

M.Tech (CSE) PROGRAMME STRUCTURE

M.Tech (CSE)			I Year – I Semester						
Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5012	PC	Distributed Computing	3	1	0	4	30	70	100
GR17D5002	PC	Object Oriented Modeling	3	1	0	4	30	70	100
GR17D5003	PC	Advanced Unix Programming	3	1	0	4	30	70	100
Open Elective I			3	1	0	4	30	70	100
Elective I			3	1	0	4	30	70	100
GR17D5005	PE	Multi-core Computers: Architecture and Programming							
GR17D5006	PE	Mobile Application Services							
GR17D5007	PE	Software Architecture & Design Patterns							
Elective II			3	1	0	4	30	70	100
GR17D5008	PE	Image Processing & Pattern Recognition							
GR17D5009	PE	Soft Computing							
GR17D5010	PE	Computer System Design							
GR17D5011	PC	Advanced Unix Programming Lab	0	0	4	2	30	70	100
GR17D5173	SPW	Seminar – I	0	0	4	2	30	70	100
TOTAL			18	6	8	28	240	560	800

M. Tech (CSE)

I Year – II Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5001	PC	Advanced Problem Solving	3	1	0	4	30	70	100
GR17D5013	PC	Advanced Datamining	3	1	0	4	30	70	100
GR17D5014	PC	Cryptography and Network Security	3	1	0	4	30	70	100
Open Elective I			3	1	0	4	30	70	100
Elective III			3	1	0	4	30	70	100
GR17D5021	PE	Service Oriented Architecture							
GR17D5017	PE	Information Storage and Retrieval							
GR17D5018	PE	Cloud Computing and Applications							
Elective IV			3	1	0	4	30	70	100
GR17D5019	PE	High Performance Computing							
GR17D5020	PE	Natural Language Processing							
GR17D5015	PE	Advanced Computer Networks							
GR17D5022	Lab	Datawarehousing & Datamining / IS Lab	0	0	4	2	30	70	100
GR17D5174	SPW	Seminar - II	0	0	4	2	30	70	100
TOTAL			18	6	8	28	240	560	800

II Year M. Tech (CSE)**I - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5175	SPW	Comprehensive Viva-voce	-	-	-	4	30	70	100
GR17D5176	SPW	Project work Review	-	-	-	12	30	70	100
Total						16	60	140	200

II Year M. Tech (CSE)**II - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5177	SPW	Project work and Dissertation	-	-	-	16	30	70	100
Total						16	30	70	100

A student has a choice to select one Open Elective Pool I in I Semester and one Open Elective Pool II in II Semester.

Open Elective Pool-I

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5178	OE-I	E- Commerce and Applications (CSE)	4	-	-	4	30	70	100
GR17D5179		Enterprise Resource Planning (IT)	4	-	-	4	30	70	100
GR17D5180		Modern Control Theory (EEE)	4	-	-	4	30	70	100
GR17D5181		Computer Oriented Numerical Methods in Engineering (CE)	4	-	-	4	30	70	100
GR17D5182		Advanced Computer Architecture (ECE)	4	-	-	4	30	70	100
GR17D5183		Operations Research (ME)	4	-	-	4	30	70	100

Open Elective Pool-II

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5184	OE-II	Human Computer Interaction (CSE)	4	-	-	4	30	70	100
GR17D5185		Big Data and Analytics (IT)	4	-	-	4	30	70	100
GR17D5186		Neural and Fuzzy Systems (EEE)	4	-	-	4	30	70	100
GR17D5187		Project Management (CE)	4	-	-	4	30	70	100
GR17D5188		Hardware Software Co-Design (ECE)	4	-	-	4	30	70	100
GR17D5189		Non-Conventional Energy Resources (ME)	4	-	-	4	30	70	100

