

# COURSE STRUCTURE

## 5-Years Integrated M.Tech (Mathematics & Computing)

GROUP-II				SEMESTER																
C O U R S E	FIRST (IC)		SECOND (IC)		THIRD		FOURTH		FIFTH		SIXTH		SEVENTH		EIGHTH		NINTH		TENTH	
	MCI101	3-1-0-11	MCI102	3-1-0-11	MCC201 (DC1)	3-0-0-9	(E/SO3) Optional	3-0-0-9	MCD541 (DC8)	3-0-0-9	MCC508 (DC11)	3-0-0-9	MCO502 (DC13)	3-0-0-9	MCC401 (DC15)	3-0-0-9	MCC597 (Thesis) 36 Credits		DE7/ OE6	3-0-0-9
	CYI101	3-0-0-9	PHI101	3-0-0-9	MCC202 (DC2)	3-0-0-9	MCO501 (DC4)	3-0-0-9	MCC502 (DC9)	3-0-0-9	MCC511 (DC12)	3-0-0-9	MCC503 (DC14)	3-0-0-9	MCC514 (DC16)	3-0-0-9			DE8/ OE7	3-0-0-9
	CYI102	0-0-2-2	PHI102	0-0-2-2	MCC203 (DC3)	3-0-0-9	MCC205 (DC5)	3-0-0-9	MCC301 (DC10)	3-0-0-9	DE1	3-0-0-9	DE3	3-0-0-9	DE5	3-0-0-9			MCC598 (Thesis) 18 Credits	
	EI101 Modular	3-0-0-9 (9/2)	MCI103 Modular	2-2-0-5	MCC505 (E/SO1)	3-0-0-9	MCC509 (DC6)	3-0-0-9	MS	3-0-0-9	HSS	3-0-0-9	OE2	3-0-0-9	OE4	3-0-0-9				
	EI102 Modular	0-0-3-3 (3/2)	CSI101 Modular	2-1-0-4	(E/SO2) Optional	3-0-0-9	MCC510 (DC7)	3-0-0-9	ESO4 Optional	3-0-0-9	OE1/DE2	3-0-0-9	OE3/ DE4	3-0-0-9	OE5 /DE6	3-0-0-9	MCC555 DC21	0-0-0-0 S/X	--	
	ECI101 Modular	3-0-0-9 (9/2)	CSI102 Modular	0-0-2-2	MCC204 (DP1)	0-0-2-2	MCC512 (DP2)	0-0-3-3	MCC302 (DP3)	0-0-2-2	MCC513 (DP4)	0-0-2-2	MCC506 (DP5)	0-0-3-3	MCC402 (DP6)	0-0-2-2				
	ECI102 Modular	0-0-3-3 (3/2)	CEI101	1-0-3-6																
	ESI101	1-0-0-3	MEI101	3-1-0-11																
	GLI101	1-0-0-3	MSI101	2-0-0-2																
MEI102	2-0-3-9	CCS102	S/X																	
HSI101	1-0-2-5	--	--																	
CCS101	S/X	--	--																	
	54		55		53		49		51		51		49		49		36		36	

DUAL DEGREE (CATEGORY-A)	DUAL DEGREE (CATEGORY-B)																																																	
NOT APPLICABLE	Data Analytics																																																	
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**NOTE: (1)** In lieu of Four DCUG (DCPG if the second department does not have any UG program) courses of the Dual Degree (Category-B) 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.

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## LIST OF COURSES FOR COMPLETION OF MINOR

MONSOON SEMESTER		WINTER SEMESTER	
MCC203	Real Analysis	MCC509	Statistical Inference
MCC502	Differential Equations		

TITLE OF THE MINOR: **Minor in Mathematics and Statistics**

## 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 : 144
- Department Elective : 45
- Department Practical : 14
- Engineering/Science Option : 36
- Open Elective : 45
- Thesis Units : 54 (9x6)
- HSS/MS : 18

LIST OF E/SO	
Guided	Offered
	MCC505
	MCE301

LIST OF OPEN ELECTIVES (OE)	
MCC301	MCO403
MCO401	MCD540
MCO402	

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Total : **465**

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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 Major 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>