

ACADEMIC CURRICULUM

(REGULATIONS 2019)

FOR

POST GRADUATE PROGRAMMES

CHOICE BASED CREDIT SYSTEM

(Applicable to the students admitted from the Academic Year 2019-20 onwards)

M.E. – STRUCTURAL ENGINEERING

M.E. – COMPUTER SCIENCE AND ENGINEERING

M.E. – COMMUNICATION SYSTEMS

M.E. – EMBEDDED SYSTEM TECHNOLOGIES

M.E. – ENGINEERING DESIGN

M.B.A- MASTER OF BUSINESS ADMINISTRATION



EASWARI ENGINEERING COLLEGE

(AUTONOMOUS INSTITUTION)

Bharathi Salai, Ramapuram, Chennai – 600 089

M.E. – STRUCTURAL ENGINEERING

SEMESTER I								
SI. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1	192MAB101T	Advanced Mathematical Methods	H	3	2	-	-	4
2	192CEC101T	Dynamics of Structures	C	3	-	-	-	3
3	192CEC102T	Theory of Elasticity and Plasticity	C	3	-	-	-	3
4	192CEC103T	Advanced Concrete Structures	C	3	-	-	-	3
5		Professional Elective - I	E	3	-	-	-	3
Practical								
6	192CEC111L	Structural Engineering Laboratory	C	-	-	3	1	2
Employability Enhancement / Career Advancement Course								
7	192CEA111L	Term Paper Writing and Technical Seminar	A	-	-	4	-	2
8	192CEA112L	Online course (Optional)	A	-	-	-	-	THREE
9	192CEA113L	Industry Supported Employability Enhancement Course - I (optional)	A	-	-	-	-	THREE
Total				15	2	7	1	20

SEMESTER II								
SI. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1	192CEC201T	Finite Element Analysis of Structures	C	3	-	-	-	3
2	192CEC202T	Advanced Steel Structures	C	3	-	-	-	3
3	192CEC203T	Experimental Techniques and Instrumentation	C	3	-	-	-	3
4	192CEC204T	Earthquake Resistant Design of Structures	C	3	-	-	-	3
5		Professional Elective - II	E	3	-	-	-	3
6		Open Elective - I	O	3	-	-	-	3
Mandatory Course								
7	192GEM201T	Research Methodology / Foreign Language / Value Education	M	2	-	-	-	TWO
Employability Enhancement / Career Advancement Course								
8	192CEP211L	Minor Project	A	-	-	-	4	2
9	192CEA211L	Internship / Industrial Training	A	-	-	-	-	1
10	192CEA212L	Online course (Optional)	A	-	-	-	-	THREE
11	192CEA213L	Industry Supported Employability Enhancement Course - I (optional)	A	-	-	-	-	THREE
Total				20	0	0	4	21

SEMESTER III								
SI. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1		Professional Elective - III	E	3	-	-	-	3
2		Professional Elective - IV	E	3	-	-	-	3
Practical								
3	192CEP311L	Project Work /Start-up (Phase I)	A	-	-	-	16	8
Employability Enhancement / Career Advancement Course								
4	192CEA311L	Internship / Industrial Training	A	-	-	-	-	2
Total				6	0	0	16	16

SEMESTER IV								
SI. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Practical								
1	192CEP411L	Project Work /Start-up (Phase II)	A	-	-	-	28	14
Total				0	0	0	28	14
Total Credit								70

Subject Area	Semester	I	II	III	IV	Credit
Foundation Course (H)		4				4
Professional Core (C)		11	12			23
Professional Electives (E)		3	3	6		12
Open Electives (O)			3			3
Employability Enhancement Courses (A)		2	3	10	14	29
Credit		20	21	16	14	71

PROFESSIONAL ELECTIVE – I								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192CEE001T	Advanced Concrete Technology	PE	3	-	-	-	3
2	192CEE002T	Maintenance and Rehabilitation of Structures	PE	3	-	-	-	3
3	192CEE003T	Smart Materials and Smart Structures	PE	3	-	-	-	3
4	192CEE004T	Matrix Methods of Structural Analysis	PE	3	-	-	-	3

