

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University)

DEPARTMENT OF CIVIL ENGINEERING

B.E. CIVIL ENGINEERING-FULL TIME

(III TO VIII SEMESTER)

Curriculum from the Academic Year 2019 - 2020 and onwards

SUBJECTS OF STUDY

Semester III

Course Code	Course Name	L	T	P	C	Category
19CEM31	Differential Equations and Boundary Value Problems	3	1	0	4	BSC
19CE31	Mechanics of Solids	3	1	0	4	ES
19CE32	Engineering Geology	3	0	0	3	PC
19CE33	Mechanics of Fluids	3	0	0	3	PC
19CE34	Surveying	3	0	0	3	PC
19CE35	Water Supply Engineering	3	0	0	3	PC
19HSS01	Science of Creativity and Professional Ethics	1	0	0	1	HSC
19CEL36	Strength of Materials Laboratory	0	0	2	1	PC
19CEL37	Survey Laboratory	0	0	2	1	PC
	One Credit Course	1	0	0	1	EEC
19HOC31	Communication Skills for Engineers I*	0	0	2	1	EEC
	TOTAL CREDITS				25	

Semester IV

Course Code	Course Name	L	T	P	C	Category
19CE41	Construction Technology	3	0	0	3	PC
19CE42	Strength of Materials	3	1	0	4	PC
19CE43	Transportation Engineering	3	0	0	3	PC
19CE44	Applied Hydraulics and Hydraulic Machinery	3	0	0	3	PC
19CE45	Waste Water Engineering	3	0	0	3	PC
19CE46	Professional Practices and Ethics	3	0	0	3	BSC
19CEL47	Hydraulics Laboratory	0	0	2	1	PC
19CEL48	Environmental Engineering Laboratory	0	0	2	1	PC
	One Credit Course	1	0	0	1	EEC
19HOC41	Communication Skills for Engineers II*	0	0	2	1	EEC
	TOTAL CREDITS				23	
	* Not to be counted for GPA. Pass is required					

Semester V

Course Code	Course Name	L	T	P	C	Category
19CE51	Structural Analysis - I	3	0	0	3	PC
19CE52	Design of Reinforced Concrete Structural Elements	3	0	0	3	PC
19CE53	Mechanics of Soils	3	0	0	3	PC
19CE54	Concrete Technology	3	0	0	3	PC
	Elective- I	3	0	0	3	EC
	Elective - II	3	0	0	3	EC
19CEL55	Computer Aided Civil Engineering Drawing	0	0	2	1	ES
19CEL56	Highway Engineering Laboratory	0	0	2	1	PC
	One Credit Course	1	0	0	1	EEC
	Mini Project	-	-	-	-	EEC
19INT51	Internship*	0	0	2	1	EEC
19HOC51	Employability and Personality Development Skills I #	0	0	2	1	EEC
	TOTAL CREDITS				23	

*2 weeks of Internship to be completed during 4th semester vacation

Semester VI

Course Code	Course Name	L	T	P	C	Category
19CE61	Structural Analysis - II	3	0	0	3	PC
19CE62	Design of Steel Structures	3	0	0	3	PC
19CE63	Foundation Engineering	3	0	0	3	PC
	Elective- III	3	0	0	3	EC
	Elective- IV	3	0	0	3	EC
19CEL64	Soil Mechanics Laboratory	0	0	2	1	PC
19CEL65	Quantity Surveying and Project Planning Laboratory	0	0	2	1	PC
	One Credit Course	1	0	0	1	EEC
19CE66	Mini Project	0	0	6	3	EEC
19INT61	Internship*	0	0	2	1	EEC
19HOC61	Employability and Personality Development Skills II #	0	0	2	1	EEC
	TOTAL CREDITS				23	

*2 weeks of Internship to be completed during 5th semester vacation

Not to be counted for GPA. Pass is required

Semester VII

Course Code	Course Name	L	T	P	C	Category
19CE71	Irrigation Engineering	3	0	0	3	PC
19CE72	Earthquake Resistant Design of Structures	3	0	0	3	PC
19CE73	Construction Management	3	0	0	3	PC
	Elective- V	3	0	0	3	EC
	Elective- VI	3	0	0	3	EC
19CEL74	Computer Applications Laboratory	0	0	2	1	PC
19CEL75	Concrete Laboratory	0	0	2	1	PC
19CE76	Project Work Phase I	0	0	6	3	EEC
	TOTAL CREDITS				20	

Semester VIII

Course Code	Course Name	L	T	P	C	Category
	Elective- VII	3	0	0	3	EC
	Elective-VIII	3	0	0	3	EC
19CE81	Project Work Phase II	0	0	10	5	EEC
	TOTAL CREDITS				11	

* Including first year credits

TOTAL CREDITS = 164*

BSC - Basic Sciences

HSC - Humanities and Social Sciences

ES - Engineering Sciences

PC - Professional Core

PE - Professional Elective

OE - Open Elective

EEC - Employability Enhancement Course

EC - Elective Course - PE / OE

COIMBATORE INSTITUTE OF TECHNOLOGY
(Government Aided Autonomous Institution Affiliated to Anna University)

DEPARTMENT OF MECHANICAL ENGINEERING BACHELOR
OF MECHANICAL ENGINEERING CHOICE BASED CREDIT
SYSTEM

Curriculum from the Academic Year 2019 - 2020 and onwards

SUBJECTS OF STUDY

Semester III

Course Code	Course Name	L	T	P	C	Category
19MEM31	Ordinary and Partial Differential Equations	3	1	0	4	BSC
19ME31	Engineering Thermodynamics	3	1	0	4	PCC
19ME32	Engineering Mechanics for Mechanical Engineers	3	1	0	4	PCC
19ME33	Fluid Mechanics and Machinery	3	0	0	3	PCC
19ME34	Embedded Processor Architecture and Programming	3	0	0	3	ESC
19HSS01	Science of Creativity and Professional Ethics	1	1	0	1	HS
19MEL35	Computer Aided Machine Drawing - I	0	0	2	1	PCC
19MEL36A / 19MEL36B	Fluid Mechanics & Machinery Laboratory / Electrical Machines & Drives and Embedded Systems Laboratory	0	0	2	0.5	PCC
	One Credit Course - Elective I	1	0	0	1	EEC
19HOC31	Communication Skills for Engineers - I*	0	0	2	1	EEC
	TOTAL CREDITS				22.5	

Semester IV

Course Code	Course Name	L	T	P	C	Category
19ME41	Applied Thermodynamics	3	1	0	4	PCC
19ME42	Strength of Materials	3	1	0	4	PCC
19ME43	Mechanics of Machines	3	1	0	4	PCC
19ME44	Materials Engineering	3	0	0	3	PCC
19ME45	Manufacturing Processes - I	3	0	0	3	PCC
19MEL46	Computer Aided Machine Drawing - II	0	0	2	1	PCC
19MEL36A / 19MEL36B	Fluid Mechanics & Machinery Laboratory / Electrical Machines & Drives and Embedded Systems Laboratory	0	0	2	0.5	PCC

19MEL47A / 19MEL47B	Material Characterization and Testing Laboratory / Manufacturing Processes Laboratory	0	0	2	0.5	PCC
	One Credit Course - Elective II	1	0	0	1	EEC
19HOC41	Communication Skills for Engineers - II*	0	0	2	1	EEC
	TOTAL CREDITS				22	

* Not to be counted for GPA. Pass is required.

