

2.1.2. Structure of the Curriculum

Curriculum structure is presented in the following tables. Each of the eight tables presents the courses of that semester. Notation used: Lecture (L), Tutorial (T), Practical (P), Seminar (S)

Course Code	Course Title	Total number of contact hours					Credits
		L	T	P	S	Total Hours	
CHM181	Applied Chemistry	3	0	0	0	3	3
CHM182	Applied Chemistry Lab.	0	0	1	1	2	1
PHM181	Applied Physics 1	3	0	0	0	3	3
PHM182	Applied Physics Lab.	0	0	1	1	2	1
MEM101	Graphics Science	3	0	0	0	3	3
MEM102	Engineering Drawing 1	0	0	7	0	7	3
MEM103	Manufacturing Process 1	3	0	0	0	3	3
MAM181	Engineering Mathematics 1	3	0	0	0	3	3
MEM104	Workshop Practice 1	3	0	3	0	6	1.5
RDC181	Agricultural Operation 1	1	0	2	0	3	1.5
RDC182	Social Service	0	0	2	0	2	1
GKC181	G. K. and Current Affairs1	1	0	0	0	1	1
HALF COURSE (ON A CHOSEN SUBJECT) ANYONE COURSE FROM							
BBH101	Business Organisation	3	0	0	0	3	3
BBH102	Basic Management	3	0	0	0	3	3
BOH181	Environmental Sciences	3	0	0	0	3	3
CEH181	Theory Of Design	3	0	0	0	3	3
DBD101	Basic Statistics	3	0	0	0	3	3
DPH181	Art Appreciation	3	0	0	0	3	3
ECH181	Essential Of Economics	3	0	0	0	3	3
ENH181	English I	3	0	0	0	3	3

MUH181	Sangeet Kriyatmak I	3	0	0	0	3	3
OMH101	Communication Technique Hindi I	3	0	0	0	3	3
PYH102	Applied Psychology	3	0	0	0	3	3
STH102	Gadya, Padya, Vyakaran & Anuvaad		0	0	0	3	3
Total		23	0	16	2	41	28

Course Code	Course Title	Total number of contact hours					Credits
		L	T	P	S	Total Hours	
PHM281	Applied Physics II	3	1	0	0	4	3
PHM282	Applied Physics Lab.	3	1	0	0	4	1
EEM201	Computer Concepts& C Programming	3	0	0	0	3	3
EEM202	Basic Electrical Engineering	3	1	0	0	4	3
MEM201	Engineering Thermodynamics	3	1	0	0	4	3
MEM202	Engineering Mechanics I	3	1	0	0	4	3
MEM203	Engineering Drawing II	0	0	3	0	3	3
MEM204	Workshop Practice II	0	0	3	0	3	1.5
MAM281	Engineering Mathematics II	3	0	0	0	3	3
EGC281	Industrial Visits	0	0	0	0	0	1
GKC281	Sc.Meth., G.K.& Current Affairs II	1	0	0	1	2	1
RDC281	Agricultural Operations II	0	0	2	0	2	1
RDC282	Social Service	2	0	0	0	2	1
CAC281	Co-curricular Activities	0	0	2	0	2	1
Total		24	5	10	1	40	28.5

	Course Title	Total number of contact hours	
--	--------------	-------------------------------	--

Cours e Code		L	T	P	S	Total Hours	Credit s
ENH281	English II	3	0	0	0	3	2.5
HSH281	Household Management	3	0	0	0	3	2.5
MUH281	Sangeet Kriyatmak II	0	0	3	0	3	2.5
SYH281	Sociology of Science	3	0	0	0	3	2.5
ABH281	Principles of Economics	4	0	0	0	4	3
BBH281	Business Organisation	4	0	0	0	4	3
OMH201	Communication Techniques Hindi II	3	0	0	0	3	3
ZOH281	Basics Of Neuroscience	3	0	0	0	3	3
Total		23	0	3	0	26	22

Course Code	Course Title	Total number of contact hours					Credits
		L	T	P	S	Total Hours	
EEM301	Basic Electronics	3	1	0	0	4	3
EEM302	Basic Electronics Lab.	0	0	2	0	2	1
EEM303	Data Structures	3	0	0	0	3	3
EEM304	C Programming Lab.	0	0	1	0	1	0.5
EEM305	Signals and Systems	3	1	0	0	4	3
MEM301	Engineering Mechanics II	3	1	0	0	4	3
MEM307	Mechanics Of Solids And Fluids	3	1	0	0	4	3
MEM308	Material Testing & Fluids Lab.	0	0	2	0	2	1
MEM310	Thermal Engineering Lab.	0	0	2	0	2	1.5
MAM381	Engineering Mathematics III	4	0	0	0	4	3
ENH381	English III	3	0	0	0	3	3
EGC381	Product Manufacturing Project	0	0	3	0	3	1.5
EGC382	Practical Training	0	0	0	0	0	2
Total		22	4	10	0	36	28.5

Course Code	Course Title	Total number of contact hours					Credits
		L	T	P	S	Total Hours	
EEM401	Electrical Measurements	3	0	0	0	3	3
EEM402	Electrical Measurements Lab	0	0	1	0	1	0.5
EEM403	Network Analysis & Synthesis	3	0	0	0	3	3

