Faculty of Engineering, School of Civil & Chemical Engineering
Department of Civil Engineering

Degree: B. Tech. Civil Engineering   **Total Credit: 160**

Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
Third Semester						**Fourth Semester**					
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
MAS21XX/ MEE22XX[i]	Statistics & Probability/ Engineering Economics	3	0	0	3	MAS21XX / MEE22XX	Statistics & Probability/ Engineering Economics	3	0	0	3
MBB21XX	Management of Technology	3	0	0	3	CIV2201	Structural Analysis	3	1	0	4
CIV2101	Fluid Mechanics	4	0	0	4	CIV2202	Environmental Engineering	3	1	0	4
CIV2102	Surveying and Practices	3	0	3	4	CIV2220/ XX22XX	Construction Project Management/ Relational Database Management Systems	4	0	0	4
CIV2103	Strength of Materials	3	1	0	4	CIV22XX	Program Elective 1	3	0	0	3
CIV2120/ XX21XX	Concrete & Construction Technology/ Data Structures and Algorithm	4	0	0	4	CIV00XX	Open Elective 1	3	0	0	3
CIV2130	Material Testing Lab	0	0	2	1	CIV2230	Environmental Engineering Lab	0	0	2	1
CIV2131	Fluid Mechanics Lab	0	0	2	1	CIV2231	Building Drawing Lab	0	0	2	1
CIV2170	Project-based Learning 1	0	0	2	1	CIV2270	Project-based Learning 2	0	0	2	1
		20	1	9	25			19	2	6	24
	Total Contact Hours (L+T+P)	**30**					**Total Contact Hours (L+T+P)**	**27**			
Fifth Semester						**Sixth Semester**					
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
CIV3101	Geotechnical Engineering	3	1	0	4	CIV32XX	Water Resources Engineering	3	1	0	4
CIV3102	Design of Reinforced Concrete Structures	3	1	0	4	CIV32XX	Program Elective 4	3	0	0	3
CIV3120 /XX31XX	Highway Engineering/ Object Oriented Programming	3	1	0	4	CIV32XX	Program Elective 5	3	0	0	3
CIV31XX	Program Elective 2	3	0	0	3	CIV32XX	Program Elective 6	3	0	0	3
CIV31XX	Program Elective 3	3	0	0	3	CIV00XX	Open Elective 3	3	0	0	3
CIV00XX	Open Elective 2	3	0	0	3	CIV3230	Professional Practice	0	0	2	1
CIV3130	Geotechnical Engineering Lab	0	0	2	1	CIV3231	Computer Aided Design Lab	0	0	2	1
CIV3131	Highway Engineering Lab	0	0	2	1	CIV3232	Estimating and Costing Practice	0	0	2	1
CIV3170	Project-based Learning 3	0	0	2	1	CIV3270	Project-based Learning 4	0	0	2	3
		18	3	6	24			15	1	8	22
	Total Contact Hours (L+T+P)	**27**					**Total Contact Hours (L+T+P)**	**24**			

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	Seventh Semester	L	T	P	C		Eighth Semester	L	T	P	C
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
CIV41XX	Program Elective 7	3	0	0	3	CIV4270	Major Project	0	0	24	12
CIV41XX	Program Elective 8	3	0	0	3						
CIV00XX	Open Elective 4	3	0	0	3						
CIV00XX	Open Elective 5	3	0	0	3						
CIV4170	Internship (Industry or Research)	0	0	2	1						
		12	0	2	13						12
	Total Contact Hours (L+T+P)		14				Total Contact Hours (L+T+P)		24		

Flexi Core		
Flexi Core 1 (III Sem)	**Flexi Core 2 (IV Sem)**	**Flexi Core 3 (V Sem)**
CIV2120: Concrete & Construction Technology	**CIV2220:** Construction Project Management	**CIV3120:** Highway Engineering
XX21XX: Data Structures and Algorithm	**XX22XX**: Relational Database Management Systems	**XX31XX:** Object Oriented Programming

Program Electives			
IV	**V**	**VI**	**VII**
Example - PE1	**Example - PE2**	**Example - PE 4**	**Example - PE 7**
CIV2240: Remote Sensing and Geographic Information System **CIV2241:** Computational Hydraulics **CIV2242:** Engineering Geology	**CIV3140:** Wastewater Treatment techniques **CIV3141:** Advanced Concrete Technology **CIV3142:** Building Information Modeling **Example – PE3** **CIV3143:** Lean Construction Technology **CIV3144:** Advance Structural Analysis **CIV3145:** Repair and Rehabilitation of Structures	**CIV3240:** Railway and Airport Engineering **CIV3241:** Design of Steel Structures **CIV3242:** Real Estate Valuation **Example - PE5** **CIV3243:** Applied Geotechnical Engineering **CIV3244:** Advance Reinforced Cement Concrete **CIV3245:** Environmental Impact Assessment **Example – PE6** **CIV3246**: Contract Management and Arbitration **CIV3247:** Earthquake Resistant Design of Structures **CIV3248:** Hazardous Waste Management	**CIV4140:** Traffic Systems and Engineering **CIV4141:** Design of Pre-stressed Concrete Structures **CIV4142:** Photogrammetry **Example - PE8** **CIV4143:** Bridge Engineering **CIV4144:** Finite Element Method **CIV4145:** Remote Sensing and GIS for Rural Development

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Open Electives	
Graded OE	**Non-Graded OE**
CIV0001: Basics of Remote Sensing and GIS	OE1: Course Name
CIV0002: Integrated Waste Management for a Smart City	OE2: Course Name
CIV0003: Introduction to Multimodal Urban Transportation Systems	OE3: Course Name
CIV0004: Environmental Impact	OE4: Course Name
CIV0005: Building Planning	OE5: Course Name
CIV0006: Environmental Management	
CIV0007: Solid Waste Management	
CIV0008: Rural Water Supply and Sanitation	

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[i] Statistics & Probability: CSE, AIML, SEEC students will take in 3rd semester. Engineering Economics: SIT, SCCE, All Core (-) SEEC will take in 3rd semester. In 4th semester, these courses are switched.