Semester V

Course Code	Course Name	L	T	P	C	Category
19ME51	Heat and Mass Transfer	3	1	0	4	PCC
19ME52	Design of Machine Elements	3	1	0	4	PCC
19ME53	Manufacturing Processes - II	3	0	0	3	PCC
19ME54	Metrology and Quality Control	3	0	0	3	PCC
19ME55	Operations Research	3	1	0	4	HS
	Elective 1	3	0	0	3	PEC
19MEL47A / 19MEL47B	Material Characterization and Testing Laboratory / Manufacturing Processes Laboratory	0	0	2	0.5	PCC
19MEL56A / 19MEL56B	Applied Thermal Sciences Laboratory / Dynamics and Metrology Laboratory	0	0	2	0.5	PCC
	One Credit Course - Elective III	1	0	0	1	EEC
19INT51	Internship - I	0	0	0	1	EEC
19ME67	Mini Project	0	0	3	0	EEC
19HOC51	Employability and Personality Development Skills - I*	0	0	2	1	
	TOTAL CREDITS				25	

Semester VI

Course Code	Course Name	L	T	P	C	Category
19ME61	Refrigeration and Air-conditioning	3	0	0	3	PCC
19ME62	Finite Element Analysis	3	1	0	4	PCC
19ME63	Design of Transmission Systems	3	1	0	4	PCC
19ME64	Computer Aided Engineering	3	1	0	4	PCC
	Elective 2	3	0	0	3	PEC
19MEL56A / 19MEL56B	Applied Thermal Sciences Laboratory / Dynamics and Metrology Laboratory	0	0	2	0.5	PCC
19MEL65	CAD / CAM Laboratory	0	0	2	1	PCC
	One Credit Course - Elective IV	1	0	0	1	PCC
19INT61	Internship - II	0	0	0	1	EEC
19ME67	Mini Project	0	0	3	3	EEC
19HOC61	Employability and Personality Development Skills - II*	0	0	2	1	
	TOTAL CREDITS				25.5	

Semester VII

Course Code	Course Name	L	T	P	C	Category
19ME71	Control Theory and Mechatronics	2	0	2	3	PCC
19ME72	Quality Engineering and Management	3	0	0	3	PCC
	Elective 3	3	0	0	3	PEC
	Elective 4	3	0	0	3	PEC
	Elective 5	3	0	0	3	OEC
	Elective 6	3	0	0	3	OEC
19ME73	Project Work Phase - I	0	0	6	3	EEC
	TOTAL CREDITS				21	

Semester VIII

Course Code	Course Name	L	T	P	C	Category
	Elective 7	3	0	0	3	PEC
	Elective 8	3	0	0	3	PEC
19ME81	Project Work Phase - II	0	0	10	5	EEC
	TOTAL CREDITS				11	

Semester 1	20
Semester 2	19
Semester 3	22.5
Semester 4	22
Semester 5	25
Semester 6	25.5
Semester 7	21
Semester 8	11
Total Credits	166

COIMBATORE INSTITUTE OF TECHNOLOGY

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B.E. ELECTRONICS AND COMMUNICATION ENGINEERING

CHOICE BASED CREDIT SYSTEM

Curriculum from the academic year 2019-2020 onwards

SUBJECTS OF STUDY

Semester III

Course Code	Course Name	L	T	P	C	Category
19ECM31	Matrices, Linear Algebra and Numerical Methods	3	1	0	4	BSC
19EC31	Digital Electronics	3	1	0	4	PCC
19EC32	Analog Electronics	3	0	0	3	PCC
19EC33	Signals and Systems	3	1	0	4	PCC
19EC34	Computer Architecture and Organization	3	0	0	3	PCC
19HSS01	Science of Creativity and Professional Ethics	1	0	0	1	HSC
19ECL35	Digital Electronics Laboratory	0	0	2	1	PCC
19ECL36	Analog Electronics Laboratory	0	0	2	1	PCC
	One Credit Course - Elective I				1	EEC
19HOC31	Communication Skills for Engineers - I*	0	0	2	1	EEC
	TOTAL CREDITS				23	

*Pass is required not accounted for GPA

Semester IV

Course Code	Course Name	L	T	P	C	Category
19EC41	Probability and Stochastic Process	3	1	0	4	PCC
19EC42	Principles of Communication	3	1	0	4	PCC
19EC43	Microcontroller Based Systems	3	1	0	4	PCC
19EC44	Linear Integrated Circuits	3	0	0	3	PCC
19EC45	Electromagnetic Fields and Waveguides	3	0	0	3	PCC
19ECL46	Microcontrollers Laboratory	0	0	2	1	PCC
19ECL47	Linear Integrated Circuits Laboratory	0	0	2	1	PCC
	One Credit Course - Elective II				1	EEC
19HOC41	Communication Skills for Engineers -II*	0	0	2	1	EEC
	TOTAL CREDITS				22	

*Pass is required not accounted for GPA

Semester V

Course Code	Course Name	L	T	P	C	Category
19EC51	Control Systems	3	0	0	3	PCC
19EC52	Digital Signal Processing	3	0	0	3	PCC
19EC53	Embedded Systems and IoT	3	0	0	3	PCC
19EC54	Antennas and Wave Propagation	3	0	0	3	PCC
	Elective - I	3	0	0	3	PEC
	Elective - II	3	0	0	3	PEC/OEC
19ECL55	Signal Processing Laboratory	0	0	2	1	PCC
19ECL56	Embedded Systems and IoT Laboratory	0	0	2	1	PCC
	One Credit Course - Elective III	0	0	2	1	EEC
19EC66	Mini Project				-	EEC
19INT51	Internship - I*				1	EEC
19HOC51	Employability and Personality Development Skills- I**	0	0	2	1	EEC
	TOTAL CREDITS				23	

* Internship / Project to be completed during 4th semester vacation

** Pass is required not accounted for GPA

Semester VI

Course Code	Course Name	L	T	P	C	Category
19EC61	VLSI Design	4	0	0	4	PCC
19EC62	Digital Communication	3	0	0	3	PCC
19EC63	Data Communication Networks	3	0	0	3	PCC
	Elective - III	3	0	0	3	PEC
	Elective - IV	3	0	0	3	PEC/OEC
19ECL64	VLSI Design Laboratory	0	0	2	1	PCC
19ECL65	Analog and Digital Communication Laboratory	0	0	2	1	PCC
	One Credit Course - Elective IV	1	0	0	1	EEC
19EC66	Mini Project	0	0	6	3	EEC
19INT61	Internship - II*				1	EEC
19HOC61	Employability And Personality Development Skills - II**	0	0	2	1	EEC
	TOTAL CREDITS				24	

* Internship to be completed during 5th semester vacation

** Pass is required not accounted for GPA

Semester VII

Course Code	Course Name	L	T	P	C	Category
19EC71	Digital Image Processing	4	0	0	4	PCC
19EC72	Microwave Engineering and Optical Communication	4	0	0	4	PCC
19EC73	Wireless Communication and Networks	3	0	0	3	PCC
	Elective - V	3	0	0	3	PEC
	Elective - VI	3	0	0	3	PEC
19ECL74	Wireless Communication and Networking Laboratory	0	0	2	1	PCC
19ECL75	High Frequency Laboratory	0	0	2	1	PCC
19EC76	Project Phase I	0	0	6	3	EEC
	TOTAL CREDITS				22	

