

## SEMESTER III

Course Code	Title of the Course	Nature of Course	Examination Scheme Marks						Total Credits	Total Marks	
			L	T	Lab	Practical	CA	ESE			
						Int	Ext				
070121301CE	Solid Mechanics	C	4	-	-	-	-	40	60	4	100
070121302CE	Fluid Mechanics I	C	3	2	-	-	-	40	60	4	100
070121303CE	Surveying I	C	3	2	-	-	-	40	60	4	100
070121304CE	Building Construction & Materials	C	3	-	-	-	-	30	45	3	75
070121305CE	Engineering Geology	C	3	-	-	-	-	30	45	3	75
070121306CE	Total Quality Management	ID	3	-	-	-	-	30	45	3	75
070121307CE	Solid Mechanics Lab	C	-	-	2	10	15	-	-	1	25
070121308CE	Fluid Mechanics I Lab	C	-	-	2	10	15	-	-	1	25
070121309CE	Surveying I Lab	C	-	-	2	10	15	-	-	1	25
070121310CE	Building Construction & Materials Lab	C	-	-	2	10	15	-	-	1	25
070121311CE	Engineering Geology Lab	C	-	-	2	10	15	-	-	1	25
		<b>Total</b>	<b>19</b>	<b>4</b>	<b>10</b>	<b>50</b>	<b>75</b>	<b>210</b>	<b>315</b>	<b>26</b>	<b>650</b>

## SEMESTER IV

Course Code	Title of the Course	Nature of Course	Examination Scheme Marks						Total Credits	Total Marks	
			L	T	Lab	Practical	CA	ESE			
						Int	Ext				
070121401CE	Engineering Mathematics -III	C	4	2	-	-	-	50	75	5	125
070121402CE	Structural Analysis-I	C	3	2	-	-	-	40	60	4	100
070121403CE	Building Design & Drawing	C	4	-	-	-	-	40	60	4	100
070121404CE	Fluid Mechanics II	C	3	2	-	-	-	40	60	4	100
070121405CE	Concrete Technology	C	4	-	-	-	-	40	60	4	100
070121406CE	Industrial Management	ID	3	-	-	-	-	30	45	3	75
070121407CE	Building Design & Drawing Lab	C	-	-	2	10	15	-	-	1	25
070121408CE	Fluid Mechanics II Lab	C	-	-	2	10	15	-	-	1	25
070121409CE	Concrete Technology Lab	C	-	-	2	10	15	-	-	1	25
		<b>Total</b>	<b>21</b>	<b>6</b>	<b>6</b>	<b>30</b>	<b>45</b>	<b>240</b>	<b>360</b>	<b>27</b>	<b>675</b>
070121410CE	*Integrated Disaster Management	GP	-	-	-	-	-	-	-	1	-

For 2 hours tutorial, there will be 1 hour classroom teaching and 1 hour for projects/self study/assignments.

## SEMESTER V

Course Code	Title of the Course	Nature of Course	Examination Scheme Marks								Total Credits	Total Marks
			L	T	Lab	Practical		CA	ESE			
						Int	Ext					
070121501CE	Structural Analysis-II	C	3	2	-	-	-	40	60	4	100	
070121502CE	Transportation Engineering-I	C	3	-	-	-	-	30	45	3	75	
070121503CE	Quantity Surveying and Valuation	C	4	-	-	-	-	40	60	4	100	
070121504CE	Environmental Engineering -I	C	3	-	-	-	-	30	45	3	75	
070121505CE	Structural Design-I	C	3	2	-	-	-	40	60	4	100	
070121506CE	Surveying-II	C	3	-	-	-	-	30	45	3	75	
070121507CE	Quantity Surveying and Valuation Lab	C	-	-	2	10	15	-	-	1	25	
070121508CE	Environmental Engineering –I Lab	C	-	-	2	10	15	-	-	1	25	
070121509CE	Structural Design-I Lab	C	-	-	2	10	15	-	-	1	25	
070121510CE	Surveying-II Lab	C	-	-	2	10	15	-	-	1	25	
070121511-22CE	Free Elective	ID	3	-	-	-	-	30	45	3	75	
		<b>Total</b>	<b>22</b>	<b>04</b>	<b>08</b>	<b>40</b>	<b>60</b>	<b>240</b>	<b>360</b>	<b>28</b>	<b>700</b>	