PROFESSIONAL ELECTIVE – II								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192CEE005T	Prefabricated Structures	PE	3	-	-	-	3
2	192CEE006T	Prestressed Concrete Structures	PE	3	-	-	-	3
3	192CEE007T	Theory of Plates	PE	3	-	-	-	3
4	192CEE008T	Stability of Structures	PE	3	-	-	-	3

PROFESSIONAL ELECTIVE – III								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192CEE009T	Optimization of Structures	PE	3	-	-	-	3
2	192CEE010T	Design of Tall Buildings	PE	3	-	-	-	3
3	192CEE011T	Design of Steel Concrete Composite Structures	PE	3	-	-	-	3
4	192CEE012T	Design of Bridges	PE	3	-	-	-	3

PROFESSIONAL ELECTIVE – IV								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192CEE013T	Design of Substructure	PE	3	-	-	-	3
2	192CEE014T	Industrial Structures	PE	3	-	-	-	3
3	192CEE015T	Wind and Cyclone Effects on Structures	PE	3	-	-	-	3
4	192CEE016T	Offshore Structures	PE	3	-	-	-	3

OPEN ELECTIVE

Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192CEO001T	Industrial Safety	OE	3	-	-	-	3
2	192CEO002T	Cost Management of Engineering Projects	OE	3	-	-	-	3
3	192CEO003T	Operations Research	OE	3	-	-	-	3
4	192CEO004T	Energy Auditing	OE	3	-	-	-	3
5	192CEO005T	Business Analytics	OE	3	-	-	-	3

M.E. – COMPUTER SCIENCE AND ENGINEERING

SEMESTER I								
Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1	192MAH101T	Applied Probability and Statistics	H	3	2	-	-	4
2	192CSC101T	Advanced Data Structures and Algorithms	C	4	-	-	-	4
3	192CSC102T	Machine Learning Techniques	C	3	-	-	-	3
4	192CSC103T	Advanced Operating Systems	C	3	-	-	-	3
5		Professional Elective – I	E	3	-	-	-	3
Practical								
6	192CSC111L	Machine Learning Laboratory	C	-	-	3	1	2
Employability Enhancement / Career Advancement Course								
7	192CSA111L	Term Paper Writing and Technical Seminar	A	-	-	4	-	2
8	192CSA112L	Online course (Optional)	A	-	-	-	-	THREE
9	192CSA113L	Industry Supported Employability Enhancement Course - I (optional)	A	-	-	-	-	THREE
Total				16	2	7	1	21

SEMESTER II								
Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1	192CSC201T	Network Design And Technologies	C	3	-	-	-	3
2	192CSC202T	Data Science and Big Data Analytics	C	3	-	-	-	3
3	192CSC203T	Agile Software Engineering	C	3	-	-	-	3
4		Professional Elective - II	E	3	-	-	-	3
5		Open Elective - I	O	3	-	-	-	3
Practical								
6	192CSC211L	Data Analytics Laboratory	C	-	-	3	1	2
Mandatory Course								
7	192GEM201T	Research Methodology / Foreign Language / Value Education	M	2	-	-	-	TWO
Employability Enhancement / Career Advancement Course								
8	192CSP211L	Minor Project	A	-	-	-	4	2
9	192CSA211L	Internship / Industrial Training	A	-	-	-	-	1
10	192CSA212L	Online course (Optional)	A	-	-	-	-	THREE
11	192CSA213L	Industry Supported Employability Enhancement Course - I (optional)	A	-	-	-	-	THREE
Total				17	0	3	5	20

SEMESTER III								
Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1		Professional Elective - III	E	3	-	-	-	3
2		Professional Elective - IV	E	3	-	-	-	3
Practical								
3	192CSP311L	Project Work /Start-up (Phase I)	A	-	-	-	16	8
Employability Enhancement / Career Advancement Course								
4	192CSA311L	Internship / Industrial Training	A	-	-	-	-	1
Total				6	0	0	16	15

SEMESTER IV								
Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Practical								
1	192CSP411L	Project Work /Start-up (Phase II)	A	-	-	-	28	14
Total							28	14
Total Credit								69

Subject Area	Semester	I	II	III	IV	Credit
Foundation Course (H)		4	-	-	-	4
Professional Core (C)		12	11	-	-	23
Professional Electives (E)		3	3	6	-	12
Open Electives (O)		-	3	-	-	3
Employability Enhancement Courses (A)		2	3	9	14	28
Credit		21	20	15	14	70

