

Government College of Engineering, Karad

(An Autonomous Institute of Government of Maharashtra)

Programme: Electronics and Telecommunication Engineering

Proposed Structure for second year to fourth year of B. Tech

(Revised from A.Y.: 2018-19)

Government College of Engineering, Karad
 (An Autonomous Institute of Government of Maharashtra)
B. Tech. Second year - Electronics and Telecommunication Engineering
Curriculum Structure
 (Revised from A.Y.: 2017-18)
Semester - III

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME				
									CT1	CT2	TA/CA	ESE	TOTAL
1	BS	EX301	Engineering Mathematics – III	3	1	-	4	4	15	15	10	60	100
2	PC	EX302	Electronic Devices and Circuits	4	-	-	4	4	15	15	10	60	100
3	PC	EX303	Microcontroller and Interfacing	4	-	-	4	4	15	15	10	60	100
4	PC	EX304	Digital Electronics	3	1	-	4	4	15	15	10	60	100
5	PC	EX305	Transducers and Measurements	3	-	-	3	3	15	15	10	60	100
6	PC	EX306	Electronic Devices and Circuits Lab	-	-	2	2	1	-	-	25	25	50
7	PC	EX307	Microcontroller and Interfacing Lab	-	-	2	2	1	-	-	25	25	50
8	PC	EX308	Digital Electronics Lab	-	-	2	2	1	-	-	25	25	50
9	PC	EX309	Embedded C	-	1	2	3	2	-	-	50	-	50
10	MC	MC301	Environmental Studies*	3	-	-	3	-	15	15	10	60	100
Total				20	3	8	31	24	90	90	185	435	800

CT1- Class Test 1

TA/CA- Teacher Assessment/Continuous Assessment

CT2- Class Test 2

ESE- End Semester Examination (For Laboratory: End Semester Performance)

* indicates Audit Course.

Credits Distribution

Course Category	HS (Hum. And So. Sc.)	BS (Basic Sc.)	ES (Eng. Sc.)	PC (Programme Core)	PE (Programme Electives)	OE (Open Elective)	MC (Mandatory Course)
Credits		4		20			--
Cumulative Sum	3	21	28	20			--

Government College of Engineering, Karad
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B. Tech. Second year - Electronics and Telecommunication Engineering
Curriculum Structure
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Semester - IV

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME				
									CT1	CT2	TA/CA	ESE	TOTAL
1	PC	EX401	Analog Integrated Circuits	3	-	-	3	3	15	15	10	60	100
2	PC	EX402	Network Analysis	3	-	-	3	3	15	15	10	60	100
3	PC	EX403	Analog Communication	3	-	-	3	3	15	15	10	60	100
4	PC	EX404	Signals and Systems	3	-	-	3	3	15	15	10	60	100
5	PC	EX405	Electromagnetic Engineering	3	1	-	4	4	15	15	10	60	100
6	PC	EX406	Analog Integrated Circuits Lab	-	-	2	2	1	-	-	25	50	75
7	PC	EX407	HDL Lab	-	1	2	3	2	-	-	25	50	75
8	PC	EX408	Analog Communication Lab	-	-	2	2	1	-	-	25	50	75
9	PC	EX409	Signals and Systems Lab	-	-	2	2	1	-	-	25	-	25
10	HS	HS002	General Proficiency-II	2	-	2	4	3	-	-	50	-	50
Total				17	2	10	29	24	75	75	200	450	800

CT1- Class Test 1

TA/CA- Teacher Assessment/Continuous Assessment

CT2- Class Test 2

ESE- End Semester Examination (For Laboratory: End Semester Performance)

Credits Distribution

Course Category	HS (Hum. And So. Sc.)	BS (Basic Sc.)	ES (Eng. Sc.)	PC (Programme Core)	PE (Programme Electives)	OE (Open Elective)	MC (Mandatory Course)
Credits	3			21			
Cumulative Sum	6	21	28	41			

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Semester - V

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME				
									CT1	CT2	TA/CA	ESE	TOTAL
1	PC	EX501	Digital Communication	4	-	-	4	4	15	15	10	60	100
2	PC	EX502	Embedded Systems	3	-	-	3	3	15	15	10	60	100
3	PC	EX503	Digital Signal Processing	4	-	-	4	4	15	15	10	60	100
4	PC	EX504	Control Systems	3	-	-	3	3	15	15	10	60	100
5	PC	EX505	Mini Project using Design Tools	1	-	2	3	4	-	-	50	-	50
6	PC	EX506	Digital Communication Lab	-	-	2	2	1	-	-	25	50	75
7	PC	EX507	Embedded Systems Lab	-	-	2	2	1	-	-	50	50	100
8	PC	EX508	Digital Signal Processing Lab	-	-	2	2	1	-	-	25	50	75
9	PC	EX509	Instrumentation and Control Lab	-	-	2	2	1	-	-	50	-	50
10	HS	HS003	General Proficiency –III	2	-	2	4	3	-	-	50	-	50
Total				17	-	12	29	25	60	60	290	390	800

CT1- Class Test 1

TA/CA- Teacher Assessment/Continuous Assessment

CT2- Class Test 2

ESE- End Semester Examination (For Laboratory: End Semester Performance).