PROGRAMME STRUCTURE

M. Tech (DFM)

I Year – I Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5107	PC	Advanced Mechanics of Solids	3	1	0	4	30	70	100
GR17D5108	PC	Materials Technology	3	1	0	4	30	70	100
GR17D5109	PC	Precision Engineering	3	1	0	4	30	70	100
OE- I Open Elective - I			3	1	0	4	30	70	100
Elective I			3	1	0	4	30	70	100
GR17D5111	PE	Special Manufacturing Processes							
GR17D5112	PE	Finite Element Applications in Manufacturing							
GR17D5113	PE	Quality Engineering in Manufacturing							
Elective- II			3	1	0	4	30	70	100
GR17D5114	PE	Advanced CAD							
GR17D5115	PE	Mechatronics							
GR17D5116	PE	Advanced Elasticity & Plasticity							
GR17D5117	Lab	Manufacturing Simulation & Precision Engg Lab	0	0	4	2	30	70	100
GR17D5173	SPW	Seminar-I	0	0	4	2	30	70	100
Total			18	6	8	28	240	560	800

M. Tech (DFM)

I Year – II Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5118	PC	Design of Hydraulics & Pneumatics Systems	3	1	0	4	30	70	100
GR17D5119		Total Quality Management	3	1	0	4	30	70	100
GR17D5120	PC	Computer Aided Manufacturing	3	1	0	4	30	70	100
Elective III			3	1	0	4	30	70	100
GR17D5122	PE	Industrial Robotics							
GR17D5123	PE	Tool Design							
GR17D5124	PE	Production and Operations Management							
Elective IV			3	1	0	4	30	70	100
GR17D5125	PE	Performance modeling and Analysis of Manufacturing Systems							
GR17D5126	PE	Computational Fluid Dynamics							
GR17D5127	PE	Automation in Manufacturing							
GR17D5128	Lab	CAD/CAM Lab	0	0	4	2	30	70	100
GR17D5174	SPW	Seminar - II	0	0	4	2	30	70	100
TOTAL			18	6	8	28	240	560	800

II Year M. Tech (DFM)**I - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5175	SPW	Comprehensive Viva-voce	-	-	-	4	30	70	100
GR17D5176	SPW	Project work Review	-	-	-	12	30	70	100
		Total				16	60	140	200

II Year M. Tech (DFM)**II - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5177	SPW	Project work and Dissertation	-	-	-	16	30	70	100
		Total				16	30	70	100

A student has a choice to select one Open Elective Pool I in I Semester and one Open Elective Pool II in II Semester.

Open Elective Pool-I

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5178		E- Commerce and Applications (CSE)	4	-	-	4	30	70	100
GR17D5179		Enterprise Resource Planning (IT)	4	-	-	4	30	70	100
GR17D5180		Modern Control Theory (EEE)	4	-	-	4	30	70	100
GR17D5181		Computer Oriented Numerical Methods in Engineering (CE)	4	-	-	4	30	70	100
GR17D5182		Advanced Computer Architecture(ECE)	4	-	-	4	30	70	100
GR17D5183	OE-I	Operations Research (ME)	4	-	-	4	30	70	100

Open Elective Pool-II

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5184		Human Computer Interaction (CSE)	4	-	-	4	30	70	100
GR17D5185		Big Data and Analytics (IT)	4	-	-	4	30	70	100
GR17D5186		Neural and Fuzzy Systems (EEE)	4	-	-	4	30	70	100
GR17D5187		Project Management (CE)	4	-	-	4	30	70	100
GR17D5188		Hardware Software Co-Design(ECE)	4	-	-	4	30	70	100
GR17D5189	OE-II	Non-Conventional Energy Resources(ME)	4	-	-	4	30	70	100

M. Tech (ES)**I Year – I Semester**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5072	PC	Embedded System Design	3	1	0	4	30	70	100
GR17D5073	PC	Microcontrollers for Embedded system Design	3	1	0	4	30	70	100
GR17D5074	PC	Embedded Real Time Operating Systems	3	1	0	4	30	70	100
OE- I Open Elective - I			3	1	0	4	30	70	100
Elective I			3	1	0	4	30	70	100
GR17D5075	PE	Software Defined Radio							
GR17D5077	PE	VLSI Technology and Design							
GR17D5078	PE	Embedded Computing							
Elective- II			3	1	0	4	30	70	100
GR17D5079	PE	Digital System Design							
GR17D5080	PE	Soft Computing Techniques							
GR17D5081	PE	Advanced Operating Systems							
GR17D5082	Lab	Embedded C Lab	0	0	4	2	30	70	100
GR17D5173	SPW	Seminar-I	0	0	4	2	30	70	100
Total			18	6	8	28	240	560	800

