course Name
1	EC4052	Communication	Microwave Theory and Techniques
2	EC4072	Embedded System	Embedded Systems
3	EC4092	Signal Processing	Bio-Medical Electronics
4	EC4112	VLSI DVT	System Verilog
5	EC4132	Industrial Automation	Programmable Logic Control (PLC)

PROGRAM ELECTIVE III LAB

	Course code	Domain	Course Name
1	EC4272	Communication	Microwave Theory and Techniques Lab
2	EC4292	Embedded System	Embedded Systems Lab
3	EC4312	Signal Processing	Bio-Medical Electronics Lab
4	EC4332	VLSI DVT	System Verilog Lab
5	EC4352	Industrial Automation	Programmable Logic Control (PLC)Lab

PROGRAM ELECTIVE IV

	Course code	Domain	Course Name
1	EC4152	Communication	Mobile Communication and Networks
2	EC4172	Embedded System	Embedded Linux
3	EC4192	Signal Processing	Mixed Signal Design
4	EC4212	VLSI DVT	Low Power VLSI
5	EC4232	Industrial Automation	Advanced Power Electronics

OPEN ELECTIVE IV

Sr. No.	Branch	Course Code	Semester-VII Open Elective-IV Courses
1	Automobile	OE4012	Reliability Engineering
2	Automobile	OE4032	Product Design and Development
3	Automobile	OE4052	Design Thinking & Innovation
4	Civil	OE4072	Metro Systems and Engineering.
5	Civil	OE4092	Engineering Economics.
6	Civil	OE4112	Industrial Safety and Risk Management.
7	Computer	OE4132	Cyber Laws
8	Computer	OE4152	Database Administration
9	Electrical	OE4172	Optimization Techniques
10	Electrical	OE4192	Electrical Materials
11	E&TC	OE4212	Mechatronics
12	IT	OE4232	Open Source Software
13	Mechanical	OE4252	Aircraft Systems
14	Mechanical	OE4272	Supply Chain Management
15	Mechanical	OE4292	Non-conventional Energy Sources
16	Mechanical	OE4312	New Product Design and Development
17	MBA	OE4332	Marketing for Engineers

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Track I: Industry Internship & Projects (IIP)

Department: Electronics and Telecommunication Engineering
Class: Final Year B. Tech

Semester: VIII

Course Code	Course	Teaching Scheme			Credits	Scheme	Evaluation Scheme			
							Theory Marks		Practical Marks	
		L	T	P			Max	Min. for passing (%)	Max	Min. for passing (%)
IPEC4002	Online Course- I/Self learning course-I	-	-	-	3	ESE*	-	-	100	50
OE4362	Engineering Management& Economics (Online Course)	-	-	-	2	ESE*	-	-	100	50
IP4022	Internship & Project	-	-	-	11	ISE	-	-	50	50
						ESE	-	-	50	50
Total		**-**	**-**	**-**	**16**					

Total Contact Hours/week : --
Total Credits : 16

ISE = In Semester Evaluation ,ESE = End Semester Exam
Note: 1] Online or self-learning course may be:
    A] Online Certification Course
    B] Self-study course approved by Dean Academics
      All courses should be related to Industry project.
    2] Engineering Management is Compulsory online course.
*Indicates that, student needs to produce certificate of online or certification course at the time of ESE. If student fails to produce this certificate, he or she will not be eligible to give ESE of Online course.
3] Weekly Contact hours are not mentioned as student is expected to be in industry regularly for 20 weeks. However, student needs to report to Institute mentors as and when required.

Guidelines for subject code of Self-study or online course:
1] XX is abbreviation of the department. Abbreviations are given below.
Mechanical Engineering-ME
Automobile Engineering-AE
Electrical Engineering-EE
Civil Engineering-CE
Information Technology-IT
Computer Science and Engineering-CS
Electronics and Telecommunication Engineering-EC
2] YYY is individual subject number. Department has to decide this number. While giving the number YYY to the subject following care must be taken.
A] Number should start with 002
B] It should be even number.

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Track II: Undergraduate Research Experience (URE)

Department: Electronics and Telecommunication Engineering
Class: Final Year B. Tech
Semester: VIII

Course Code	Course	Teaching Scheme			Credits	Evaluation Scheme					
						Scheme	Theory Marks		Practical Marks		
		L	T	P			Max	Min. for passing (%)		Max	Min. for passing (%)
RE4022	Research Methodology	3	-	-	3	ISE	20	40	40	-	-
						UT-1	15				
						UT-2	15				
						ESE	50	40			
RE4062	Research Methodology Lab	-	-	2	1	ISE	-	-	-	100	50
OE4362	Engineering Management& Economics (Online Course)	-	-	-	2	ESE*	-	-	-	100	50
RE4042	Research Project	-	-	10	10	ISE	-	-	-	50	50
						ESE				50	50
	Total	**03**	**-**	**12**	**16**						

Total Contact Hours/week : 15
Total Credits : 16
ISE = In Semester Evaluation,   UT-I = Unit Test-I,   UT-II = Unit Test-II   ESE = End Semester Exam

Note:

1] Engineering Management is Compulsory online course.

