

# COURSE STRUCTURE

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

		GROUP-I				SEMESTER												NINTH	TENTH
		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	CSC201 (DC1)	3-0-0-9	CSE202 (E/SO3)	3-0-0-9	CSC301 (DC8)	3-0-0-9	CSC305 (DC10)	3-0-0-9	DE1	3-0-0-9	DE3	3-0-0-9	DUAL DEGREE	DUAL DEGREE
		PHI101	3-0-0-9	CYI101	3-0-0-9	CSC202 (DC2)	3-0-0-9	CSC206 (DC4)	3-0-0-9	CSC302 (DC9)	3-0-0-9	CSC306 (DC11)	3-0-0-9	DE2	3-0-0-9	DE4	3-0-0-9		
		PHI102	0-0-2-2	CYI102	0-0-2-2	CSC203 (DC3)	3-0-0-9	CSC207 (DC5)	3-0-0-9	OE1	3-0-0-9	MS	3-0-0-9	OE4	3-0-0-9	OE7	3-0-0-9		
		EEI101 Modular	3-0-0-9 (9/2)	MCI103 Modular	2-2-0-5	MCC505 (E/SO1)	3-0-0-9	CSC208 (DC6)	3-0-0-9	HSS	3-0-0-9	OE2	3-0-0-9	OE5	3-0-0-9	OE8/HSS	3-0-0-9		
		EEI102 Modular	0-0-3-3 (3/2)	CSI101 Modular	2-1-0-4	(E/SO2) Optional	3-0-0-9	CSC209 (DC7)	3-0-0-9	E/SO4 Optional	3-0-0-9	OE3	3-0-0-9	OE6	3-0-0-9	CSC402 (UGP2)	0-0-0-6		
		ECI101 Modular	3-0-0-9 (9/2)	CSI102 Modular	0-0-2-2	CSC204 (DP1)	0-0-2-2	CSC210 (DP3)	0-0-2-2	CSC303 (DP5)	0-0-2-2	CSC307 (DP7)	0-0-2-2	CSC401 (UGP1)	0-0-0-6	--	--		
		ECI102 Modular	0-0-3-3 (3/2)	ESI101	1-0-0-3	CSC205 (DP2)	0-0-2-2	CSC211 (DP4)	0-0-2-2	CSC304 (DP6)	0-0-2-2	CSC308 (DP8)	0-0-2-2	CSS401 (DC12)	0-0-0-0 S/X	--	--		
		CEI101	1-0-3-6	GLI101	1-0-0-3	--	--	--	--	--	--	--	--	--	--	--	--		
		MEI101	3-1-0-11	MEI102	2-0-3-9	--	--	--	--	--	--	--	--	--	--	--	--		
		MSI101	2-0-0-2	HSI101	1-0-2-5	--	--	--	--	--	--	--	--	--	--	--	--		
		CCS101	0-0-0-S/X	CCS102	0-0-0-S/X	--	--	--	--	--	--	--	--	--	--	--	--		
		57		52		49		49		49		49		51		42			

DUAL DEGREE (CATEGORY-A)						DUAL DEGREE (CATEGORY-B)																											
FIFTH		SIXTH		SEVENTH		EIGHTH		NINTH		TENTH		FIFTH		SIXTH		SEVENTH		EIGHTH		NINTH		TENTH											
CSC504 DCPG	3-0-0-9	DEPG/ OEPG	3-0-0-9	CSC503 DCPG	3-0-0-9	DEPG/ OEPG	3-0-0-9	CSC597 36 Credits Thesis	3-0-0-9	DEPG/ OEPG	3-0-0-9	CSE201 DCUG	3-0-0-9	CSE206 DCUG	3-0-0-9	CSC203 DCUG	3-0-0-9	OEPG1	3-0-0-9	CSC597 36 Credits Thesis	3-0-0-9	DEPG3/ OEPG3	3-0-0-9										
		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 (CSC201),</li> <li>• In place of OE-2 will take (CSC206),</li> <li>• In place of OE-3 will take (CSC203),</li> <li>• In place of OE-4 will take (CSC301),</li> </ul>	CSC301 DCUG	3-0-0-9	DEPG1	3-0-0-9	DEPG4/ OEPG4	3-0-0-9			
		One course from each basket								CSC598 18 Credits Thesis												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)									DCPG	3-0-0-9	DEPG2
		One course from each basket								CSC598 18 Credits Thesis												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)		DCPG	3-0-0-9	DEPG2	3-0-0-9	One course from each basket		CSC598 18 Credits Thesis			

DOUBLE MAJOR (SECOND MAJOR IN OTHER DEPARTMENT)															Department Practical, if any				
<b>MONSOON SEMESTER</b>		CSE201*	3-0-0-9	CSC202	3-0-0-9	CSC203	3-0-0-9	CSC301	3-0-0-9	CSC302	3-0-0-9	DE	3-0-0-9	DE	3-0-0-9	CSC205	CSC303	CSC304	
<b>WINTER SEMESTER</b>		CSE202* (ESO)	3-0-0-9	CSC208	3-0-0-9	CSC209	3-0-0-9	CSC305	3-0-0-9	CSC306	3-0-0-9	DE	3-0-0-9	DE	3-0-0-9	CSC211	CSC303	CSC308	

**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	
CSE301	Database Management System		
CSO303	Artificial Intelligence		
CSO501	Data Mining		

**Courses of Minor will be offered in Monsoon Semester only**

TITLE OF THE MINOR: Data Science

## 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 : 99 “
- Department Elective : 36 “
- Department Practical : 16 “
- Engineering/Science Option : 36 “
- Open Elective : 72 “
- HSS+MS : 18 (9+9)
- UGP-1 & UGP-2 : 12 (6+6)

LIST OF E/SO	
Guided	Offered
MCC505	CSE201
--	CSE202

LIST OF DEPARTMENTAL ELECTIVES (DE)	
CSD502	CSD403
CSD504	CSD404
CSD508	CSD405
CSD510	CSD406
CSD511	CSD407
CSD401	CSD408
CSD402	CSD409

LIST OF OPEN ELECTIVES (OE)	
CSO301	CSO402
CSO302	CSO403
CSO303	CSO404
CSO304	CSO405
CSO401	

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Total : **398**

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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>