M. Tech (ES)**I Year – II Semester**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5084	PC	Digital Signal Processors & Architecture	3	1	0	4	30	70	100
GR17D5085	PC	Embedded Networking	3	1	0	4	30	70	100
GR17D5086	PC	CPLD & FPGA Architectures And Applications	3	1	0	4	30	70	100
OE – II Open Elective -II			3	1	0	4	30	70	100
Elective III			3	1	0	4	30	70	100
GR17D5087	PE	Sensor and Actuators							
GR17D5088	PE	Wireless Communications and Networks							
GR17D5089	PE	Network Security & Cryptography							
Elective IV			3	1	0	4	30	70	100
GR17D5090	PE	Multimedia Signal Coding							
GR17D5091	PE	System on Chip Architecture							
GR17D5092	PE	Wireless LANs and PANs							
GR17D5093	Lab	Embedded System Lab	0	0	4	2	30	70	100
	SPW	Seminar - II	0	0	4	2	30	70	100
TOTAL			18	6	8	28	240	560	800

II Year M. Tech (ES)**I - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5175	SPW	Comprehensive Viva-voce	-	-	-	4	30	70	100
GR17D5176	SPW	Project work Review	-	-	-	12	30	70	100
		Total				16	60	140	200

II Year M. Tech (ES)**II - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5177	SPW	Project work and Dissertation	-	-	-	16	30	70	100
		Total				16	30	70	100

A student has a choice to select one Open Elective Pool I in I Semester and one Open Elective Pool II in II Semester.

Open Elective Pool-I

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5178	OE-I	E- Commerce and Applications (CSE)	4	-	-	4	30	70	100
GR17D5179		Enterprise Resource Planning (IT)	4	-	-	4	30	70	100
GR17D5180		Modern Control Theory (EEE)	4	-	-	4	30	70	100
GR17D5181		Computer Oriented Numerical Methods in Engineering (CE)	4	-	-	4	30	70	100
GR17D5182		Advanced Computer Architecture(ECE)	4	-	-	4	30	70	100
GR17D5183		Operations Research (ME)	4	-	-	4	30	70	100

Open Elective Pool-II

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5184	OE-II	Human Computer Interaction (CSE)	4	-	-	4	30	70	100
GR17D5185		Big Data and Analytics (IT)	4	-	-	4	30	70	100
GR17D5186		Neural and Fuzzy Systems (EEE)	4	-	-	4	30	70	100
GR17D5187		Project Management (CE)	4	-	-	4	30	70	100
GR17D5188		Hardware Software Co-Design(ECE)	4	-	-	4	30	70	100
GR17D5189		Non-Conventional Energy Resources(ME)	4	-	-	4	30	70	100

PROGRAMME STRUCTURE

M. Tech (PE)

I Year – I Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5040	PC	Machine Modeling& Analysis	3	1	0	4	30	70	100
GR17D5037	PC	Analysis Of Power Electronic Converters	3	1	0	4	30	70	100
GR17D5039	PC	Power Electronic Control Of DC Drives	3	1	0	4	30	70	100
OE- I Open Elective – I			3	1	0	4	30	70	100
Elective I			3	1	0	4	30	70	100
GR17D5041	PE	HVDC Transmission							
GR17D5042	PE	Energy Conservation Systems							
GR17D5054	PE	Advanced Digital Signal Processing							
Elective- II			3	1	0	4	30	70	100
GR17D5044	PE	Solar and Wind Energy							
GR17D5043	PE	Digital Control of Power Electronic Systems							
GR17D5045	PE	Special Machines							
GR17D5046	Lab	Electrical Systems Simulation Lab	0	0	4	2	30	70	100
GR17D5173	SPW	Seminar-I	0	0	4	2	30	70	100
Total			18	6	8	28	240	560	800