SEMESTER VIII

Course Code	Course Name	L	T	P	C	Category
	Elective -VII	3	0	0	3	PEC
	Elective -VIII	3	0	0	3	PEC
19EC81	Project Phase II	0	0	10	5	EEC
	TOTAL CREDITS				11	

TOTAL CREDITS : 165 (4 year B.E ECE)

TOTAL CREDITS : 129* (Lateral-B.E ECE)

*125 credits-from 3rd to 8th semester,

4 credits-Bridge Courses (Engineering Mathematics-2 Credits & Physical Sciences -2 Credits)

Category; BSC - Basic Sciences Course, HSC- Humanities and Social Sciences Course, ESC-Engineering Sciences Course, PCC -Professional Core Course, PEC- Professional Elective Course, OEC-Open Elective Course, EEC -Employability Enhancement Course

COIMBATORE INSTITUTE OF TECHNOLOGY

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B.E. ELECTRICAL AND ELECTRONICS ENGINEERING (FULL TIME)

CHOICE BASED CREDIT SYSTEM

Curriculum from the Academic Year 2019 - 2020 and onwards

SUBJECTS OF STUDY

Semester III

S. No.	Course Code	Course Name	L	T	P	C	Category
1	19EEM31	Transforms, Probability and Random Variables	3	0	0	3	BS
2	19EE31	Electric Circuit Analysis	2	1	0	3	PCC
3	19EE32	Electromagnetic Fields	2	1	0	3	PCC
4	19EE33	DC Machines and Transformers	3	0	0	3	PCC
5	19EE34	Analog Electronics	3	0	0	3	PCC
6	19EE35	Digital Electronics	3	0	0	3	PCC
7	19HSS01	Science of Creativity and Professional Ethics	1	0	0	1	HS
8	19EEL36	DC Machines and Transformers Laboratory	0	0	2	1	PCC
9	19EEL37	Analog and Digital Electronics Laboratory	0	0	2	1	PCC
10		One Credit Course 1				1	OCC
11	19HOC31	Communication Skills For Engineers I*	0	0	2	1	EEC
(BS - 3, HS - 1, PCC - 17, OCC - 1, EEC - 1) TOTAL CREDITS						23	
* Not to be counted for GPA. Pass is required							

Semester IV

S. No.	Course Code	Course Name	L	T	P	C	Category
1	19EE41	AC Rotating Machines	3	0	0	3	PCC
2	19EE42	Networks and Systems	3	0	0	3	PCC
3	19EE43	Measurements and Instrumentation	3	0	0	3	PCC
4	19EE44	Linear Integrated Circuits	3	0	0	3	PCC
5	19EE45	Transmission and Distribution	3	0	0	3	PCC
6	19EE46	OOPS and C++ for Electrical Engineers	3	0	0	3	PCC
7	19EEL47	AC Rotating Machines Laboratory	0	0	2	1	PCC
8	19EEL48	Linear Integrated Circuits Laboratory	0	0	2	1	PCC
9		One Credit Course 2				1	OCC
10	19HOC41	Communication Skills For Engineers II*	0	0	2	1	EEC
(PCC - 20, OCC - 1, EEC - 1) TOTAL CREDITS						22	
* Not to be counted for GPA. Pass is required							

Semester V

S. No.	Course Code	Course Name	L	T	P	C	Category
1	19EE51	Control Systems	3	0	0	3	PCC
2	19EE52	Power System Analysis	3	0	0	3	PCC
3	19EE53	Data Structures and Algorithms	3	0	0	3	PCC
4	19EE54	Embedded System Design	3	0	0	3	PCC
5		Elective Course 1	3	0	0	3	EC
6		Elective Course 2	3	0	0	3	EC
7	19EEL55	Control systems Laboratory	0	0	2	1	PCC
8	19EEL56	Embedded System Design Laboratory	0	0	2	1	PCC
9		One Credit Course 3				1	OCC
10	19EEL66	Mini Project	-	-	2	-	EEC
11	19INT51	Internship - I	-	-	-	1	EEC
12	19HOC51	Employability and Personality Development Skills - I *	0	0	2	1	EEC
(PCC - 14, EC - 6, OCC - 1, EEC - 2)			TOTAL CREDITS			23	
* Not to be counted for GPA. Pass is required							

Semester VI

S. No.	Course Code	Course Name	L	T	P	C	Category
1	19EE61	Power Electronics	3	0	0	3	PCC
2	19EE62	Digital Protection of Power Systems	3	0	0	3	PCC
3	19EE63	Digital Signal Processing	3	1	0	4	PCC
4		Elective Course 3	3	0	0	3	EC
5		Elective Course 4	3	0	0	3	EC
6	19EEL64	Power Electronics Laboratory	0	0	2	1	PCC
7	19EEL65	Power Systems Laboratory	0	0	2	1	PCC
8		One Credit Course 4				1	OCC
9	19EEL66	Mini Project	0	0	6	3	EEC
10	19INT61	Internship - II	-	-	-	1	EEC
11	19HOC61	Employability and Personality Development Skills - II*	0	0	2	1	EEC
(PCC - 12, EC - 6, OCC - 1, EEC - 5)			TOTAL CREDITS			24	
* Not to be counted for GPA. Pass is required							

Semester VII

S. No.	Course Code	Course Name	L	T	P	C	Category
1	19EE71	Solid State Drives and Control	3	0	0	3	PCC
2	19EE72	Generation of Electrical Energy	3	1	0	4	PCC
3	19EE73	Smart Grid	3	0	0	3	PCC
4		Elective Course 5	3	0	0	3	EC
5		Elective Course 6	3	0	0	3	EC
6	19EEL74	Electrical Drives Laboratory	0	0	2	1	PCC
7	19EEL75	Professional Competency	0	0	4	2	PCC
8	19EE76	Project Work Phase - I	0	0	6	3	EEC
(PCC - 13, EC - 6, EEC - 3)			TOTAL CREDITS			22	

Semester VIII

S. No.	Course Code	Course Name	L	T	P	C	Category
1		Elective Course 7	3	0	0	3	EC
2		Elective Course 8	3	0	0	3	EC
3	19EE81	Project Work Phase - II	0	0	10	5	EEC
(EC - 6, EEC - 5)			TOTAL CREDITS			11	

TOTAL CREDITS : 164 *

* Including First Year Credits

Category : **BS** - Basic Sciences, **HS** - Humanities and Social Sciences, **ES** - Engineering Sciences, **PCC** - Professional Core Course, **EC** - Elective Course, **EEC** - Employability Enhancement Course, **OCC** - One Credit Course.