PROFESSIONAL ELECTIVE – I								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192CSE001T	Compiler Optimization Techniques	E	3	-	-	-	3
2	192CSE002T	Robotics	E	3	-	-	-	3
3	192CSE003T	Information Retrieval Techniques	E	3	-	-	-	3
4	192CSE004T	Wireless Sensor Networks	E	3	-	-	-	3
5	192CSE005T	Bio Inspired Computing	E	3	-	-	-	3
6	192CSE006T	Advanced Database Design and Management	E	3	-	-	-	3

PROFESSIONAL ELECTIVE – II								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192CSE007T	XML and Web Services	E	3	-	-	-	3
2	192CSE008T	Internet of Things	E	3	-	-	-	3
3	192CSE009T	Data Visualization Techniques	E	3	-	-	-	3
4	192CSE010T	TCP/IP Technologies	E	3	-	-	-	3
5	192CSE011T	Virtual Reality	E	3	-	-	-	3
6	192CSE012T	Embedded Software Development	E	3	-	-	-	3

PROFESSIONAL ELECTIVE – III								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192CSE013T	Software Testing and Quality Assurance	E	3	-	-	-	3
2	192CSE014T	Parallel Programming Paradigms	E	3	-	-	-	3
3	192CSE015T	Speech Processing and Synthesis	E	3	-	-	-	3
4	192CSE016T	Semantic web and Social Networks	E	3	-	-	-	3
5	192CSE017T	Cyber Security	E	3	-	-	-	3
6	192CSE013T	Software Testing and Quality Assurance	E	3	-	-	-	3
7	192CSE014T	Parallel Programming Paradigms	E	3	-	-	-	3

PROFESSIONAL ELECTIVE – IV

Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192CSE209T	Quantum Computing	E	3	-	-	-	3
2	192CSE021T	Natural Language Processing	E	3	-	-	-	3
3	192CSE022T	Real Time Systems	E	3	-	-	-	3
4	192CSE023T	Medical Image Processing	E	3	-	-	-	3
5	192CSE024T	Foundation of Block chain technology	E	3	-	-	-	3
6	192CSE025T	Cognitive computing	E	3	-	-	-	3
7	192CSE026T	Formal Models Of Software Systems	E	3	-	-	-	3

OPEN ELECTIVE

Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192CSO001T	Java Programming	E	3	-	-	-	3
2	192CSO002T	Data Structures and Algorithms	E	3	-	-	-	3
3	192CSO003T	Big Data Analytics	E	3	-	-	-	3
4	192CSO004T	cloud computing techniques	E	3	-	-	-	3
5	192CSO005T	software engineering	E	3	-	-	-	3
6	192CSO006T	Database Design and Management	E	3	-	-	-	3
7	192CSO007T	Artificial Intelligence	E	3	-	-	-	3
8	192CSO008T	Python Programming	E	3	-	-	-	3

M.E. – COMMUNICATION SYSTEMS

SEMESTER I

Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1	192MAB103T	Applied Mathematics for Communication Engineers	H	3	2	-	-	4
2	192ECC101T	Advanced Digital Communication Techniques	C	3	-	-	-	3
3	192ECC102T	Advanced Digital Signal Processing	C	3	-	-	-	3
4	192ECC103T	Optical Networks	C	3	-	-	-	3
5		Professional Elective I	E	3	-	-	-	3
Practical								
6	192ECC111L	Communication Systems Laboratory	C	-	-	3	1	2
Employability Enhancement / Career Advancement Course								
7	192ECA111L	Term Paper Writing and Seminar	A	-	-	4	-	2
8	192ECA112L	Online Courses(Optional)	A	-	-	-	-	THREE
9	192ECA113L	Industry Supported Employability Enhancement Course - I (optional)	A	-	-	-	-	THREE
Total				15	2	7	1	20