Free Electives (Choose any one)	
Course Code	Title of the Course
070121511CE	Geographic Information Systems
070121512CE	Earthquake Engineering
070121513CE	JAVA
070121514CE	Open Source Technologies
070121515CE	Database management Systems
070121516CE	MATLAB
070121517CE	Printed Circuit Board (PCB) Design
070121518CE	Fundamentals of Automotive Technology
070121519CE	Six Sigma
070121520CE	Nanotechnology
070121521CE	Smart Material Science
070121522CE	Introduction to Statistical Product and Service Solutions (SPSS)

For 2 hours tutorial, there will be 1 hour classroom teaching and 1 hour for projects/self study/assignments.

## SEMESTER VI

Course Code	Title of the Course	Nature of Course	Examination Scheme Marks						Total Credits	Total Marks	
			L	T	Lab	Practical		CA			ESE
						Int	ext				
070121601CE	Environmental Engineering -II	C	4	-	-	-	-	40	60	4	100
070121602CE	Geotechnical Engineering - I	C	3	2	-	-	-	40	60	4	100
070121603CE	Construction Techniques & Management	C	3	2	-	-	-	40	60	4	100
070121604CE	Structural Design-II	C	3	2	-	-	-	40	60	4	100
070121605CE	Transportation Engineering - II	C	3	-	-	-	-	30	45	3	75
070121606CE	Water Resources Engineering	C	3	-	-	-	-	30	45	3	75
070121607CE	Environmental Engineering-II Lab	C	-	-	2	10	15	-	-	1	25
070121608CE	Geotechnical Engineering-I Lab	C	-	-	2	10	15	-	-	1	25
070121609CE	Structural Design-II Lab	C	-	-	2	10	15	-	-	1	25
070121610CE	Transportation Engineering – II Lab	C	-	-	2	10	15	-	-	1	25
		<b>Total</b>	<b>19</b>	<b>06</b>	<b>08</b>	<b>40</b>	<b>60</b>	<b>220</b>	<b>330</b>	<b>26</b>	<b>650</b>

For 2 hours tutorial, there will be 1 hour classroom teaching and 1 hour for projects/self study/assignments.

## SEMESTER VII

Group A											
Course Code	Title of the Course	Nature of Course	Examination Scheme Marks					Total Credits	Total Marks		
			L	T	Lab	Practical	CA			ESE	
						Int	Ext				
070121701CE	Internship (6 Months)	C	-	-	-	-	-	400	-	16	400
OR											
070121727CE	Global Immersion Programme	-	-	-	-	-	-	-	-	-	-
070121702CE	Seminar	C	-	-	-	-	-	100	-	4	100
		<b>Total</b>	-	-	-	-	-	500	-	20	500

OR

Group B											
Course Code	Title of the Course	Nature of Course	Examination Scheme Marks					Total Credits	Total Marks		
			L	T	Lab	Practical	CA			ESE	
						Int	Ext				
070121703CE	Project	PD	-	-	8	-	-	100	-	4	100
070121704CE	Internship(6-8 Weeks)	PD	-	-	8	-	-	100	-	4	100
070121705-22CE	Liberal Arts	GP	2	-	0	-	-	50	-	2	50
070121723CE	Service Learning	GP	2	-	-	-	-	50	-	2	50
070121724CE	Water Power Engineering	C	3	-	-	-	-	30	45	3	75
070121725CE	Earth Structures	C	3	2	-	-	-	40	60	4	100
070121726CE	Performing Arts	GP	-	-	2	10	15	-	-	1	25
		<b>Total</b>	10	2	18	10	15	370	105	20	500

