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

Degree: B. Tech. _____ with Minor Specialization in GIS and Remote Sensing Total Credit: 178 (160 + 18*)

	Third Semester						Fourth Semester				
Code	Subject Name	L	T	P	С	Code	Subject Name	L	T	P	С
MAS21XX/M EE22XX ⁱ	Statistics & Probability				3	MAS21XX / MEE22XX	Engineering Economics				3
MBB21XX	Management of Technology				3	XXX22XX	Department Core 4				4
XXX21XX	Department Core 1				4	XXX22XX	Department Core 5				4
XXX21XX	Department Core 2				4	XXX222X	Flexi Core 2				4
XXX21XX	Department Core 3				4	XXX22XX	Program Elective 1				3
XXX212X	Flexi Core 1				4	XXX00XX	Open Elective 1				3
XXX213X	Lab -1				1	XXX223X	Lab -3				1
XXX213X	Lab -2				1	XXX223X	Lab -4				1
XXX2170	Project-based Learning 1				1	XXX223X	Project-based Learning 2				1
					25						24
	Total Contact Hours (L+T+P)						Total Contact Hours (L+T+P)				
	Fifth Semester						Sixth Semester				
Code	Subject Name	L	T	P	С	Code	Subject Name	L	T	P	C
XXX31XX	Department Core 6				4	XXX32XX	Department Core 8				4
XXX31XX	Department Core 7				4	XXX32XX	Program Elective 4				3
XXX31XX	Flexi Core 3				4	XXX32XX	Program Elective 5				3
XXX31XX	Program Elective 2				3	XXX32XX	Program Elective 6				3
XXX31XX	Program Elective 3				3	XXX00XX	Open Elective 3				3
XXX00XX	Open Elective 2				3	XXX32XX	Professional Practice (Do the Coding as per the core course)				1
XXX31XX	Lab – 5				1	XXX32XX	Lab – 7				1
XXX31XX	Lab – 6				1	XXX32XX	Lab – 8				1
XXX31XX	Project-based Learning 3				1	XXX32XX	Project-based Learning 4				3
CIV3190	Research Methodology	1	0	0	1	CIV3290	Remote Sensing Essentials	3	0	0	3
	Total Contact Hours (L+T+P)				24		Total Contact Hours (L+T+P)				22

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	Seventh Semester						Eighth Semester				
Code	Subject Name	L	Т	P	С	Code	Subject Name	L	Т	P	С
XXX41XX	Program Elective 7				3	XXX427X	Major Project				12
XXX41XX	Program Elective 8				3	CIV4290	Minor Specialization Project	0	0	16	8
XXX00XX	Open Elective 4				3						
XXX00XX	Open Elective 5				3						
XXX41XX	Internship (Industry or Research)				1						
CIV4190	Remote Sensing and GIS for rural development	3	0	0	3						
CIV4191	Microwave Remote Sensing in Hydrology	3	0	0	3						
					19						20
	Total Contact Hours (L+T+P)		I	I	1		Total Contact Hours (L+T+P)		1	1	

Program Electives			
IV	V	VI	VII
Example - PE1	Example - PE2	Example - PE 4	Example - PE 7
• XXX2240: Course 1	• XXX23140: Course 1	• XXX23240: Course 1	• XXX24140: Course 1
XXX22241: Course	• XXX23141: Course 2	• XXX23241: Course 2	• XXX24141: Course 2
2	Example - PE3	Example - PE5	Example - PE8
	• XXX23140: Course 1	• XXX23240: Course 1	• XXX24140: Course 1
	• XXX23141: Course 2	• XXX23241: Course 2	• XXX24141: Course 2
		Example - PE6	
		• XXX23240: Course 1	
		• XXX23241: Course 2	

Open Electives

Graded OE	Non-Graded OE
OE1 XXX20001: Course Name	OE1 XXX20051: Course Name
OE2 XXX20001: Course Name	OE2 XXX20052: Course Name
OE3 XXX20001: Course Name	OE3 XXX20052: Course Name
OE4 XXX20001: Course Name	OE4 XXX20052: Course Name
OE5 XXX20001: Course Name	OE5 XXX20052: Course Name

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Program Electives for Minor Specialization

VI / VII

CIV3290: Remote Sensing Essentials

 $\mbox{\sc CIV4190:}$ Remote Sensing and GIS for rural development

CIV4191: Microwave Remote Sensing in Hydrology

Eligibility Criteria for Minor Specializationⁱⁱ

SN	Minor Program	Eligible Branch of	@ Offering	Award of
		Students	Department	Degree
Example	GIS and Remote	CSE, CCE, IT	Civil Engineering	B. Tech. in
	Sensing	Mechatronics,		branch name
		Mechanical, Electronics,		with Minor in
		Electrical etc.		GIS and Remote
				Sensing.

¹ 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.

ii For Eligibility criteria, refer the AICTE APH.