SEMESTER II

Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1	192ECC201T	Advanced Wireless Communication Systems	C	3	-	-	-	3
2	192ECC202T	MIC and RF System Design	C	3	-	-	-	3
3	192ECC203T	Electromagnetic Interference and Compatibility	C	3	-	-	-	3
4		Professional Elective - II	E	3	-	-	-	3
5		Open Elective I	O	3	-	-	-	3
Practical-								
6	192ECC211L	RF System Design Laboratory	C	-	-	3	1	2
Mandatory Courses								
7	192ECMXXXT	Research Methodology and IPR / Human Values /Foreign Language	M	2	-	-	-	TWO
Employability Enhancement / Career Advancement Course								
8	192ECP211L	Minor Project	A	-	-	-	4	2
9	192ECA211L	Internship / Industrial Training	A	-	-	-	-	1
10	192ECA212L	Online Courses(Optional)	A	-	-	-	-	THREE

11	192ECA213L	Industry Supported Employability Enhancement Course - I (optional)	A	-	-	-	-	THREE
Total				17	0	3	5	20

SEMESTER III								
SI. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1		Professional Elective III	E	3	-	-	-	3
2		Professional Elective IV	E	3	-	-	-	3
Practical								
3	192ECP311L	Project Work /Start-up (Phase I)	P	-	-	-	16	8
Employability Enhancement / Career Advancement Course								
4	192ECA311L	Internship / Industrial Training	A	-	-	-	-	1
Total				6	0	0	16	15

SEMESTER IV								
SI. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Practical								
1	192ECP411L	Project Work / Start-up (Phase II)	P	-	-	-	28	14
Total				0	0	0	28	14
Total Credit								69

Subject Area	Semester	I	II	III	IV	Credit
Foundation Course (H)		4				4
Professional Core (C)		11	11			22
Professional Electives (E)		3	3	6		12
Open Electives (O)			3			3
Employability Enhancement Courses (A)		2	3	9	14	28
Credit		20	20	15	14	69

PROFESSIONAL ELECTIVE								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192ECE001T	Advanced Radiation Systems	E	3	-	-	-	3
2	192ECE002T	Millimeter Wave Communication	E	3	-	-	-	3
3	192ECE003T	Advanced Satellite Communication and Navigation Systems	E	3	-	-	-	3
4	192ECE004T	DSP Processor Architecture and Programming	E	3	-	-	-	3
5	192ECE005T	Analog and Mixed Mode VLSI Design	E	3	-	-	-	3
6	192ECE006T	Real Time Embedded Systems	E	3	-	-	-	3
7	192ECE007T	MEMS and NEMS	E	3	-	-	-	3
8	192ECE008T	Digital Communication Receivers	E	3	-	-	-	3
9	192ECE009T	Detection and Estimation Theory	E	3	-	-	-	3
10	192ECE010T	VLSI for Wireless Communication	E	3	-	-	-	3
11	192ECE011T	Cognitive Networks and Software Defined Radio	E	3	-	-	-	3
12	192ECE012T	Advanced Digital Image Processing	E	3	-	-	-	3
13	192ECE013T	Radar Signal Processing	E	3	-	-	-	3
14	192ECE014T	Speech Processing and Synthesis	E	3	-	-	-	3
15	192ECE015T	Advanced Wireless Networks	E	3	-	-	-	3
16	192ECE016T	Wavelet Transforms and its Applications	E	3	-	-	-	3
17	192ECE017T	Broadband Access Technologies	E	3	-	-	-	3
18	192ECE018T	Pattern Recognition and Machine Learning	E	3	-	-	-	3
19	192ECE019T	Wireless Adhoc and Sensor Networks	E	3	-	-	-	3
20	192ECE020T	Internet of Things	E	3	-	-	-	3
21	192ECE021T	Multimedia Compression Techniques	E	3	-	-	-	3
22	192ECE022T	Ultra Wide Band Communication	E	3	-	-	-	3
23	192ECE023T	Soft Computing Techniques	E	3	-	-	-	3
24	192ECE024T	Network Processors	E	3	-	-	-	3
25	192ECE025T	Communication Network Security	E	3	-	-	-	3
26	192ECE026T	High Performance Switching Architectures	E	3	-	-	-	3