COIMBATORE INSTITUTE OF TECHNOLOGY

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B.E. COMPUTER SCIENCE AND ENGINEERING

CHOICE BASED CREDIT SYSTEM

Curriculum from the academic year 2019 - 2020 onwards

SUBJECTS OF STUDY

Semester III

Course Code	Course Name	Periods			Credits	Category
		L	T	P		
19CIM31	Linear Algebra, Complex Variables and Transform Techniques	3	1	0	4	BSC
19CI31	Data Structures and Algorithms - I	3	1	0	4	PCC
19CI32	Digital Design	3	0	0	3	ESC
19CS31	Discrete Mathematics	2	0	0	2	PCC
19CI33	Object Oriented Programming and Java	3	0	0	3	PCC
19HSS01	Science of Creativity and Professional Ethics	1	0	0	1	HSC
19CIL34	Digital Design Laboratory	0	0	3	1.5	ESC
19CIL35	Object Oriented Programming Laboratory	0	0	3	1.5	PCC
	One Credit Course	0	0	2	1	OCC
19HOC31	Communication Skills for Engineers - I*	0	0	2	1	EEC
	Total Credits				22	

Semester IV

Course Code	Course Name	Periods			Credits	Category
		L	T	P		
19CI41	Data Structures and Algorithms- II	3	0	0	3	PCC
19CI42	Database Management Systems	3	0	0	3	PCC
19CI43	Computer Architecture	3	0	0	3	PCC
19CI44	Operating Systems	3	0	0	3	PCC
19CI45	Software Engineering	2	1	0	3	PCC
19CS41	Formal Languages and Automata Theory	2	0	0	2	PCC
19CIL46	Database Management Systems Laboratory	0	0	3	1.5	PCC
19CIL47	Data Structures and Algorithms Laboratory	0	0	3	1.5	PCC
	One Credit Course	0	0	2	1	OCC
19HOC41	Communication Skills for Engineers - II*	0	0	2	1	EEC
	Total Credits				22	

* Not to be counted for GPA. Pass is required.

Semester V

Course Code	Course Name	Periods			Credits	Category
		L	T	P		
19CI51	Computer Networks	3	0	0	3	PCC
19CS51	Unix Internals	3	0	0	3	PCC
19CI52	Data Warehousing and Data Mining	3	0	0	3	PCC
19CS52	Statistical Data Analysis	2	1	0	3	PCC
	Elective - I	3	0	0	3	PEC/OEC
	Elective - II	3	0	0	3	PEC/OEC
19CIL54	Computer Networks Laboratory	0	0	2	1	PCC
19CIL48	Operating Systems Laboratory	0	0	2	1	PCC
	One Credit Course	0	0	2	1	OCC
19HOC51	Employability and Personality Development Skills - I*	0	0	2	1	EEC
19CS65	Mini Project	0	0	3	-	EEC
19INT51	Internship-I*	-	-	-	1	EEC
	Total Credits				23	

Semester VI

Course Code	Course Name	Periods			Credits	Category
		L	T	P		
19CI53	Embedded Systems	3	0	0	3	PCC
19CS61	Internet of Things and Its Applications	3	0	0	3	PCC
19CS62	Machine Learning	3	0	0	3	PCC
	Elective - III	3	0	0	3	PEC/OEC
	Elective - IV	3	0	0	3	PEC/OEC
19CSL63	Embedded Systems & IOT Laboratory	0	0	2	1	PCC
19CSL64	Machine Learning Laboratory	0	0	2	1	PCC
19HOC61	Employability and Personality Development Skills-II*	0	0	2	1	EEC
	One Credit Course	0	0	2	1	OCC
19CS65	Mini Project	0	0	3	3	EEC
19INT61	Internship-II*	-	-	-	1	EEC
	Total Credits				23	

*Internship to be completed during 4th semester and 5th semester vacation

* Not to be counted for GPA. Pass is required.

Semester VII

Course Code	Course Name	Periods			Credits	Category
		L	T	P		
19CS71	Principles of Compiler Design	3	1	0	4	PCC
19CI61	Artificial Intelligence	3	0	0	3	PCC
19CI71	Cryptography and Network Security	3	1	0	4	PCC
	Elective - V	3	0	0	3	PEC/OEC
	Elective - VI	3	0	0	3	PEC/OEC
19CSL72	Compiler Design Laboratory	0	0	3	1.5	PCC
19CSL73	Artificial Intelligence Laboratory	0	0	3	1.5	PCC
19CS74	Project Phase-I	0	0	6	3	EEC
	Total Credits				23	

Semester VIII

Course Code	Course Name	Periods			Credits	Category
		L	T	P		
	Elective - VII	3	0	0	3	PEC/OEC
	Elective - VIII	3	0	0	3	PEC/OEC
19CS81	Project Phase-II	0	0	10	5	EEC
	Total Credits				11	

Note :

- Open Electives (Maximum 2) can be opted from other departments as approved by CSE department.
- NPTEL 3 credit courses can be opted instead of electives with approval of department.

TOTAL CREDITS

CREDITS (First and Second semester) : 40

CREDITS (Third to Eight semester) : 124

TOTAL : 164 Credits

SCC-Subject Category Code:

HSC - Humanities and Social Sciences, BSC - Basic Science Courses, ESC - Engineering Science Courses, PCC- Professional Core Courses, PEC - Professional Elective Courses, OEC - Open Elective Courses, EEC - Project Work, Entrepreneurship, Seminar, Soft skills, Internship, Comprehensive Test, MCC - Mandatory Courses, OCC - One Credit Courses

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

B.Tech. INFORMATION TECHNOLOGY

CHOICE BASED CREDIT SYSTEM

Curriculum from the academic year 2019-2020 onwards

SUBJECTS OF STUDY

Semester III

Course Code	Course Name	L	T	P	C	Category
19CIM31	Linear Algebra, Complex Variables and Transform Techniques	3	1	0	4	BS
19CI31	Data Structures and Algorithms - I	3	1	0	4	PC
19CI32	Digital Design	3	0	0	3	ES
19IT31	Discrete Mathematics And Automata Theory	3	0	0	3	PC
19CI33	Object Oriented Programming and Java	3	0	0	3	PC
19HSS01	Science Of Creativity and Professional Ethics	1	0	0	1	HS
19CIL34	Digital Design Laboratory	0	0	3	1.5	ES
19CIL35	Object Oriented Programming Laboratory	0	0	3	1.5	PC
	One Credit Course	0	0	2	1	OCC
19HOC31	Communication Skills for Engineers - I*	0	0	2	1	EEC
	TOTAL CREDITS				23	

Semester IV

Course Code	Course Name	L	T	P	C	Category
19CI41	Data Structures and Algorithms II	3	0	0	3	PC
19CI42	Database Management Systems	3	0	0	3	PC
19CI43	Computer Architecture	3	0	0	3	PC
19CI44	Operating Systems	3	0	0	3	PC
19CI45	Software Engineering	2	1	0	3	PC
19CIL46	Database Management Systems Laboratory	0	0	3	1.5	PC
19CIL47	Data Structures and Algorithms Laboratory	0	0	3	1.5	PC
19CIL48	Operating Systems Laboratory	0	0	2	1	PC
	One Credit Course	0	0	2	1	OCC
19HOC41	Communication Skills for Engineers -II*	0	0	2	1	EEC
	TOTAL CREDITS				21	

* Not to be counted for GPA. Pass is required.

