

# COURSE STRUCTURE

## B.Tech. and B.Tech.-M.Tech. Dual Degree (Category-A & B) and Double Major (Civil Engineering)

GROUP-I				SEMESTER													DUAL DEGREE	DUAL DEGREE
FIRST (IC)		SECOND (IC)		THIRD		FOURTH		FIFTH		SIXTH			SEVENTH		EIGHTH			
C O U R S E	MCI101	3-1-0-11	MCI102	3-1-0-11	CEC201 (DC1)	3-0-0-9	CEE202 E/SO3	3-0-0-9	CEC301 (DC8)	3-0-0-9	CEC305 (DC10)	3-0-0-9	CEC401 (DC12)	3-0-0-9	CED403 (DE3)	3-0-0-9	DUAL DEGREE	DUAL DEGREE
	PHI101	3-0-0-9	CYI101	3-0-0-9	CEC202 (DC2)	3-0-0-9	CEC206 (DC4)	3-1-0-11	CEC302 (DC9)	3-0-0-9	CEC306 (DC11)	3-0-0-9	CED401 (DE1)	3-0-0-9	CED404 (DE4)	3-0-0-9		
	PHI102	0-0-2-2	CYI102	0-0-2-2	CEC203 (DC3)	3-0-2-11	CEC207 (DC5)	3-0-0-9	OE-1	3-0-0-9	MS	3-0-0-9	CED402 (DE2)	3-0-0-9	OE6	3-0-0-9		
	E EI101 Modular	3-0-0-9 (9/2)	MCI103 Modular	2-2-0-5	(E/SO1) Optional	3-0-0-9	CEC208 (DC6)	3-0-0-9	HSS	3-0-0-9	OE2	3-0-0-9	OE4	3-0-0-9	OE7/HSS	3-0-0-9		
	E EI102 Modular	0-0-3-3 (3/2)	CSI101 Modular	2-1-0-4	CEE201 (E/SO2)	3-0-0-9	CEC209 (DC7)	3-1-0-11	E/SO4 Optional	3-0-0-9	OE3	3-0-0-9	OE5	3-0-0-9	CEC402 UGP2	0-0-0-6		
	E CI101 Modular	3-0-0-9 (9/2)	CSI102 Modular	0-0-2-2	CEC204 (DP1)	0-0-2-2	CEC210 (DP3)	0-0-2-2	CEC303 (DP5)	0-0-2-2	CEC307 (DP7)	0-0-2-2	CES401 (DC13)	0-0-0-0 S/X	--	--		
	E CI102 Modular	0-0-3-3 (3/2)	ESI101	1-0-0-3	CEC205 (DP2)	0-0-2-2	CEC211 (DP4)	0-0-2-2	CEC304 (DP6)	0-0-2-2	CEC308 (DP8)	0-0-2-2	CEC401 UGP1	0-0-0-6	--	--		
	E EI101	1-0-3-6	GLI101	1-0-0-3	--	--	--	--	--	--	--	--	--	--	--	--		
	E EI101	3-1-0-11	MEI102	2-0-3-9	--	--	--	--	--	--	--	--	--	--	--	--		
	E SI101	2-0-0-2	HSI101	1-0-2-5	--	--	--	--	--	--	--	--	--	--	--	--		
	E SI101	0-0-0-0S/X	CCS102	0-0-0-0 S/X														
	57		52		51		53		49		49		51		42			

DUAL DEGREE (CATEGORY-A)							DUAL DEGREE (CATEGORY-B)																													
FIFTH		SIXTH		SEVENTH		EIGHTH		NINTH		TENTH		FIFTH		SIXTH		SEVENTH		EIGHTH		NINTH		TENTH														
CEC501 DCPG	3-0-0-9	DEPG/ OEPG	3-0-0-9	CSC503 DCPG	3-0-0-9	DEPG/ OEPG	3-0-0-9	CEC597 36 Credits Thesis	DEPG/ OEPG	3-0-0-9	CEC203 DCUG	3-0-0-9	CEC306 DCUG	3-0-0-9	CEC302 DCUG	3-0-0-9	DEPG/ OEPG	3-0-0-9	CEC597 36 Credits Thesis	DEPG/ OEPG	3-0-0-9	CEC597 36 Credits Thesis	DEPG/ OEPG	3-0-0-9												
																									Any one from the basket given in the next page		Any one from the basket given in the next page		Any one from the basket given in the next page		One course from each basket		<ul style="list-style-type: none"> <li>• In place of OE-1 will take (CEC203),</li> <li>• In place of OE-2 will take (CEC306),</li> <li>• In place of OE-3 will take (CEC302),</li> <li>• In place of OE-4 will take (CEC301),</li> </ul> All four DCUG courses are prescribed from the Course Structure of the Undergraduate Program where the student will do the M.Tech. Program under Dual Degree (Category-B)		One course from each basket	
																									One course from each basket		One course from each basket		One course from each basket		One course from each basket		One course from each basket		One course from each basket	
																									CEC598 18 Credits Thesis		CEC598 18 Credits Thesis		CEC598 18 Credits Thesis		CEC598 18 Credits Thesis		CEC598 18 Credits Thesis		CEC598 18 Credits Thesis	