M. Tech (PE)

I Year – II Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5036	PC	Modern Power Electronics	3	1	0	4	30	70	100
GR17D5047	PC	Power Electronic Control of AC Drives	3	1	0	4	30	70	100
GR17D5049	PC	Flexible AC Transmission Systems	3	1	0	4	30	70	100
OE – II Open Elective -II			3	1	0	4	30	70	100
Elective III			3	1	0	4	30	70	100
GR17D5051	PE	Power Quality							
GR17D5052	PE	Digital Control Systems							
GR17D5067	PE	Electric Smart Grid							
Elective IV			3	1	0	4	30	70	100
GR17D5048	PE	Microcontrollers							
GR17D5055	PE	Programmable Logic Controllers							
GR17D5056	PE	Reactive Power Compensation and Management							
GR17D5057	Lab	Power Converters Lab	0	0	4	2	30	70	100
GR17D5174	SPW	Seminar - II	0	0	4	2	30	70	100
TOTAL			18	6	8	28	240	560	800

II Year M. Tech (PE)**I - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5175	SPW	Comprehensive Viva-voce	-	-	-	4	30	70	100
GR17D5176	SPW	Project work Review	-	-	-	12	30	70	100
		Total				16	60	140	200

II Year M. Tech (PE)**II - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5177	SPW	Project work and Dissertation	-	-	-	16	30	70	100
		Total				16	30	70	100

A student has a choice to select one Open Elective Pool I in I Semester and one Open Elective Pool II in II Semester.

Open Elective Pool-I

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5178		E- Commerce and Applications (CSE)	4	-	-	4	30	70	100
GR17D5179		Enterprise Resource Planning (IT)	4	-	-	4	30	70	100
GR17D5180		Modern Control Theory (EEE)	4	-	-	4	30	70	100
GR17D5181		Computer Oriented Numerical Methods in Engineering (CE)	4	-	-	4	30	70	100
GR17D5182		Advanced Computer Architecture (ECE)	4	-	-	4	30	70	100
GR17D5183	OE-I	Operations Research (ME)	4	-	-	4	30	70	100

Open Elective Pool-II

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5184		Human Computer Interaction (CSE)	4	-	-	4	30	70	100
GR17D5185		Big Data and Analytics (IT)	4	-	-	4	30	70	100
GR17D5186		Neural and Fuzzy Systems (EEE)	4	-	-	4	30	70	100
GR17D5187		Project Management (CE)	4	-	-	4	30	70	100
GR17D5188		Hardware Software Co-Design (ECE)	4	-	-	4	30	70	100
GR17D5189	OE-II	Non-Conventional Energy Resources (ME)	4	-	-	4	30	70	100

PROGRAMME STRUCTURE

M. Tech (PS)

I Year – I Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5058	PC	Advanced Power System Analysis	3	1	0	4	30	70	100
GR17D5059	PC	Advanced Power System Protection	3	1	0	4	30	70	100
GR17D5037	PC	Analysis of Power Electronic Converters	3	1	0	4	30	70	100
OE- I Open Elective – I			3	1	0	4	30	70	100
Elective I			3	1	0	4	30	70	100
GR17D5041	PE	HVDC Transmission							
GR17D5042	PE	Energy Conservation Systems							
GR17D5060	PE	Power System Dynamics							
Elective- II			3	1	0	4	30	70	100
GR17D5044	PE	Solar and Wind Energy							
GR17D5062	PE	Gas insulated Systems(GIS)							
GR17D5063	PE	EHVAC Transmission							
GR17D5064	Lab	Power Systems Simulation Lab	0	0	4	2	30	70	100
GR17D5173	SPW	Seminar-I	0	0	4	2	30	70	100
Total			18	6	8	28	240	560	800

M. Tech (PS)

I Year – II Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5065	PC	Voltage Stability	3	1	0	4	30	70	100
GR17D5066	PC	Power System Operation and Deregulation	3	1	0	4	30	70	100
GR17D5049	PC	Flexible AC Transmission Systems	3	1	0	4	30	70	100
OE – II Open Elective -II			3	1	0	4	30	70	100
Elective III			3	1	0	4	30	70	100
GR17D5051	PE	Power Quality							
GR17D5052	PE	Digital Control Systems							
GR17D5067	PE	Electric Smart Grid							
Elective IV			3	1	0	4	30	70	100
GR17D5048	PE	Microcontrollers							
GR17D5055	PE	Programmable Logic Controllers							
GR17D5056	PE	Reactive Power Compensation and Management							
GR17D5071	Lab	Power Systems Lab	0	0	4	2	30	70	100
GR17D5174	SPW	Seminar - II	0	0	4	2	30	70	100
TOTAL			18	6	8	28	240	560	800

II Year M. Tech (PS)**I - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5175	SPW	Comprehensive Viva-voce	-	-	-	4	30	70	100
GR17D5176	SPW	Project work Review	-	-	-	12	30	70	100
		Total				16	60	140	200

II Year M. Tech (PS)**II - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5177	SPW	Project work and Dissertation	-	-	-	16	30	70	100
		Total				16	30	70	100

A student has a choice to select one Open Elective Pool I in I Semester and one Open Elective Pool II in II Semester.

