

Government College of Engineering, Karad
SCHEME OF INSTRUCTION & SYLLABI
Scheme of Instruction for First Year of M. Tech. (PG) Degree in Civil -Structural Engineering
Semester – I (W.E.F. AY. 2023-24)

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs./Wk	Credits	EXAM SCHEME			
									MSE	ISE	ESE	TOTAL
1	PCC	SE2101	Theory of Elasticity & Plasticity	3	-	-	3	3	20	20	60	100
2	PCC	SE2102	Mechanics of Structure	3	-	-	3	3	20	20	60	100
3	PEC	SE21*3	Program Elective I	3	-	-	3	3	20	20	60	100
4	PEC	SE21*4	Program Elective II	3	-	-	3	3	20	20	60	100
5	MDC	SE2105	Research Methodology and IPR	2	-	-	2	2	20	20	60	100
6	PCC	SE2106	Structural Design Lab I	-	-	4	4	2	-	25	25	50
7	PEC	SE2107	Laboratory 2 (Based on Elective I & II)	-	-	4	4	2	-	50	-	50
8	OEC	OE21*8	Open Elective	3	-	-	3	3	20	20	60	100
9	MNC	AU21*9	Audit Course I	2	-	-	2	Audit	-	-	-	-
			Total	19	-	8	27	21	120	195	385	700

L- Lecture

T-Tutorial

P-Practical

MSE- Mid Semester Examination

ISE- In Semester Evaluation

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 Civil -Structural Engineering
Semester – II (W.E.F. AY. 2023-24)

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME			
									MSE	ISE	ESE	TOTAL
1	PCC	SE2201	Theory of Plates and Shells	3	-	-	3	3	20	20	60	100
2	PCC	SE2202	Advanced Design of Steel Structures	3	-	-	3	3	20	20	60	100
3	PEC	SE22*3	Program Elective III	3	-	-	3	3	20	20	60	100
4	PEC	SE22*4	Program Elective IV	3	-	-	3	3	20	20	60	100
5	PEC	SE22*5	Program Elective V	3	-	-	3	3	20	20	60	100
6	PCC	SE2206	Structural Design Lab II	-	-	4	4	2	-	25	25	50
7	PCC	SE2207	Mini Project/Industrial Training	-	-	4	4	2	-	50	-	50
8	P/S/IT	SE2208	Seminar	-	-	4	4	2	-	100	-	100
9	MNC	AU22*9	Audit Course II	2	-	-	2	Audit	-	-	-	-
			Total	17	-	12	29	21	100	275	325	700

L- Lecture

T-Tutorial

P-Practical

MSE- Mid Semester Examination

ISE- In Semester Evaluation

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 Second Year of M. Tech. (PG) Degree in Civil -Structural Engineering Semester – III (W.E.F. AY. 2024-25)

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME			
									MSE	ISE	ESE	TOTAL
1	P/S/IT	SE2301	Dissertation Phase-I	-	-	14	14	07	-	100	100	200
2	MOOC	CS2302	MOOCs / OPEN COURSE (8-12 weeks)	-	-	-	-	03	-	-	-	-
			Total	00	00	14	14	10	-	100	100	200

Note:

- SE2302 will be decided by respective Guide in Consultation with Program Coordinator. Course is mandatory for student and candidate dissertation phase- I will be considered incomplete without this Mandatory MOOC Course.
- In Case, the course offered online are not completely relevant with the topic of dissertation then any course suggested by NASSCOM on recent technologies can be opted by candidate.

L- Lecture

T-Tutorial

P-Practical

MSE- Mid Semester Examination

ISE- In Semester Evaluation

ESE- End Semester Examination (For Laboratory End Semester performance)

Government College of Engineering, Karad
SCHEME OF INSTRUCTION & SYLLABI

Scheme of Instruction for Second Year of M. Tech. (PG) Degree in Civil -Structural Engineering
Semester – IV (W.E.F. AY. 2024-25)

Sr. No.	Course Category	Course Code	Course Title	L	T	P	Contact Hrs/Wk	Credits	EXAM SCHEME			
									MSE	ISE	ESE	TOTAL
1	P/S/IT	SE2401	Dissertation phase-II	-	-	32	32	16	-	100	200	300
			Total	-	-	32	32	16	-	100	200	300

L- Lecture

T-Tutorial

P-Practical

MSE- Mid Semester Examination

ISE- In Semester Evaluation

ESE- End Semester Examination (For Laboratory End Semester performance)

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Scheme of Instruction for Second Year of M. Tech. (PG) Degree in Civil -Structural 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
SE 2113 Advanced Design of Concrete Structures	SE 2114 Structural Dynamics	SE 2213 Earthquake Engineering	SE 2214 Design of R. C. Bridges	SE 2215 Finite Element Method
SE 2123 Advanced Design in Composite	SE 2124 Analytical and Numerical Methods for Structural Engineering.	SE 2223 Advanced Design of Foundations	SE 2224 Repairs and Rehabilitation of Structures	SE 2225 Fracture Mechanics
SE 2133 Design of Pre stressed Concrete Structures	SE 2134 Stability of Structures	SE 2233 Soil Structure Interaction	SE 2234 Structural Health Monitoring	SE 2235 Design of High Rise Structures

Open Elective	Audit Course I	Audit Course II
Semester - I	Semester – I	Semester – II
OE2118: Business Analytics	AU2119: Research Paper Writing	AU2219: Constitution of India
OE2128: Industrial Safety	AU2129: Disaster Management	AU2229: Pedagogy Studies
OE2138: Operations Research	AU2139: Sanskrit for Technical Knowledge	AU2239: Stress Management by Yoga
OE2148: Cost Management of Engineering Projects	AU2149: Value Education	AU2249: Personality Development through Life Enlightenment Skills
OE2158: Composite Materials		
OE2168: Waste to Energy		