M.E. – EMBEDDED SYSTEM TECHNOLOGIES

SEMESTER I								
Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1	192MAB104T	Applied Mathematics for Electrical Engineers	H	3	2	-	-	4
2	192EEC101T	ARM Processors and Controllers	C	3	-	-	-	3
3	192EEC102T	Advanced Digital System Design	C	3	-	-	-	3
4	192EEC103T	Embedded Sensor Networks	C	3	-	-	-	3
5		Professional Elective - I	E	3	-	-	-	3
Practical								
6	192EEC111L	Embedded Systems Laboratory	C	-	-	3	1	2
Employability Enhancement / Career Advancement Course								
7	192EEA111L	Term Paper Writing and Seminar	A	-	-	4	-	2
8	192EEA112L	Online Courses(Optional)	A	-	-	-	-	THREE
9	192EEA113L	Industry Supported Employability Enhancement Course - I (optional)	A	-	-	-	-	THREE
Total				15	2	7	1	20

SEMESTER II								
Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1	192EEC202T	Real Time Operating Systems	C	3	-	-	-	3
2	192EEC203T	Digital Controllers in Power Electronics Application	C	3	-	-	-	3
3	192EEC204T	Embedded Linux	C	3	-	-	-	3
4		Professional Elective – II	E	3	-	-	-	3
5		Open Elective – I	O	3	-	-	-	3
Practical								
6	192EEC211L	Real Time Operating Systems Laboratory	C	-	-	3	1	2
Mandatory Course (Choice)								
7	192GEM201T	Research Methodology / Foreign Language / Value Education	M	2	-	-	-	TWO
Employability Enhancement / Career Advancement Course								
8	192EEP211L	Minor Project	A	-	-	-	4	2
9	192EEA211L	Internship / Industrial Training	A	-	-	-	-	1
10	192EEA212L	Online course (Optional)	A	-	-	-	-	TWO
11	192CEA213L	Industry Supported Employability Enhancement Course - I (optional)	A	-	-	2	-	ONE
Total				17	0	9	5	20

SEMESTER III								
Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1		Professional Elective - III	E	3	-	-	-	3
2		Professional Elective - IV	E	3	-	-	-	3
Practical								
3	192EEP311L	Project Work /Start-up (Phase I)	P	-	-	-	16	8
Employability Enhancement / Career Advancement Course								
	192EEA311L	Internship / Industrial Training	A	-	-	-	-	1
Total				6	0	0	16	15

SEMESTER IV								
Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Practical								
1	192EEP411L	Project Work /Start-up (Phase II)	P	-	-	-	28	14
Total								14
Total Credit								69

Subject Area	Semester	I	II	III	IV	Credit
Foundation Course (H)		4	-			4
Professional Core (C)		11	11	-	-	22
Professional Electives (E)		3	3	6	-	12
Open Electives (O)		-	3	-	-	3
Employability Enhancement Courses (A)		2	3	9	14	28
Credit		20	20	15	14	69

PROFESSIONAL ELECTIVE								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192EEE001T	Digital Image Processing	E	3	-	-	-	3
2	192EEE002T	Real Time Embedded Systems	E	3	-	-	-	3
3	192EEE003T	Low Power VLSI Design	E	3	-	-	-	3
4	192EEE004T	Digital Instrumentation	E	3	-	-	-	3
5	192EEE005T	Software For Embedded Systems	E	3	-	-	-	3
6	192EEE006T	Wireless And Mobile Communication	E	3	-	-	-	3
7	192EEE007T	Machine Learning And Applications	E	3	-	-	-	3
8	192EEE008T	Embedded System Network	E	3	-	-	-	3
9	192EEE009T	Information Theory And Coding	E	3	-	-	-	3
10	192EEE010T	Internet Of Things	E	3	-	-	-	3
11	192EEE011T	Robotics And Control	E	3	-	-	-	3
12	192EEE012T	Electric Vehicles And Power Management	E	3	-	-	-	3

M.E. – ENGINEERING DESIGN

SEMESTER I								
Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1	192MAB101T	Applied Mathematics for Engineers	H	3	2	-	-	4
2	192MEC101T	Engineering Fracture Mechanics	C	3	-	-	-	3
3	192MEC102T	Computer Applications in Design	C	3	-	-	-	3
4	192MEC103T	Advanced Finite Element Analysis	C	3	-	-	-	3
5		Professional Elective - I	E	3	-	-	-	3
Practical								
6	192MEC111L	CAD and Analysis Laboratory	C	-	-	3	1	2
Employability Enhancement / Career Advancement Course								
7	192MEA111L	Term Paper Writing and Technical Seminar	A	-	-	4	-	2
8	192MEA112L	Online course (Optional)	A	-	-	-	-	THREE
9	192MEA113L	Industry Supported Employability Enhancement Course - I (optional)	A	-	-	-	-	THREE
Total				15	2	7	1	20

