

Government College of Engineering, Karad
SCHEME OF INSTRUCTION & SYLLABI
Scheme of Instruction for First Year of M. Tech. (PG) Degree in Computer Science and Engineering
Semester – I (W.E.F. AY. 2019-20)

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs./Wk	Credits	EXAM SCHEME				
									CT1	CT2	TA / CA	ESE	TOTAL
1	PCC	CS101	Mathematical foundations of Computer Science	3	-	-	3	3	15	15	10	60	100
2	PCC	CS102	Advanced Data Structures and Algorithms	3	-	-	3	3	15	15	10	60	100
3	PEC	CS1*3	Program Elective I	3	-	-	3	3	15	15	10	60	100
4	PEC	CS1*4	Program Elective II	3	-	-	3	3	15	15	10	60	100
5	MDC	CS105	Research Methodology	2	-	-	2	2	15	15	10	60	100
6	PCC	CS106	Laboratory 1(Advanced Data Structures and Algorithms)	-	-	4	4	2	-	-	25	25	50
7	PEC	CS107	Laboratory 2 (Based on Elective I & II)	-	-	4	4	2	-	-	50	-	50
8	OEC	OE1*8	Open Elective	3	-	-	3	3	15	15	10	60	100
9	MNC	CS1*9	Audit Course I	2	-	-	2	Audit	15	15	10	60	100
Total				19	-	8	27	21	105	105	145	445	800

L- Lecture T-Tutorial P-Practical

CT1- Class Test 1

TA/CA- Teacher Assessment/Continuous Assessment

CT2- Class Test 2

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

*- Program Elective- I and II, Audit Course I, Open Elective list is provided at the end of structure.

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SCHEME OF INSTRUCTION & SYLLABI
Scheme of Instruction for First Year of M. Tech. (PG) Degree in Computer Science and Engineering
Semester – II (W.E.F. AY. 2019-20)

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME				
									CT1	CT2	TA / CA	ESE	TOTAL
1	PCC	CS201	Advanced Computer Networks	3	-	-	3	3	15	15	10	60	100
2	PCC	CS202	Soft Computing	3	-	-	3	3	15	15	10	60	100
3	PEC	CS2*3	Program Elective III	3	-	-	3	3	15	15	10	60	100
4	PEC	CS2*4	Program Elective IV	3	-	-	3	3	15	15	10	60	100
5	PEC	CS2*5	Program Elective V	3	-	-	3	3	15	15	10	60	100
6	PCC	CS206	Laboratory 3 (Based on cores)	-	-	4	4	2	-	-	25	25	50
7	PCC	CS207	Laboratory 4 (Based on Elective III & IV)	-	-	4	4	2	-	-	50	-	50
8	P/S/IT	CS208	Seminar	-	-	4	4	2	-	-	100	-	100
9	MNC	CS2*9	Audit Course II	2	-	-	2	Audit	15	15	10	60	100
			Total	17	-	12	29	21	90	90	235	385	800

L- Lecture T-Tutorial P-Practical

CT1- Class Test 1

TA/CA- Teacher Assessment/Continuous Assessment

CT2- Class Test 2

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

*- Program Elective- III, IV and V, Audit Course II list is provided at the end of structure.

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SCHEME OF INSTRUCTION & SYLLABI
Scheme of Instruction for First Year of M. Tech. (PG) Degree in Computer Science and Engineering
Semester – III (W.E.F. AY. 2019-20)

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME				
									CT1	CT2	TA/CA	ESE	TOTAL
1	P/S/IT	CS301	Dissertation Stage-I	-	-	10	10	05	-	-	50	-	50
2	P/S/IT	CS302	Dissertation Stage-II	-	-	10	10	05	-	-	50	100	150
			Total	00	00	20	20	10	-	-	100	100	200

CT1- Class Test 1
CT2- Class Test 2

TA/CA- Teacher Assessment/Continuous Assessment
ESE- End Semester Examination (For Laboratory: End Semester Performance)

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SCHEME OF INSTRUCTION & SYLLABI
Scheme of Instruction for First Year of M. Tech. (PG) Degree in Computer Science and Engineering
Semester – IV (W.E.F. AY. 2019-20)

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME				
									CT1	CT2	TA/CA	ESE	TOTAL
1	P/S/IT	CS401	Dissertation Stage-I	-	-	16	16	08	-	-	50	-	50
2	P/S/IT	CS402	Dissertation Stage-II	-	-	16	16	08	-	-	50	200	250
			Total	-	-	32	32	16	-	-	100	200	300

CT1- Class Test 1
CT2- Class Test 2

TA/CA- Teacher Assessment/Continuous Assessment
ESE- End Semester Examination (For Laboratory: End Semester Perform

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List of Electives

Program Elective I	Program Elective II	Program Elective III	Program Elective IV	Program Elective V
Semester - I	Semester - I	Semester - II	Semester - II	Semester – II
CS113: Machine Learning	CS114: Data Science	CS213: Data Preparation and Analysis	CS214: Human and Computer Interaction	CS215: Mobile Technologies and Services
CS123 Wireless Sensor Networks	CS124: Advanced Distributed Systems	CS223: Secure Software Design & Enterprise Computing	CS224: GPU Computing	CS225: Compiler for HPC
CS133 Introduction to Intelligent Systems	CS134: Advanced Mobile Computing	CS233: Computer Vision	CS234: Digital Forensics	CS235: Optimization Techniques

Audit Course I	Audit Course II	Open Elective
Semester – I	Semester – II	Semester - I
CS119: Research Paper Writing	CS219: Constitution of India	OE118: Business Analytics
CS129: Disaster Management	CS229: Pedagogy Studies	OE128: Industrial Safety
CS139: Sanskrit for Technical Knowledge	CS239: Stress Management by Yoga	OE138: Operations Research
CS149: Value Education	CS249: Personality Development through Life Enlightenment Skills	OE148: Cost Management of Engineering Projects
		OE158: Composite Materials
		OE168: Waste to Energy