Semester V

Course Code	Course Name	L	T	P	C	Category
19CI51	Computer Networks	3	0	0	3	PC
19CI52	Data Warehousing and Data Mining	3	0	0	3	PC
19CI53	Embedded Systems	3	0	0	3	PC
19IT51	Economics for Engineers	2	0	0	2	HS
	Elective-I	3	0	0	3	PE/OE
	Elective-II	3	0	0	3	PE/OE
19ITL52	Embedded Systems Laboratory	0	0	2	1	PC
19CIL54	Computer Networks Laboratory	0	0	2	1	PC
	One Credit Course	0	0	2	1	OCC
19HOC51	Employability and Personality Development Skills - I*	0	0	2	1	EEC
19IT65	Mini Project	0	0	3	-	EEC
19INT51	Internship-I	0	0	0	1	EEC
	TOTAL CREDITS				22	

Semester VI

Course Code	Course Name	L	T	P	C	Category
19CI61	Artificial Intelligence	3	0	0	3	PC
19IT61	Mobile Computing	3	0	0	3	PC
19IT62	Internet Technology	3	0	0	3	PC
	Elective-III	3	0	0	3	PE/OE
	Elective-IV	3	0	0	3	PE/OE
19ITL63	Data Analytics and Artificial Intelligence Laboratory	0	0	3	1.5	PC
19ITL64	Internet Technology & Software Engineering Laboratory	0	0	3	1.5	PC
	One Credit Course	0	0	2	1	OCC
19HOC61	Employability and Personality Development Skills - II*	0	0	2	1	EEC
19IT65	Mini Project	0	0	3	3	EEC
19INT61	Internship -II	0	0	0	1	EEC
	TOTAL CREDITS				24	

• Internship/Project to be completed during 4th and 5th semester vacation

* Not to be counted for GPA. Pass is required.

Semester VII

Course Code	Course Name	L	T	P	C	Category
19CI71	Cryptography and Network Security	3	1	0	4	PC
19IT71	Distributed Systems	3	0	0	3	PC
19IT72	Internet of Things	3	1	0	4	PC
	Elective-V	3	0	0	3	PE/OE
	Elective-VI	3	0	0	3	PE/OE
19ITL73	Internet of Things Laboratory	0	0	3	1.5	PC
19ITL74	Mobile Application Development Laboratory	0	0	3	1.5	PC
19IT75	Project Phase-I	0	0	6	3	EEC
	TOTAL CREDITS				23	

Semester VIII

Course Code	Course Name	L	T	P	C	Category
	Elective-VII	3	0	0	3	PE/OE
	Elective-VIII	3	0	0	3	PE/OE
19IT81	Project Phase-II	0	0	10	5	EEC
	TOTAL CREDITS				11	

Total Credits : 164 (4 years B.Tech (IT))

Total Credits : 126 (Lateral B.Tech (IT))

122* Credits for Laterals + 4 Credits - Bridge

Course (Engineering Mathematics - 2 Credits & Physical - Sciences - 2 Credits)

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University)

B.Tech. CHEMICAL ENGINEERING

Curriculum from the Academic Year - 2019

SUBJECTS OF STUDY

Semester III

Course Code	Course Name	L	T	P	C	CAT
19CEM31	Differential Equations and Boundary Value Problems	2	1	0	3	BS
19CH31	Mechanics of Solids	3	0	0	3	ES
19CH32	Fluid Mechanics	2	1	0	3	PCC
19CH33	Chemical Engineering Thermodynamics	2	1	0	3	PCC
19CH34	Environmental Science	3	0	0	3	PCC
19CH35	Chemical Process Calculations	2	1	0	3	PCC
19HSS01	Science of Creativity and Professional Ethics	1	0	0	1	HS
19CHL36	Computer Laboratory (Programming for problem solving)	0	0	2	1	ES
19CHL37	Electrical and Electronics Engineering Laboratory	0	0	2	1	ES
	One Credit Course	1	0	0	1	
19HOC31	Communication Skills for Engineers - I*	0	0	2	1	EEC
	TOTAL CREDITS				23	

Semester IV

Course Code	Course Name	L	T	P	C	CAT
19CH41	Biology for Chemical Engineers	3	0	0	3	ES
19CH42	Mechanical Operations	2	1	0	3	PCC
19CH43	Chemical Reaction Engineering - I	2	1	0	3	PCC
19CH44	Heat Transfer	2	1	0	3	PCC
19CH45	Mass Transfer - I	2	1	0	3	PCC
19CH46	Instrumental Methods of Analysis	3	0	0	3	PCC
19CHL47	Fluid Mechanics Laboratory	0	0	2	1	PCC
19CHL48	Technical Analysis Laboratory	0	0	2	1	PCC
	One Credit Course	1	0	0	1	
19HOC41	Communication Skills for Engineers - II*	0	0	2	1	EEC
	TOTAL CREDITS				22	

* Not to be counted for GPA. Pass is required.

Semester V

Course Code	Course Name	L	T	P	C	CAT
19CH51	Numerical Methods in Chemical Engineering	2	1	0	3	PCC
19CH52	Chemical Reaction Engineering- II	2	1	0	3	PCC
19CH53	Mass Transfer-II	2	1	0	3	PCC
	Elective - I	3	0	0	3	PEC
	Elective - II	3	0	0	3	PEC
19CHL56	Entrepreneurship Development	0	0	2	1	HS
19CHL57	Mechanical Operations Laboratory	0	0	2	1	PCC
19CHL58	Heat Transfer Laboratory	0	0	2	1	PCC
	One Credit Course	1	0	0	1	-
19CH68	Mini Project*	0	0	2	No Credit	EEC
19INT51	Internship-I#	0	0	2	1	EEC
19HOC51	Employability and Personality Development Skills-I*	0	0	2	1	EEC
	TOTAL CREDITS				21	

Internship - I to be completed during 4th semester vacation

* Mini Project will be evaluated in 6th Semester

Semester VI

Course Code	Course Name	L	T	P	C	CAT
19CH61	Process Dynamics and Control	2	1	0	3	PCC
19CH62	Chemical Process Industries	3	0	0	3	PCC
19CH63	Chemical Process Safety	3	0	0	3	PCC
	Elective - III	3	0	0	3	PEC
	Elective - IV	3	0	0	3	PEC
19CHL66	Chemical Reaction Engineering Laboratory	0	0	2	1	PCC
19CHL67	Mass Transfer Laboratory	0	0	2	1	PCC
	One Credit Course	1	0	0	1	-
19CH68	Mini Project	0	0	4	2	EEC
19INT61	Internship-II#	0	0	2	1	EEC
19HOC61	Employability and Personality Development Skills-II*	0	0	2	1	EEC
	TOTAL CREDITS				22	

Internship-II to be completed during 5th semester vacation

* Not to be counted for GPA. Pass is required.

Semester VII

Course Code	Course Name	L	T	P	C	CAT
19CH71	Transport Phenomena	2	1	0	3	PCC
19CH72	Process Economics and Technology Management	3	0	0	3	PCC
19CH73	Process Modeling and Simulation	2	1	0	3	PCC
19CH74	Electrochemical Engineering	3	0	0	3	PEC
	Elective - V	3	0	0	3	PEC/OEC
19CHL76	Process Equipment Design and Drawing	0	0	4	2	PCC
19CHL77	Process Control and Simulation Laboratory	0	0	2	1	PCC
19CH78	Project Work Phase - I	0	0	6	3	EEC
	TOTAL CREDITS				21	

Semester VIII

Course Code	Course Name	L	T	P	C	CAT
	Elective -VI	3	0	0	3	PEC
	Elective-VII	3	0	0	3	PEC
	Elective-VIII	3	0	0	3	PEC/OEC
19CH84	Project Work Phase - II	0	0	10	5	EEC
	TOTAL CREDITS				14	

Category : BS - Basic Science, HS - Humanities and Social Science, ES - Engineering Science, PCC - Professional Core Course, PEC - Professional Elective Course, OEC - Open Elective Course, EEC - Employability Enhancement Courses.