Open Elective Pool-I

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5178		E- Commerce and Applications (CSE)	4	-	-	4	30	70	100
GR17D5179		Enterprise Resource Planning (IT)	4	-	-	4	30	70	100
GR17D5180		Modern Control Theory (EEE)	4	-	-	4	30	70	100
GR17D5181		Computer Oriented Numerical Methods in Engineering (CE)	4	-	-	4	30	70	100
GR17D5182		Advanced Computer Architecture(ECE)	4	-	-	4	30	70	100
GR17D5183	OE-I	Operations Research (ME)	4	-	-	4	30	70	100

Open Elective Pool-II

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5184		Human Computer Interaction (CSE)	4	-	-	4	30	70	100
GR17D5185		Big Data and Analytics (IT)	4	-	-	4	30	70	100
GR17D5186		Neural and Fuzzy Systems (EEE)	4	-	-	4	30	70	100
GR17D5187		Project Management (CE)	4	-	-	4	30	70	100
GR17D5188		Hardware Software Co-Design(ECE)	4	-	-	4	30	70	100
GR17D5189	OE-II	Non-Conventional Energy Resources(ME)	4	-	-	4	30	70	100

PROGRAMME STRUCTURE

M. Tech (SE)

I Year – I Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5023	PC	Software Requirements and Estimation	3	1	0	4	30	70	100
GR17D5024	PC	Software Process & Project Management	3	1	0	4	30	70	100
GR17D5025	PC	Component Oriented Programming Languages	3	1	0	4	30	70	100
OE- I Open Elective - I			3	1	0	4	30	70	100
Elective I			3	1	0	4	30	70	100
GR17D5026	PE	Data Mining and Applications							
GR17D5015	PE	Advanced Computer Networks							
GR17D5002	PE	Object Oriented Modeling							
Elective- II			3	1	0	4	30	70	100
GR17D5017	PE	Information Storage and Retrieval							
GR17D5004	PE	Distributed Databases							
GR17D5009	PE	Soft Computing							
GR17D5028	Lab	Component Oriented Programming Languages Lab	0	0	4	2	30	70	100
GR17D5173	SPW	Seminar-I	0	0	4	2	30	70	100
Total			18	6	8	28	240	560	800

M. Tech (SE)

I Year – II Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5012	PC	Distributed Computing	3	1	0	4	30	70	100
GR17D5029	PC	Software Quality Assurance and Testing	3	1	0	4	30	70	100
GR17D5030	PC	Server side Scripting Languages	3	1	0	4	30	70	100
OE – II Open Elective -II			3	1	0	4	30	70	100
Elective III			3	1	0	4	30	70	100
GR17D5021	PE	Service Oriented Architecture							
GR17D5007	PE	Software Architecture & Design Patterns							
GR17D5033	PE	Formal Methods in Software Engineering							
Elective IV			3	1	0	4	30	70	100
GR17D5031	PE	Multimedia & Rich Internet Development							
GR17D5034	PE	Software Agents							
GR17D5008	PE	Image Processing & Pattern Recognition							
GR17D5035	Lab	Server Side Scripting Languages Lab	0	0	4	2	30	70	100
GR17D5174	SPW	Seminar – II	0	0	4	2	30	70	100
TOTAL			18	6	8	28	240	560	800

II Year M. Tech (SE)**I - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5175	SPW	Comprehensive Viva-voce	-	-	-	4	30	70	100
GR17D5176	SPW	Project work Review	-	-	-	12	30	70	100
		Total				16	60	140	200

II Year M. Tech (SE)**II - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5177	SPW	Project work and Dissertation	-	-	-	16	30	70	100
		Total				16	30	70	100

A student has a choice to select one Open Elective Pool I in I Semester and one Open Elective Pool II in II Semester.