**Liberal Arts (Select any one)**

070121705CE	Technical Writing
070121706CE	Creative Writing
070121707CE	Principles of Economics
070121708CE	Intellectual Property Rights
070121709CE	Cyber Law
070121710CE	Creativity and Innovations
070121711CE	Society & Science
070121712CE	Sustainability Studies
070121713CE	Environmental Awareness: Only One Earth
070121714CE	Impact of Science & Technology on Human Civilization
070121715CE	Women and Gender Studies
070121716CE	Organizational Behavior
070121717CE	Quantitative Reasoning: Mathematics
070121718CE	Photography
070121719CE	German
070121720CE	French

070121721CE	Chinese
070121722CE	Philosophy

For 2 hours tutorial, there will be 1 hour classroom teaching and 1 hour for projects/self study/assignments.

**SEMESTER VIII**

Course Code	Title of the Course	Nature of Course	Examination Scheme Marks							Total Credits	Total Marks
			L	T	Lab	Practical		CA	ESE		
						Int	Ext				
070121801CE	Project	PD	-	-	8	40	60	-	-	4	100
070121802CE	Geotechnical Engineering -II	C	3	2	-	-	-	40	60	4	100
070121803CE	Structural Design – III	C	3	2	-	-	-	40	60	4	100
070121804CE	Dams & Hydraulic Structures	C	3	-	-	-	-	30	45	3	75
070121805CE	Entrepreneurship	PD	2	-	-	-	-	50	-	2	50
070121806-8CE	Elective-I	C	3	-	-	-	-	30	45	3	75
070121809-11CE	Elective-II	C	3	-	-	-	-	30	45	3	75
070121812CE	Structural Design – III Lab	C	-	-	2	10	15	-	-	1	25
070121813CE	Dams & Hydraulic Structures Lab	C	-	-	2	10	15	-	-	1	25
		<b>Total</b>	<b>17</b>	<b>04</b>	<b>12</b>	<b>60</b>	<b>90</b>	<b>220</b>	<b>255</b>	<b>25</b>	<b>625</b>

For 2 hours tutorial, there will be 1 hour classroom teaching and 1 hour for projects/self study/assignments.

<b>ELECTIVES FOR SEMESTER VIII- ELECTIVE – I (Select any One)</b>											
Course Code	Title of the Course	Nature of Course	Examination Scheme Marks						Total Credits	Total Marks	
			L	T	Lab	Practical		CA			ESE
						Int	Ext				
070121806	Infrastructural Engineering	C	3	-	-	-	-	30	45	3	75
070121807	Geographic Information Systems	C	3	-	-	-	-	30	45	3	75
070121808	Systems Approach in Civil Engineering	C	3	-	-	-	-	30	45	3	75

<b>ELECTIVES FOR SEMESTER VIII- ELECTIVE – II (Select any One)</b>											
Course Code	Title of the Course	Nature of Course	Examination Scheme Marks						Total Credits	Total Marks	
			L	T	Lab	Practical		CA			ESE
						Int	Ext				
070121809	Advanced Design of RCC Structures	C	3	-	-	-	-	30	45	3	75
070121810	Earthquake Engineering	C	3	-	-	-	-	30	45	3	75
070121811	Pavement Design & Construction	C	3	-	-	-	-	30	45	3	75

L- Lecture , T-Tutorial,

C - Core Subject

ES - Engineering Science Course

GP - General Proficiency Course

ID - Inter Disciplinary Course

PD - Professional Development Course

CA- Continuous Assessment, ESE- End Semester Examination

Practical, CA, ESE are separate heads of Passing

Int- Internal (Practical)

Ext- External (Practical)

Practical external examination may be conducted by alternate internal faculty

All the students of B. Tech. will study one inter institutional course of 2 credits during semester III and semester IV

\*Integrated Disaster Management course is mandatory for the award of degree.