DOUBLE MAJOR (SECOND MAJOR IN OTHER DEPARTMENT)															Department Practical, if any			
<b>MONSOON SEMESTER</b>	CEE201*	3-0-0-9	CEC201	3-0-0-9	CEC203	3-0-0-9	CEC302	3-0-0-9	CEC301	3-0-0-9	DE	3-0-0-9	DE	3-0-0-9	CEC204	CEC303	CEC304	
<b>WINTER SEMESTER</b>	CEE202*	3-0-0-9	CEC206	3-0-0-9	CEC207	3-0-0-9	CEC208	3-0-0-9	CEC209	3-0-0-9	DE	3-0-0-9	DE	3-0-0-9	CEC210	CEC211	CED307	

**NOTE: (1)** \*Two ESOs guided/optional prescribed in the course structure of Double Major program and the same is taken by the students for completion of the course work of the Double Major in the slot of their optional ESO, both the ESOs will fulfil the ESO credit requirement of the Double Major program as well as B.Tech. degree. **(2)** In lieu of Four DCUG (DCPG if the second department does not have any UG program) courses of the Dual Degree (Category-B & C) and Double Major Program will be considered as OE-1, OE-2, OE-3 & OE-4 of the B.Tech. program of Parent Department and the credits of these courses will be counted for fulfilment of the OE credit requirements.

## LIST OF COURSES FOR COMPLETION OF MINOR

MONSOON SEMESTER		WINTER SEMESTER	
CEC203	Building Materials Construction and Management	CEC208	Geotechnical Engineering
		CEC209	Transportation Engineering

TITLE OF THE MINOR: Minor in Infrastructure Engineering

## DETAILS OF THE MINIMUM CREDIT REQUIREMENTS FOR COMPLETION OF B.TECH. PROGRAM AND LIST OF ESO, DE AND OE COURSES

### Minimum Credit requirements for Graduation:

- Institute Core (IC) : 109 Credits
- Department Compulsory : 114
- Department Elective : 36
- Department Practical : 16
- Engineering/Science Option : 36
- Open Elective : 63
- HSS+MS : 18 (9+9)
- UGP-1 & UGP-2 : 12 (6+6)

LIST OF E/SO	
Guided	Offered
--	CEE202
--	CEE201

LIST OF OPEN ELECTIVES (OE)	
CEO401	CEO402
CEO301	CEO403
CEO302	CEO404

LIST OF DEPARTMENTAL ELECTIVES (DE)				
DE-1	DE-2	DE-3	DE-4	DE-5
Basket-1	Basket-2	Basket-3	Basket-4	Basket-5
CED511	CED512	CED513	CED514	CED515
CED521	CED522	CED523	CED524	CED525
CED531	CED532	CED533	--	--

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Total : 404

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## Minimum Credit requirements for completion of Additional Academic Program

Dual Degree (Category-A)		Dual Degree (Category-B)		Double Major	
<ul style="list-style-type: none"> <li>• Departmental Core (DCPG)</li> <li>• DEPG/OEPH</li> <li>• Thesis</li> </ul>	18 Credits 36 Credits 54 Credits <b>Total: 108 Credits</b>	<ul style="list-style-type: none"> <li>• Departmental Core (4 DCUG) of Second Department (Extra credits to be counted in B.Tech part as OE credits)</li> <li>• 2 DCPG &amp; 4 DEPG/OEPG or 1 DCPG &amp; 5 DEPG/OEPG</li> <li>• Thesis</li> </ul>	36 Credits (Not to be counted in M.Tech. Part) 54 Credits 54 Credits <b>Total: 108 Credits</b>	<ul style="list-style-type: none"> <li>• Two ESO courses</li> <li>• Departmental Core (8 DCUG) of Second Department</li> <li>• 4 DE of Second Department</li> </ul>	18 Credits (Not to be counted in the Second Major) 72 Credits 54 Credits <b>Total: 108 Credits</b>