Open Elective Pool-I

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5178		E- Commerce and Applications (CSE)	4	-	-	4	30	70	100
GR17D5179		Enterprise Resource Planning (IT)	4	-	-	4	30	70	100
GR17D5180		Modern Control Theory (EEE)	4	-	-	4	30	70	100
GR17D5181		Computer Oriented Numerical Methods in Engineering (CE)	4	-	-	4	30	70	100
GR17D5182		Advanced Computer Architecture (ECE)	4	-	-	4	30	70	100
GR17D5183	OE-I	Operations Research (ME)	4	-	-	4	30	70	100

Open Elective Pool-II

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5184		Human Computer Interaction (CSE)	4	-	-	4	30	70	100
GR17D5185		Big Data and Analytics (IT)	4	-	-	4	30	70	100
GR17D5186		Neural and Fuzzy Systems (EEE)	4	-	-	4	30	70	100
GR17D5187		Project Management (CE)	4	-	-	4	30	70	100
GR17D5188		Hardware Software Co-Design (ECE)	4	-	-	4	30	70	100
GR17D5189	OE-II	Non-Conventional Energy Resources (ME)	4	-	-	4	30	70	100

PROGRAMME STRUCTURE

M. Tech (STE)

I Year – I Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5152	PC	Theory of elasticity and plasticity	3	1	0	4	30	70	100
GR17D5153	PC	Theory and analysis of plates	3	1	0	4	30	70	100
GR17D5154	PC	Advanced Reinforced concrete design	3	1	0	4	30	70	100
OE- I Open Elective - I			3	1	0	4	30	70	100
Elective I			3	1	0	4	30	70	100
GR17D5155	PE	Advanced Concrete Technology							
GR17D5156	PE	Experimental stress analysis							
GR17D5157	PE	Optimization techniques in structural Engineering							
Elective- II			3	1	0	4	30	70	100
GR17D5158	PE	Matrix Methods in Structural Analysis							
GR17D5159	PE	Soil dynamics and machine foundation							
GR17D5160	PE	Fibre reinforced cement concrete							
GR17D5161	Lab	Advanced Concrete Lab	0	0	4	2	30	70	100
GR17D5173	SPW	Matrix Methods in Structural Analysis	0	0	4	2	30	70	100
Total			18	6	8	28	240	560	800

M. Tech (STE)

I Year – II Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5162	PC	Finite element methods in Structural Engineering	3	1	0	4	30	70	100
GR17D5163	PC	Structural dynamics	3	1	0	4	30	70	100
GR17D5165	PC	Advanced steel design	3	1	0	4	30	70	100
OE – II Open Elective -II			3	1	0	4	30	70	100
Elective III			3	1	0	4	30	70	100
GR17D5166	PE	Advanced Pre-stressed Concrete							
GR17D5168	PE	Computer Aided design in Structural Engineering							
GR17D5167	PE	Advanced design of structures							
Elective IV			3	1	0	4	30	70	100
GR17D5169	PE	Principles of bridge Engineering							
GR17D5164	PE	Analysis and design of shells and folded plates							
GR17D5170	PE	Earthquake resistant design of buildings							
GR17D5172	Lab	Advanced CAD lab	0	0	4	2	30	70	100
GR17D5174	SPW	Seminar – II	0	0	4	2	30	70	100
TOTAL			18	6	8	28	240	560	800

II Year M. Tech (STE)**I - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5175	SPW	Comprehensive Viva-voce	-	-	-	4	30	70	100
GR17D5176	SPW	Project work Review	-	-	-	12	30	70	100
		Total				16	60	140	200

II Year M. Tech (STE)**II - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5177	SPW	Project work and Dissertation	-	-	-	16	30	70	100
		Total				16	30	70	100

A student has a choice to select one Open Elective Pool I in I Semester and one Open Elective Pool II in II Semester.