EEM404	Electronics& Signal Processing Lab	0	0	3	0	3	1.5
EEM405	Electrical Machines I	3	1	0	0	4	3
EEM406	Electrical Machines Lab	0	0	3	0	3	1.5
EEM407	Electronic Devices & Circuits	3	1	0	0	4	3
MEM401	Instrumentation	3	1	0	0	4	3
MAM481	Engineering Mathematics IV	3	0	0	0	3	3
ENH481	English IV	3	0	0	0	3	2.5
EGC481	Industrial Visits	0	0	0	0	0	1
GKC481	Sc.Meth.,G.K.&Current Affairs IV	1	0	0	0	1	1
CAC481	Co-Curricular Activities	2	0	0	0	2	3
Total		24	3	7	0	34	29

Course Code	CourseTitle	Total number of contact hours					Credit s
		L	T	P	S	Total	
Work Experience Course (On A Chosen Subject)							
ASW401	Metallurgical Analysis	0	0	2	0	2	2
DPW481	Commercial Art	0	0	4	0	4	2
EEW401	Radio & Television Repair	0	0	4	0	4	2
EEW402	Repair Of Electrical Equipment	0	0	4	0	4	2
EEW403	Printing Techniques	0	0	4	0	4	2
EEW404	Micro Controllers&IoT	0	0	4	0	4	2
MEW401	Automobile Engineering	0	0	4	0	4	2
MEW402	Photography	0	0	4	0	4	2
MEW403	Refrigeration& Air Conditioning	0	0	4	0	4	2
MEW404	Furniture Design & Manufacturing	0	0	4	0	4	2
Total		0	0	38	0	38	20
Course Code	Course Title	Total number of contact hours					Credit s
		L	T	P	S	Total	
EEM501	Linear Control Engineering	3	1	0	0	4	3
EEM502	Control Engineering Lab.	0	0	0	0	0	1.5
EEM505	Analog Electronics	3	1	0	0	4	3
EEM506	Digital Systems	3	1	0	0	4	3
MAM581	Discrete Mathematics					0	3
PYH581	Industrial Psychology	2	0	0	0	2	2

EGC581	Design Engg./ Theme Dev, Project	0	0	3	0	3	1.5
EGC582	Practical Training	2	1	0	0	3	2
CRC581	Comparative Study Of Religions					0	2
GKC581	Sc. Meth., G.K. & Current Affairs II	1	0	0	1	2	1
RDC581	Agricultural Engineering	3	0	0	0	3	2.5
	Mainstream Electrical						
EEM503	Electrical Machines li	3	1	0	0	4	3
EEM504	Electrical Machines Lab.	0	0	2	0	2	1
	Electronics Specialisation						
EEM511	Analog ICs & Systems	3	1	0	0	4	3
EEM512	Analog ICs & Systems Lab	0	0	2	0	2	1
	Computer Science Specialisation						
EEM513	Computer Architecture	4	1	0	0	5	3
EEM514	Advanced Programming Lab	0	0	2	0	2	1
Total		36.5	7	9	1	44	36.5

Course Code	Course Title	Total number of contact hours					Credits
		L	T	P	S	Total	
ASM601	Electrical Engineering Materials	4	1	0	0	5	3
EEM601	Microprocessors & Microcontrollers	4	1	0	0	5	3
EEM602	Microprocessors Lab	0	0	0	3	0	1.5
EEM603	Power Systems I	3	1	0	0	4	3
EEM604	Applied Systems Engineering	3	1	0	0	4	3
EEM609	Stream Seminar	0	0	0	2	2	1
MAM681	Advanced Optimization Techniques	4	0	0	0	4	3
EGC681	Design Engg./Theme Develop. Project	0	0	3	0	3	1.5
RDC681	Village Industries & Entrepreneurship	2	1	0	0	3	2
CEC681	Cultural Education	2	1	0	0	3	2
CAC681	Co-Curricular Activities					0	3
	Mainstream Electrical					0	
EEM605	Power Electronics	3	0	0	0	3	3
EEM606	Power Electronics Lab	0	0	3	0	3	1.5

	Electronics Specialisation						
EEM605	Power Electronics	3	0	0	0	3	3
EEM606	Power Electronics Lab	0	0	3	0	3	1.5
	Computer Science Specialisation						
EEM611	Design & Analysis Of Algorithms	3	0	0	0	3	3
EEM612	Computer Science Lab	0	0	3	0	3	1.5
Total		31	6	12	5	51	39.5

