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	CT1	CT2	TA / CA	ESE	TOTAL
									EXAM SCHEME				
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	RM1105	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	ÒE11*8	Open Elective	3	-	-	3	3	15	15	10	60	100
9	MNC	AU11*9	Audit Course I	2	-	-	2	Audit	-	-	-	-	-
			Total	19	-	8	27	21	90	90	145	385	700

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.

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 – 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	AU12*9	Audit Course II	2	-	-	2	Audit	-	-	-	-	-
			Total	17	-	12	29	21	90	90	235	385	700

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.

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 – 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   TA/CA- Teacher Assessment/Continuous Assessment

CT2- Class Test 2   ESE- End Semester Examination (For Laboratory: End Semester Performance)

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 – 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   TA/CA- Teacher Assessment/Continuous Assessment
CT2- Class Test 2   ESE- End Semester Examination (For Laboratory: End Semester Perform

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

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