*For Online Certification course, student needs to produce certificate of online course at the time of ESE. If student fails to produce this certificate, he or she will not be eligible to give ESE of Online course.
All courses should be related to research project

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Track III: Entrepreneurship Development (ED)

Department: Electronics and Telecommunication Engineering
Class: Final Year B. Tech

Semester: VIII

Course Code	Course	Teaching Scheme			Credits	Scheme	Theory Marks			Practical Marks	
		L	T	P			Max	Min. for passing (%)		Max	Min. for passing (%)
ED4102	Project Management	3	-	-	3	ISE	20	40	40	-	-
						UT-1	15				
						UT-2	15				
						ESE	50	40			
ED4042	Commercial Aspects of the Project	3	-	-	3	ISE	20	40	40	-	-
						UT-1	15				
						UT-2	15				
						ESE	50	40			
ED4062	Entrepreneurship Development Program (EDP)	-	-	-	1	ISE	-	-	-	100	50
ED4082	Entrepreneurship Development Project	-	-	9	9	ISE	-	-	-	50	50
						ESE				50	
Total		**06**	**-**	**09**	**16**	**-**	**-**	**-**	**-**	**-**	**---**

Total Contact Hours/week   : 15
Total Credits   : 16
ISE = In Semester Evaluation,   UT-I = Unit Test-I,   UT-II = Unit Test-II   ESE = End Semester Exam

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Track IV: Regular Capstone Project (CP)

Department: Electronics and Telecommunication Engineering
Class: Final Year B. Tech

Semester: VIII

Course Code	Course	Teaching Scheme			Credits	Evaluation Scheme					
							Theory Marks			Practical Marks	
		L	T	P		Scheme	Max	Min. for passing (%)		Max.	Min. for passing (%)
PE V*	Program Elective-V	3	-	-	3	ISE	20	40	40	-	-
						UT1	15			-	-
						UT2	15			-	-
						ESE	50	40		-	-
OE V*	Open Elective-V	3	-	-	3	ISE	20	40	40	-	-
						UT1	15			-	-
						UT2	15			-	-
						ESE	50	40		-	-
OE4362	Engineering Management & Economics (Online Course)	-	-	-	2	ESE*	-	-	-	100	50
EC4122	Capstone Project Phase II	-	-	8	8	ISE	-	-		50	50
						ESE	-	-		50	50
	TOTAL	**06**	**-**	**08**	**16**						

Total Contact Hours/week : 14
Total Credits **:** 16
ISE = In Semester Evaluation,   UT-I = Unit Test-I,   UT-II = Unit Test-II   ESE = End Semester Exam

1] Engineering Management is Compulsory online course.

*For Online Certification course, student needs to produce certificate of online course at the time of ESE. If student fails to produce this certificate, he or she will not be eligible to give ESE of Online course

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PROGRAM ELECTIVE V

Sl.No	Course code	Domain	Course Name
1	EC4022	Communication	Satellite Communication
2	EC4042	Embedded System	Real Time Embedded Systems
3	EC4062	Signal Processing	Computer Architecture
4	EC4082	VLSI DVT	Mixed mode VLSI Design
5	EC4102	Industrial Automation	Electric Drives

OPEN ELECTIVE V

Sr. No.	Branch	Course Code	Semester-VIII Open Elective-V Courses
1	Automobile	OE4022	Renewable Energy Sources
2	Automobile	OE4042	Transport Management
3	Automobile	OE4062	Electric and Hybrid Electrical Vehicle
4	Civil	OE4082	Smart Cities and Sustainable Development.
5	Civil	OE4102	Material Management.
6	Computer	OE4122	Network Administration
7	Computer	OE4142	Information Technology Foundation Program
8	Electrical	OE4162	Finance Management
9	Electrical	OE4182	Electrical Installations and Maintenance
10	E&TC	OE4202	Image Processing
11	IT	OE4222	Information Technology and Business Management
12	Mechanical	OE4242	Computational Fluid Dynamics
13	Mechanical	OE4262	Entrepreneurship Development
14	Mechanical	OE4282	Hybrid Vehicles
15	Mechanical	OE4302	Maintenance Management
16	Mechanical	OE4322	Reverse Engineering and Benchmarking
17	MBA	OE4342	Finance for Engineers

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B.Tech Honors

Semester	Course codes	B.Tech Honors
IV	EC4142	Electronics Enclosures and Thermal Issues
V	EC4162	Programming Data Structure & Algorithm in Python
V	EC4182	Android App development
VI	EC4202	Industrial Automation & Control
VI	EC4222	Deep learning for Visual Computing/ Introduction to Soft computing
VII	EC4242	Remote Sensing & Digital image Processing of Satellite data
VII	EC4262	Architecture of IC
VIII	EC4282	Cryptography and Network Security

B.Tech Minor

Semester	Course codes	B.Tech Minor
IV	EC4302	Analog Circuit/Basis Electronics
V	EC4322	Digital Circuits
V	EC4342	OP-AMP Practical Application
VI	EC4362	Microprocessors and Microcontrollers
VI	EC4382	Control Systems
VII	EC4402	Internet of Things
VII	EC4422	Image Processing
VIII	EC4424	Embedded System Design