Open Elective Pool-I

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5178		E- Commerce and Applications (CSE)	4	-	-	4	30	70	100
GR17D5179		Enterprise Resource Planning (IT)	4	-	-	4	30	70	100
GR17D5180		Modern Control Theory (EEE)	4	-	-	4	30	70	100
GR17D5181		Computer Oriented Numerical Methods in Engineering (CE)	4	-	-	4	30	70	100
GR17D5182		Advanced Computer Architecture(ECE)	4	-	-	4	30	70	100
GR17D5183	OE-I	Operations Research (ME)	4	-	-	4	30	70	100

Open Elective Pool-II

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5184		Human Computer Interaction (CSE)	4	-	-	4	30	70	100
GR17D5185		Big Data and Analytics (IT)	4	-	-	4	30	70	100
GR17D5186		Neural and Fuzzy Systems (EEE)	4	-	-	4	30	70	100
GR17D5187		Project Management (CE)	4	-	-	4	30	70	100
GR17D5188		Hardware Software Co-Design(ECE)	4	-	-	4	30	70	100
GR17D5189	OE-II	Non-Conventional Energy Resources(ME)	4	-	-	4	30	70	100

PROGRAMME STRUCTURE

M. Tech (TE)

I Year – I Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5129	PC	Advanced Thermodynamics	3	1	0	4	30	70	100
GR17D5130	PC	Conduction And Radiation Heat Transfer	3	1	0	4	30	70	100
GR17D5131	PC	Advanced Fluid Mechanics	3	1	0	4	30	70	100
OE- I Open Elective - I			3	1	0	4	30	70	100
Elective I			3	1	0	4	30	70	100
GR17D5133	PE	Turbo machines							
GR17D5132	PE	Advanced Finite Element Analysis							
GR17D5135	PE	Theory of Heat Pipes							
Elective- II			3	1	0	4	30	70	100
GR17D5136	PE	Refrigeration & Air- Conditioning							
GR17D5137	PE	Jet Propulsion And Rocket engines							
GR17D5138	PE	Thermal And Nuclear Power Plants							
GR17D5139	Lab	Thermal Engineering Lab	0	0	4	2	30	70	100
GR17D5173	SPW	Seminar I	0	0	4	2	30	70	100
Total			18	6	8	28	240	560	800

M. Tech (TE)

I Year – II Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5140	PC	Convective Heat Transfer	3	1	0	4	30	70	100
GR17D5141	PC	Computational Methods In Heat Transfer	3	1	0	4	30	70	100
GR17D5142	PC	Advanced IC Engines	3	1	0	4	30	70	100
OE – II Open Elective -II			3	1	0	4	30	70	100
Elective III			3	1	0	4	30	70	100
GR17D5146	PE	Cryogenic Engineering							
GR17D5144	PE	Thermal Measurements And Process Controls							
GR17D5145	PE	Alternate Energy Sources							
Elective IV			3	1	0	4	30	70	100
GR17D5143	PE	Equipment Design For Thermal Systems							
GR17D5147	PE	Fuels, Combustion and Environment							
GR17D5148	PE	Multiphase Flow							
GR17D5150	Lab	Computational Methods Lab	0	0	4	2	30	70	100
GR17D5174	SPW	Seminar – II	0	0	4	2	30	70	100
TOTAL			18	6	8	28	240	560	800

II Year M. Tech (TE)**I - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5175	SPW	Comprehensive Viva-voce	-	-	-	4	30	70	100
GR17D5176	SPW	Project work Review	-	-	-	12	30	70	100
		Total				16	60	140	200

II Year M. Tech (TE)**II - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5177	SPW	Project work and Dissertation	-	-	-	16	30	70	100
		Total				16	30	70	100

A student has a choice to select one Open Elective Pool I in I Semester and one Open Elective Pool II in II Semester.

Open Elective Pool-I

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5178		E- Commerce and Applications (CSE)	4	-	-	4	30	70	100
GR17D5179		Enterprise Resource Planning (IT)	4	-	-	4	30	70	100
GR17D5180		Modern Control Theory (EEE)	4	-	-	4	30	70	100
GR17D5181		Computer Oriented Numerical Methods in Engineering (CE)	4	-	-	4	30	70	100
GR17D5182		Advanced Computer Architecture (ECE)	4	-	-	4	30	70	100
GR17D5183	OE-I	Operations Research (ME)	4	-	-	4	30	70	100