Credits Distribution

Course Category	HS (Hum. And So. Sc.)	BS (Basic Sc.)	ES (Engg. Sc.)	PC (Programme Core)	PE (Programme Electives)	OE (Open Elective)	MC (Mandatory Course)
Credits	3			22			
Cumulative Sum	9	21	28	63			

Government College of Engineering, Karad

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B. Tech. Third year - Electronics and Telecommunication Engineering

Curriculum Structure

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Semester - VI

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME				
									CT1	CT2	TA/CA	ESE	TOTAL
1	OE	OE651	Open Elective	2	-	2	4	3	-	-	50	50	100
2	PC	EX602	Antennas and Wave Propagation	4	-	-	4	4	15	15	10	60	100
3	PC	EX603	Power Electronics	4	-	-	4	4	15	15	10	60	100
4	PE	EX6*4	Elective – I	3	-	-	3	3	15	15	10	60	100
5	PC	EX605	Industrial and Project Management	4	-	-	4	4	15	15	10	60	100
6	PC	EX606	Antennas and Wave Propagation Lab	-	-	2	2	1	-	-	25	50	75
7	PC	EX607	Power Electronics Lab	-	-	2	2	1	-	-	25	-	25
8	PE	EX6*8	Elective – I Lab	-	-	2	2	1	-	-	25	50	75
9	PC	EX609	Minor Project	-	-	2	2	2	-	-	50	50	100
10	PC	EX610	Seminar	-	-	2	2	2	-	-	25	-	25
Total				17	-	12	27	25	60	60	240	440	800

CT1- Class Test 1

TA/CA- Teacher Assessment/Continuous Assessment

CT2- Class Test 2

ESE- End Semester Examination (For Laboratory: End Semester Performance)

Credits Distribution

Course Category	HS (Hum. And So. Sc.)	BS (Basic Sc.)	ES (Engg. Sc.)	PC (Programme Core)	PE (Programme Electives)	OE (Open Elective)	MC (Mandatory Course)
Credits		--		18	4	3	
Cumulative Sum	9	21	28	81	4	3	

Government College of Engineering, Karad
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B. Tech. Fourth year - Electronics and Telecommunication Engineering
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Semester - VII

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME				
									CT1	CT2	TA/CA	ESE	TOTAL
1	PC	EX701	Wireless and Mobile Communication	4	-	-	4	4	15	15	10	60	100
2	PC	EX702	VLSI Technology	3	-	-	3	3	15	15	10	60	100
3	PC	EX703	Fiber Optics	3	-	-	3	3	15	15	10	60	100
4	PC	EX704	Computer Communication Networks	3	-	-	3	3	15	15	10	60	100
5	PE	EX7*5	Elective – II	3	1	-	4	4	15	15	10	60	100
6	PC	EX706	VLSI Technology Lab	-	-	2	2	1	-	-	25	50	75
7	PC	EX707	Fiber Optics Lab	-	-	2	2	1	-	-	25	-	25
8	PC	EX708	Computer Communication Networks Lab	-	-	2	2	1	-	-	25	50	75
9	PC	EX709	Project Phase – I	-	-	2	2	4	-	-	25	50	75
10	PC	EX710	Industrial Training/Mini Project	-	-	-	-	2	-	-	50	-	50
			Total	16	1	8	25	26	75	75	200	450	800

CT1- Class Test 1

CT2- Class Test 2

TA/CA- Teacher Assessment/Continuous Assessment

ESE- End Semester Examination (For Laboratory: End Semester Performance)

Credits Distribution

Course Category	HS (Hum. And So. Sc.)	BS (Basic Sc.)	ES (Engg. Sc.)	PC (Programme Core)	PE (Programme Electives)	OE (Open Elective)	MC (Mandatory Course)
Credits		--		22	4		
Cumulative Sum	9	21	28	103	8	3	

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Semester - VIII

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME				
									CT1	CT2	TA/CA	ESE	TOTAL
1	PC	EX801	Advanced Networking	4	-	-	4	4	15	15	10	60	100
2	PC	EX802	Microwave Engineering	4	-	-	4	4	15	15	10	60	100
3	PE	EX8*3	Elective – III	4	-	-	4	4	15	15	10	60	100
4	PE	EX8*4	Elective – IV	4	-	-	4	4	15	15	10	60	100
5	PC	EX805	Advanced Networking Lab	-	-	2	2	1	-	-	50	50	100
6	PC	EX806	Microwave Engineering Lab	-	-	2	2	1	-	-	50	50	100
7	PC	EX807	Project Phase – II	-	-	5	5	8	-	-	100	100	200
			Total	16	-	9	25	26	60	60	240	440	800

CT1- Class Test 1

TA/CA- Teacher Assessment/Continuous Assessment

CT2- Class Test 2

ESE- End Semester Examination (For Laboratory: End Semester Performance)

Credits Distribution

Course Category	HS (Hum. And So. Sc.)	BS (Basic Sc.)	ES (Engg. Sc.)	PC (Programme Core)	PE (Programme Electives)	OE (Open Elective)	MC (Mandatory Course)
Credits				18	8		
Cumulative Sum	9	21	28	121	16	3	

Government College of Engineering, Karad
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Programme: Electronics and Telecommunication Engineering

List of Electives offered by E&TC Department

Open Elective	Elective I	Elective II	Elective III	Elective IV
(Open)	(Core)	(Core)	(Core)	(SSM)
6	6	7	8	8
OE651 Open Source Embedded Platform	EX614 Random Signal Processing	EX715 Mechatronics	EX813 Speech Processing	EX814 Broadband Communication
	EX624 Computer Organization	EX725 Real Time Operating Systems	EX823 Embedded Linux	EX824 Satellite Communication
	EX634 Image Processing	EX735 Industrial Drives	EX833 PLC and SCADA	EX834 Audio & Video Engineering
	EX644 Information Theory and Coding	EX745 Linear Algebra	EX843 Robotics	EX844 Digital Signal Compression