Total Credits

Semester	Credits
I	21
II	21
III	23
IV	22
V	21
VI	22
VII	21
VIII	14
TOTAL	165

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

COIMBATORE - 641 014, TAMILNADU, INDIA



DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

B.TECH. ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

Curriculum and Syllabi

(R2021)

Under Choice Based Credit System

(For the students admitted during the academic year 2021 - 2022 and onwards)

**SUBJECTS OF STUDY
SEMESTER I**

Subject Code	Subject	SCC#	Periods			Credits
			L	T	P	
21FYM14	Matrices and Calculus	BS	3	1	0	4
21FYE11	Technical English	HS	2	0	1	2
21FYP13	Engineering Physics	BS	3	0	0	3
21FYC11	Engineering Chemistry	BS	3	0	0	3
21CS11	C Programming	ES	3	0	0	3
21CSL11	C Programming Laboratory	ES	0	0	4	2
21PL11	Physics Laboratory I	BS	0	0	2	0.5
21CL11	Chemistry Laboratory I	BS	0	0	2	0.5
21MEL12	Engineering Practices Laboratory	BS	0	0	2	1
21FYEL11	Employability Skills	EEC	0	0	2	1
Total Credits						20

SEMESTER II

Subject Code	Subject	SCC#	Periods			Credits
			L	T	P	
21FYM21	Linear Algebra and Gradient Calculus	BS	3	1	0	4
21AD21	Fundamentals of Industry Revolution 4.0	PC	3	0	0	3
21FYC21	Environmental Science and Engineering	ES	3	0	0	1
21CS21	Digital Design	ES	3	0	0	3
21CSL22	Python Programming	ES	1	0	4	3
21MEL11	Engineering Graphics	ES	1	0	4	3
21PL21	Physics Laboratory II	BS	0	0	2	0.5
21CL21	Chemistry Laboratory II	BS	0	0	2	0.5
21CSL21	Digital Design Laboratory	ES	0	0	2	1
21FYEL21	English for Employability	EEC	0	0	2	1
21CC01	Co-curricular Activities	-	-	-	-	1
Total Credits						21

SEMESTER III

Subject Code	Subject	SCC#	Periods			Credits
			L	T	P	
21AD31	Probability and Statistics	BS	3	1	0	4
21AD32	Data Structures and Algorithms	PC	3	1	0	4
21AD33	Principles of Artificial Intelligence	PC	3	0	0	3
21AD34	Software Engineering Principles and Practices	PC	3	0	0	3
21AD35	Web Development Technologies	PC	3	0	0	3
21AD36	Science of Creativity and Professional Ethics	HS	1	1	0	1
21ADL37	Data Structures and Algorithms Laboratory	PC	0	0	3	1.5
21ADL38	Web Development Laboratory	PC	0	0	3	1.5
21ADOC01	One Credit Course – Elective I	OCC	-	-	-	1
21HOC01	Communication Skills for Engineers – I	EEC	0	0	2	1
Total Credits						23

SEMESTER IV

Subject Code	Subject	SCC [#]	Periods			Credits
			L	T	P	
21AD41	Discrete Mathematics and Automata Theory	BS	3	1	0	4
21AD42	Machine learning techniques	PC	3	0	0	3
21AD43	Database Management Systems	PC	3	0	0	3
21AD44	Principles of Computer Systems	PC	3	0	0	3
21AD45	Data communication and Networking	PC	3	0	0	3
21AD46	Foundation in Data Science	PC	3	0	0	3
21ADL47	Machine Learning Laboratory	PC	0	0	3	1.5
21ADL48	Database Management Systems Laboratory	PC	0	0	3	1.5
21ADOC02	One Credit Course-Elective II	OCC	-	-	-	1
21HOC02	Communication Skills for Engineers – II	EEC	0	0	2	1
Total Credits						24

SEMESTER V

Subject Code	Subject	SCC#	Periods			Credits
			L	T	P	
21AD51	Cloud Architecture	PC	3	0	0	3
21AD52	Mobile Application Development	PC	3	0	0	3
21AD53	Data Mining and Analysis	PC	3	0	0	3
21AD54	Big Data Architecture: Tools and Techniques	PC	3	0	0	3
	Professional Elective I	PE	3	0	0	3
	Open Elective I	OE	3	0	0	3
21ADL55	Mobile Application Development Laboratory	PC	0	0	2	1
21ADL56	Data Mining and Analysis Laboratory	PC	0	0	2	1
21ADOC03	Comprehensive Exam Training (One Credit Course)	EEC	-	-	-	1
21AD66	Mini Project <i>(** Evaluated at Sem VI)</i>	EEC	0	0	6	1
21ADI57	Internship I <i>*(To be completed during third/fourth semester vacation)</i>	EEC	0	0	0	1
Total Credits						22

SEMESTER VI

Subject Code	Subject	SCC#	Periods			Credits
			L	T	P	
21AD61	Deep Learning Techniques	PC	3	0	0	3
21AD62	Computer Vision and Pattern Recognition	PC	3	0	0	3
21AD63	Data Visualization	PC	3	0	0	3
	Professional Elective II	PE	3	0	0	3
	Open Elective II	OE	3	0	0	3
21ADL64	Deep Learning Laboratory	PC	0	0	4	2
21ADL65	Data Visualization Laboratory	PC	0	0	2	1
21AD66	Mini Project	EEC	0	0	6	3
21ADI67	Internship II* (To be completed during fourth/fifth semester vacation)	EEC	0	0	0	1
Total Credits						22

SEMESTER VII

Subject Code	Subject	SCC [#]	Periods			Credits
			L	T	P	
21AD71	Data Security	PC	3	0	0	3
21AD72	IoT and its Applications	PC	3	0	0	3
21AD73	Applied Natural Language Processing	PC	3	0	0	3
	Professional Elective III	PE	3	0	0	3
	Professional Elective IV	PE	3	0	0	3
21ADL74	Applied Natural Language Processing Laboratory	PC	0	0	2	1
21ADL75	Internet of Things Laboratory	PC	0	0	2	1
21AD76	Project Phase-I	EEC	0	0	6	3
Total Credits						20

SEMESTER VIII

Subject Code	Subject	SCC#	Periods			Credits
			L	T	P	
	Professional Elective – V	PE	3	0	0	3
	Professional Elective – VI	PE	3	0	0	3
21AD81	Project Phase-II	EEC	0	0	10	5
Total Credits						11

Note:

- Open Electives can be opted from other departments too
- NPTEL 12-week courses, CISCO certifications, AWS certifications, PM certifications can be opted instead of electives with approval of department

TOTAL CREDITS:**Semester I and Semester II : 41****Semester III to Semester VIII : 122****Total : 163**

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF CIVIL ENGINEERING

COURSES OF STUDY

For the students admitted during 2019 - 2020 and onwards

Under Choice Based Credit System

Name of the degree : M.E. (Full-Time)