Open Elective Pool-II

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5184		Human Computer Interaction (CSE)	4	-	-	4	30	70	100
GR17D5185		Big Data and Analytics (IT)	4	-	-	4	30	70	100
GR17D5186		Neural and Fuzzy Systems (EEE)	4	-	-	4	30	70	100
GR17D5187		Project Management (CE)	4	-	-	4	30	70	100
GR17D5188		Hardware Software Co-Design (ECE)	4	-	-	4	30	70	100
GR17D5189	OE-II	Non-Conventional Energy Resources (ME)	4	-	-	4	30	70	100

PROGRAMME STRUCTURE

M. Tech (VLSI)

I Year – I Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5077	PC	VLSI Technology and Design	3	1	0	4	30	70	100
GR17D5094	PC	CMOS Analog Integrated Circuit Design	3	1	0	4	30	70	100
GR17D5086	PC	CPLD & FPGA Architectures and Applications	3	1	0	4	30	70	100
OE- I Open Elective - I			3	1	0	4	30	70	100
Elective I			3	1	0	4	30	70	100
GR17D5079	PE	Digital System Design							
GR17D5102	PE	Scripting Languages for VLSI							
GR17D5096	PE	Device Modelling							
Elective- II			3	1	0	4	30	70	100
GR17D5081	PE	Advanced Operating Systems							
GR17D5073	PE	Micro Controllers for Embedded Systems Design							
GR17D5095	PE	CMOS Digital Integrated Circuit Design							
GR17D5097	Lab	VLSI Lab – I	0	0	4	2	30	70	100
GR17D5173	SPW	Seminar I	0	0	4	2	30	70	100
Total			18	6	8	28	240	560	800

M. Tech (VLSI)

I Year – II Semester

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5099	PC	CAD for VLSI Circuits	3	1	0	4	30	70	100
GR17D5100	PC	CMOS Mixed Signal Circuit Design	3	1	0	4	30	70	100
GR17D5101	PC	Design for Testability	3	1	0	4	30	70	100
OE – II Open Elective -II			3	1	0	4	30	70	100
Elective III			3	1	0	4	30	70	100
GR17D5098	PE	Low Power VLSI Design							
GR17D5084	PE	Digital Signal Processors & Architectures							
GR17D5103	PE	VLSI Signal Processing							
Elective IV			3	1	0	4	30	70	100
GR17D5104	PE	Optimization Techniques in VLSI Design							
GR17D5091	PE	System On Chip Architecture							
GR17D5105	PE	Semiconductor Memory Design & Testing							
GR17D5106	Lab	VLSI Lab – II	0	0	4	2	30	70	100
GR17D5174	SPW	Seminar – II	0	0	4	2	30	70	100
TOTAL			18	6	8	28	240	560	800

II Year M. Tech (VLSI)**I - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5175	SPW	Comprehensive Viva-voce	-	-	-	4	30	70	100
GR17D5176	SPW	Project work Review	-	-	-	12	30	70	100
		Total				16	60	140	200

II Year M. Tech (VLSI)**II - SEMESTER**

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5177	SPW	Project work and Dissertation	-	-	-	16	30	70	100
		Total				16	30	70	100

A student has a choice to select one Open Elective Pool I in I Semester and one Open Elective Pool II in II Semester.

Open Elective Pool-I

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5178		E- Commerce and Applications (CSE)	4	-	-	4	30	70	100
GR17D5179		Enterprise Resource Planning (IT)	4	-	-	4	30	70	100
GR17D5180		Modern Control Theory (EEE)	4	-	-	4	30	70	100
GR17D5181		Computer Oriented Numerical Methods in Engineering (CE)	4	-	-	4	30	70	100
GR17D5182		Advanced Computer Architecture (ECE)	4	-	-	4	30	70	100
GR17D5183	OE-I	Operations Research (ME)	4	-	-	4	30	70	100

Open Elective Pool-II

Sub-code	Group	Subject	L	T	P	C	Int.	Ext.	Total
GR17D5184		Human Computer Interaction (CSE)	4	-	-	4	30	70	100
GR17D5185		Big Data and Analytics (IT)	4	-	-	4	30	70	100
GR17D5186		Neural and Fuzzy Systems (EEE)	4	-	-	4	30	70	100
GR17D5187		Project Management (CE)	4	-	-	4	30	70	100
GR17D5188		Hardware Software Co-Design (ECE)	4	-	-	4	30	70	100
GR17D5189	OE-II	Non-Conventional Energy Resources (ME)	4	-	-	4	30	70	100