SEMESTER II								
Sl. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1	192MEC201T	Mechanisms Design and Simulation	C	3	-	-	-	3
2	192MEC202T	Mechanical Behavior of Materials	C	3	-	-	-	3
3	192MEC203T	Vibration Analysis and Control	C	3	-	-	-	3
4		Professional Elective - II	E	3	-	-	-	3
5		Open Elective - I	O	3	-	-	-	3
Practical								
6	192MEC201L	Vibration lab	C	-	-	3	1	2
Mandatory Course								
7	192GEM201T	Research Methodology and IPR/ Foreign Language/ Human Values	M	2	-	-	-	TWO
Employability Enhancement / Career Advancement Course								
8	192MEP211L	Design Project	A	-	-	-	4	2
9	192MEA211L	Internship / Industrial Training	A	-	-	-	-	1
10	192MEA212L	Online course (Optional)	A	-	-	-	-	THREE
11	192MEA213L	Industry Supported Employability Enhancement Course - I (optional)	A	-	-	-	-	THREE
Total				17	0	3	5	20

SEMESTER III								
SI. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Theory								
1		Professional Elective-III	E	3	-	-	-	3
2		Professional Elective-IV	E	3	-	-	-	3
Practical								
3	192MEP311P	Project Work /Start-up (Phase I)	A	-	-	-	16	8
Employability Enhancement / Career Advancement Course								
4	192MEA311L	Industry Internship	A	-	-	-	-	2
Total				6	0	0	16	16

SEMESTER IV								
SI. NO.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	
Practical								
1	192MEP411P	Project Work /Start-up (Phase II)	EEC	-	-	-	28	14
Total				0	0	0	28	14
Total Credit								70

Subject Area	Semester	I	II	III	IV	Credit
Foundation Course (H)		4				4
Professional Core (C)		11	11			22
Professional Electives (E)		3	3	6		12
Open Electives (O)			3			3
Employability Enhancement Courses (A)		2	3	10	14	29
Credit		20	20	16	16	70

PROFESSIONAL ELECTIVE – I								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192MEE101T	Quality Concepts in Design	E	3	-	-	-	3
2	192MEE102T	Optimization Techniques in Design	E	3	-	-	-	3
3	192MEE103T	Design of Pressure Vessel and Piping	E	3	-	-	-	3
4	192MEE104T	Design of Material Handling Equipments	E	3	-	-	-	3
5	192MEE105T	Additive Manufacturing and Tooling	E	3	-	-	-	3
6	192MEE106T	Information Analytics	E	3	-	-	-	3

PROFESSIONAL ELECTIVE – II								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192MEE201T	Integrated Mechanical Design	E	3	-	-	-	3
2	192MEE202T	Modal Analysis of Mechanical Systems	E	3	-	-	-	3
3	192MEE203T	Advanced Metal Forming Techniques	E	3	-	-	-	3
4	192MEE204T	Tribology in Design	E	3	-	-	-	3
5	192MEE205T	Surface Engineering	E	3	-	-	-	3
6	192MEE206T	Advanced Mechanics of Materials	E	3	-	-	-	3

PROFESSIONAL ELECTIVE – III								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192MEE301T	Product Lifecycle Management	E	3	-	-	-	3
2	192MEE302T	Design for Internet of Things	E	3	-	-	-	3
3	192MEE303T	Design of Hydraulic and Pneumatic Systems	E	3	-	-	-	3
4	192MEE304T	Computational Fluid Dynamics	E	3	-	-	-	3
5	192MEE305T	Biomechanics	E	3	-	-	-	3

PROFESSIONAL ELECTIVE – IV								
Sl. No.	Course Code	Course Title	Category	Hours / Week				Credits
				L	T	P	R	C
1	192MEE306T	Design for Manufacture, Assembly and Environments	E	3	-	-	-	3
2	192MEE307T	Product Design for Sustainability	E	3	-	-	-	3
3	192MEE308T	Bearing Design and Rotor Dynamics	E	3	-	-	-	3
4	192MEE309T	Composite Materials and Mechanics	E	3	-	-	-	3
5	192MEE310T	Plates and Shells	E	3	-	-	-	3