Specialization : M.E. Structural Engineering

Semester I

Course Code	Course Name	L	T	P	C	CY
19MCE11	Applied Mathematics	4	0	0	4	FC
19MCE12	Applied Elasticity and Plasticity	3	0	0	3	PC
19MCE13	Matrix Methods of Structural Analysis	3	0	0	3	PC
19MCE14	Advanced Reinforced Concrete Structures	3	0	0	3	PC
19MCE15	Advanced Steel Structures	3	0	0	3	PC
	Program Elective - I	3	0	0	3	PE
19MCE16	Computer Applications Laboratory	0	0	4	2	PC
	TOTAL CREDITS				21	

Semester II

Course Code	Course Name	L	T	P	C	CY
19MCE21	Structural Dynamics	3	0	0	3	PC
19MCE22	Finite Element Method	3	0	0	3	PC
19MCE23	Design of Foundation Structures	3	0	0	3	PC
	Program Elective - II	3	0	0	3	PE
	Program Elective - III	3	0	0	3	PE
	Program Elective - IV	3	0	0	3	PE
19MCE24	Advanced Structural Engineering Laboratory	0	0	4	2	PC
	TOTAL CREDITS				20	

Semester III

Course Code	Course Name	L	T	P	C	CY
	Program Elective - V	3	0	0	3	PE
	Program Elective - VI	3	0	0	3	PE
	Open Elective / Professional Elective - VII	3	0	0	3	OE
	One Credit Course	1	0	0	1	EEC
19MCE31	Practical Training	0	0	0	2	EEC
	TOTAL CREDITS				12	

Semester IV

Course Code	Course Name	L	T	P	C	CY
19MCE41	Project Work and Viva Voce	0	0	36	18	EEC
	TOTAL CREDITS				18	

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

M.E. (ENVIRONMENTAL ENGINEERING AND MANAGEMENT)

(Curriculum from the Academic Year 2019-2020 onwards)

SUBJECTS OF STUDY

Semester I

Course Code	Course Name	Category	L	T	P	C
19MEN11	Applied Statistics and Probability	FC	3	0	0	3
19MEN12	Environmental Chemistry	PC	3	0	0	3
19MEN13	Environmental Microbiology	PC	3	0	0	3
19MEN14	Separation Process In Environmental Engineering	PC	3	0	0	3
19MEN15	Industrial Wastewater Treatment and Management	PC	3	0	0	3
	Program Elective - I	PE	3	0	0	3
19MEN16	Process Engineering Laboratory - I	PC	0	0	4	2
	TOTAL		18	0	4	20

Semester II

Course Code	Course Name	Category	L	T	P	C
19MEN21	Design of Water and wastewater treatment Plant	PC	3	0	0	3
19MEN22	Air Pollution and Control	PC	3	0	0	3
19MEN23	Solid and Hazardous Waste Management	PC	3	0	0	3
	Program Elective - 2	PE	3	0	0	3
	Program Elective - 3	PE	3	0	0	3
	Program Elective - 4	PE	3	0	0	3
19MEN24	Process Engineering Laboratory - II	PC	0	0	4	2
	TOTAL		18	0	4	20

Semester III

Course Code	Course Name	Category	L	T	P	C
	Program Elective - 5	PE	3	0	0	3
	Program Elective - 6	PE	3	0	0	3
	Open Elective / Professional Elective - VII	OE	3	0	0	3
19MEN31	Practical Training	EEC	-	-	-	2
	One credit course	EEC	0	-	2	1
	TOTAL		10	0	2	12

Semester IV

Course Code	Course Name	Category	L	T	P	C
19MEN41	Project	EEC	0	0	36	18
	TOTAL		0	0	36	18

Total Credits : 70

L - Lecture, T - Tutorial, P - Practical, C - Credit, FC - Foundation Course, PC - Professional Core,
PE - Professional Elective, EEC - Employment Enhancement Course

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

M.E. CONSTRUCTION MANAGEMENT

(Curriculum from the Academic Year 2019 - 2020 onwards)

Semester I

Course Code	Course Name	Category	L	T	P	C
19MCM11	Statistical Methods and Research Methodology for Construction Management	FC	3	-	-	3
19MCM12	Construction Project Management	PC	3	-	-	3
19MCM13	Construction Project Formulation and Appraisal	PC	3	-	-	3
19MCM14	Construction Resource Planning and Management	PC	3	-	-	3
19MCM15	Construction Economics and Financial Management	PC	3	-	-	3
	Program Elective - 1	PE	3	-	-	3
19MCM16	Data Analysis Laboratory for Construction Management	PC	-	-	4	2
	Total		18	0	2	20

Semester II

Course Code	Course Name	Category	L	T	P	C
19MCM21	Construction Planning, Scheduling and Control	PC	3	-	-	3
19MCM22	Contract Management and Dispute Resolution	PC	3	-	-	3
19MCM23	Quantitative Techniques in Construction Management	PC	3	-	-	3
	Program Elective - 2	PE	3	-	-	3
	Program Elective - 3	PE	3	-	-	3
	Program Elective - 4	PE	3	-	-	3
19MCM24	Project Planning Laboratory for Construction Management	PC	-	-	4	2
	Total		18	0	2	20

Semester III

Course Code	Course Name	Category	L	T	P	C
	Program Elective - 5	PE	3	-	-	3
	Program Elective - 6	PE	3	-	-	3
	Open Elective / Program Elective - 7	PE	3	-	-	3
19MCM31	Practical Training	EEC	-	-	-	2
	One Credit course	EEC			-	1
	Total		9	-	-	12

Semester IV

Course Code	Course Name	Category	L	T	P	C
19MCM41	Project Work	EEC	-	-	-	18
	Total		-	-	-	18

Total Credits to be Earned for the Award of the Degree = 70

FC - Foundation Courses

PC - Professional Core

PE - Professional Electives

EEC - Employment Enhancement Courses

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Curriculum from the Academic Year 2019 - 2020 onwards

Under Choice Based Credit System

Specialization : Embedded And Real Time Systems

Semester I

Course Code	Course Name	L	T	P	C	Category
19MA11	Linear Algebra and Stochastic Processes	4	0	0	4	FC
19MER11	Real Time Operating Systems	3	1	0	4	PC
19MER12	Embedded Processors	3	0	0	3	PC
19MER13	Wireless Communication Sensors	3	0	0	3	PC
19MA14	Electromagnetic Interference and Compatibility	3	0	0	3	PC
	ELECTIVE I	3	0	0	3	PE
19MER14	Embedded Processors Laboratory	0	0	4	2	PC
	Total				22	

Semester II

Course Code	Course Name	L	T	P	C	Category
19MA21	Automation and Industrial Internet of Things	3	0	0	3	PC
19MA22	Robotics Technology and Intelligence	3	0	0	3	PC
19MER21	Embedded System Design using FPGA	3	0	0	3	PC
	ELECTIVE II	3	0	0	3	PE
	ELECTIVE III	3	0	0	3	PE
	ELECTIVE IV	3	0	0	3	PE
19MER22	FPGA based Embedded System Design Laboratory	0	0	4	2	PC
19MAEE01	Feasibility Report Preparation	0	0	4	2	EEC 1
	One Credit Course				1	OCC1
	TOTAL				23	

Semester III

Course Code	Course Name	L	T	P	C	Category
	ELECTIVE V	3	0	0	3	PE
	ELECTIVE VI	3	0	0	3	PE
	OPEN ELECTIVE I	3	0	0	3	OE
	One Credit Course				1	OCC 2
	TOTAL				10	