Core courses common to all the three streams:							
Course Code	Course Title	Total number of contact hours					Credits
		L	T	P	S	Total	
EEM703	Communication Engineering	3	1	0	0	4	3
EEM704	Computer Technology Lab.	0	0	3	0	3	2
EEM705	Electrical Engineering Project I	3	0	0	0	3	3
MEM708	Managerial Eco. & Industrial Organ.	3	1	0	0	4	3
EGC781	Co-Op Training	0	0	0	0	0	4
GKC781	Sc. Meth., G.K. & Current Affairs Iii	1	0	0	0	1	1
RDC781	Rural Engineering Project	0	0	2	0	2	1
	*	3	0	0	0	3	3
	*	3	0	0	0	3	3
	*	3	0	0	0	3	3
	*	5	0	0	0	5	5
TOTAL		15	0	2	0	17	16
*Stream-Wise Optional Courses Any One Of The Following To Be Opted:							
Mainstream Electrical							
EEM715	Computer Methods In Power Systems	3	0	0	0	3	3
EEM717	Semiconductor Controlled Drives	3	0	0	0	3	3
EEM719	VLSI Design Techniques	3	0	0	0	3	3
EEM711	Electrical Machine Design	5	0	0	0	5	5
Electronics Specialization							
EEM706	Electro-Magnetic Field Theory	3	1	0	0	4	3
EEM708	Communication Lab.	0	0	2	0	2	2
EEM712	Digital Design	5	0	0	0	5	5

EEM720	Computer Networks	3	0	0	0	3	3
Computer Science Specialization							
EEM706	Electro-Magnetic Field Theory	3	1	0	0	4	3
EEM710	Software Design	4	1	0	0	5	5
EEM720	Computer Networks	3	0	0	0	3	3
EEM723	System Lab.	0	0	2	0	2	2

Course Code	Course title	Total number of contact hours					Credits
		L	T	P	S	Total	
EEM802	Electrical Engineering Project II	6	2	0	0	8	8
MEM801	Business Management	3	0	0	1	4	4
EEM803	Seminars	0	0	0	2	2	1
RDC881	Rural Engineering Project	0	0	2	0	2	1
GKC881	Sc.Meth., G.K. & Current Affairs IV	1	0	0	0	1	1
CAC881	Co-Curricular Activities	3	0	0	0	3	3
#	Stream Wise Core Courses	3	0	0	0	0	3
*	Stream Wise I Optional Courses	3	0	0	0	0	3
**	Stream Wise II Optional Courses	3	0	0	0	0	3
***	Stream Wise III Optional Courses	3	0	0	0	0	3
TOTAL		25	2	2	3	20	30
#In Addition To Above Stream-Wise Core Courses							
Mainstream Electrical						0	3
EEM801	Utilization Of Electrical Power	3	0	0	0	3	
Electronics Specialization						0	3
EEM822	Digital Communications	3	0	0	0	3	
Computer Science Specialization						0	3
EEM812	Operating Systems	3	0	0	0	3	
*Stream-Wise FIRST Optional Courses Any One Of The Following To Be Opted:							
Computer Science Specialization							
EEM821	Neural Networks	3	0	0	0	3	3
EEM823	Systems Optimization Using EAs	3	0	0	0	3	3
EEM825	Mobile Computing	3	0	0	0	3	3
EEM814	Digital Signal Processing	3	0	0	0	3	3
Electronics Specialization							
EEM821	Neural Networks	3	0	0	0	3	3
EEM823	Systems Optimization Using EAs	3	0	0	0	3	3

EEM825	Mobile Computing	3	0	0	0	3	3
EEM814	Digital Signal Processing	3	0	0	0	3	3
Electrical Mainstream							
EEM815	High Voltage D.C.	3	0	0	0	3	3
EEM823	Systems Optimization Using EAs	3	0	0	0	3	3
EEM825	Mobile Computing	3	0	0	0	3	3
EEM814	Digital Signal Processing	3	0	0	0	3	3
**Stream-Wise SECOND Optional Courses Any One Of The Following To Be Opted:							
Computer Science Specialization							
EEM817	Microwave Engineering	3	0	0	0	3	3
EEM820	Quantum Computing	3	0	0	0	3	3
EEM824	Fuzzy Systems	3	0	0	0	3	3
Electronics Specialization							
EEM817	Microwave Engineering	3	0	0	0	3	3
EEM820	Quantum Computing	3	0	0	0	3	3
EEM824	Fuzzy Systems	3	0	0	0	3	3
Electrical Mainstream							
EEM817	Microwave Engineering	3	0	0	0	3	3
EEM818	Planning & Op.: Restructured P.S.	3	0	0	0	3	3
EEM820	Quantum Computing	3	0	0	0	3	3
EEM826	Electrical Machines-III	3	0	0	0	3	3
EEM824	Fuzzy Systems	3	0	0	0	3	3
***THIRD Optional Courses (common to all streams) Any One Of The Following To Be Opted:							
EEM811	Robotics	3	0	0	0	3	3
MEM809	Nano-Technology & Nano-Computing	3	0	0	0	3	3
MEM824	Futurology Study	3	0	0	0	3	3
MEM812	Non-Conventional Energy Engineering	3	0	0	0	3	3
MEM813	Supply Chain Management	3	0	0	0	3	3

Curriculum is reviewed annually through Departmental and Faculty Board of Studies and Academic Council. Major review of curriculum is through Curriculum Development Workshops. The review of programmes and courses is undertaken according to prescribed norms of Statutory Regulatory Authorities, feedback from all stakeholders, analysis of current market trends and industrial requirements and also maintaining national and international standards.