Semester IV

Course Code	Course Name	L	T	P	C	Category
19MER41	PROJECT - DISSERTATION	0	0	36	18	EEC2
	TOTAL				18	

TOTAL CREDITS: 73

(**Note** : FC - Foundation Course; PC - Professional Core; PE - Professional Elective; OC - Open Elective; EEC - Employability Enhancement Course; OCC - One Credit Course)

CURRICULUM
M.E- ADVANCED MANUFACTURING TECHNOLOGY

SEMESTER – I						
S.No	COURSE CODE	COURSE NAME	TEACHING SCHEME			CREDITS
			L	T	P	
1.	19MMA11	Applied Numerical Analysis	3	0	0	3
2.	19MMA12	Mechatronics in Manufacturing Systems	3	0	0	3
3.	19MMA13	Computer Integrated Manufacturing	3	0	0	3
4.	19MMA14	Optimization for Engineering Applications	3	0	0	3
5.	19MMA15	Advanced Material Engineering	3	0	0	3
6.		Professional Elective – I	3	0	0	3
7.	19MMA17	CIM Laboratory & Mechatronics Laboratory	0	0	4	2
Total Credits:			18		4	20

SEMESTER – II						
S.No	COURSE CODE	COURSE NAME	TEACHING SCHEME			CREDITS
			L	T	P	
1	19MMA21	Design for Manufacture and Assembly	3	0	0	3
2	19MMA22	Advanced Metal Joining Technology	3	0	0	3
	19MMA23	Finite Element Analysis in Manufacturing Engineering	3	0	0	3
3		Professional Elective – II	3	0	0	3
4		Professional Elective – III	3	0	0	3
		Professional Elective – IV	3	0	0	3
5	19MMA27	Simulation Laboratory & Welding Laboratory	0	0	4	2
8		Mini project / Industrial Training / Employability Enhancement Courses	0	0	4	2
Total Credits:			18		8	22

M.E- ADVANCED MANUFACTURING TECHNOLOGY

SEMESTER – III						
S.No	COURSE CODE	COURSE NAME	TEACHING SCHEME			CREDITS
			L	T	P	
1		Professional Elective - IV	3	0	0	3
2		Professional Elective -V	3	0	0	3
		Open Elective / Professional Elective	3	0	0	3
3	19MMA41	Project Work and Viva Voce	0	0	0	0
Total Credits:			9			9

SEMESTER – IV						
S.No	COURSE CODE	COURSE NAME	TEACHING SCHEME			CREDITS
			L	T	P	
1	19MMA41	Project Work and Viva Voce	0	0	0	18
Total Credits:						18

TOTAL CREDITS FOR THE PROGRAMME = 20 + 22 + 9 + 18 = 69

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

MASTER OF COMPUTER APPLICATIONS

UNDER CHOICE BASED CREDIT SYSTEM

Curriculum from the Academic Year 2018 - 2019 onwards

Semester I

Course Code	Course Name	L	T	P	C	Category
	THEORY					
18MCA11	Theory of Computing	3	0	0	3	FC
18MCA12	Data Structures	3	0	0	3	FC
18MCA13	Programming in C	3	0	0	3	PC
18MCA14	Computer Organization	3	0	0	3	FC
18MCA15	Probability and Statistics	3	0	0	3	PC
	PRACTICALS					
18MCA16	C Programming Laboratory	0	0	4	2	PC
18MCA17	User Experience Laboratory	0	0	4	2	FC
18MCA18	Statistics Laboratory	0	0	4	2	FC
18MCA19	Communication Skills	0	0	2	1	EEC
	TOTAL CREDITS				22	

Semester II

Course Code	Course Name	L	T	P	C	Category
	THEORY					
18MCA21	Design and Analysis of Algorithms	3	0	0	3	FC
18MCA22	Object Oriented Principles and Programming in JAVA	3	0	0	3	PC
18MCA23	Principles of Operating System	3	0	0	3	PC
18MCA24	Database Management Systems	3	0	0	3	PC
18MCA25	Software Engineering	3	0	0	3	PC
	PRACTICAL					
18MCA26	Algorithms and Operating Systems Laboratory	0	0	4	2	PC
18MCA27	Object Oriented Programming Laboratory	0	0	4	2	PC
18MCA28	RDBMS Laboratory	0	0	4	2	PC
18MCA29	Professional English	0	0	2	1	EEC
	TOTAL CREDITS				22	

Semester III

Course Code	Course Name	L	T	P	C	Category
	THEORY					
18MCA31	Numerical Methods and Applied Statistics	4	0	0	4	FC
18MCA32	Computer Networks	3	0	0	3	PC
18MCA33	Artificial Intelligence	3	0	0	3	PC
18MCA34	SOA and Web Services	3	0	0	3	PC
	Elective I	3	0	0	3	PE
	PRACTICAL					
18MCA35	Advanced Programming Laboratory	0	0	4	2	PC
18MCA36	Artificial Intelligence Laboratory	0	0	4	2	PC
18MCA37	Network Programming Laboratory	0	0	4	2	PC
18MCA38*	Personality Development					EEC
	TOTAL CREDITS				22	

Semester IV

Course Code	Course Name	L	T	P	C	Category
	THEORY					
18MCA41	Operations Research	4	0	0	4	FC
18MCA42	Data Mining and Warehousing	3	0	0	3	PC
18MCA43	Accounting and Financial Management	4	0	0	4	PC
	Elective II	3	0	0	3	PE
	Elective III	3	0	0	3	PE
	PRACTICAL					
18MCA44	Data Mining Laboratory	0	0	4	2	PC
	Elective Laboratory	0	0	4	2	PE
18MCA45	Mini Project	0	0	4	2	EEC
	TOTAL CREDITS				23	

Semester V

Course Code	Course Name	L	T	P	C	Category
	THEORY					
18MCA51	Software Testing and Quality Assurance	3	0	0	3	PC
18MCA52	Cryptography and Network Security	3	0	0	3	PC
	Elective IV	3	0	0	3	PE
	Elective V	3	0	0	3	PE
	Elective VI	3	0	0	3	PE
	PRACTICAL					
18MCA53	Software Testing Laboratory	0	0	4	2	PC
18MCA54	Information Security Laboratory	0	0	4	2	PC
18MCA55*	Professional Ethics					EEC
	TOTAL CREDITS				19	

Semester VI

Course Code	Course Name	L	T	P	C	Category
18MCA61	Project work and Viva voce				18	EEC
	TOTAL CREDITS				18	

TOTAL = 126

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF MANAGEMENT STUDIES (MBA)

MASTER OF BUSINESS ADMINISTRATION REGULATIONS - 2021

CHOICE BASED CREDIT SYSTEM

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs) :

MBA programme curriculum is designed to prepare the post graduate students

- I. To have a thorough understanding of the core aspects of the business.
- II. To provide the learners with the management tools to identify, analyze and create business opportunities as well as solve business problems.
- III. To prepare them to have a holistic approach towards management functions.
- IV. To motivate them for continuous learning.
- V. To inspire and make them practice ethical standards in business.

PROGRAMME OUTCOMES (POs) :

On successful completion of the programme,

1. Ability to apply the business acumen gained in practice.
2. Ability to understand and solve managerial issues.
3. Ability to communicate and negotiate effectively, to achieve organizational and individual goals.
4. Ability to upgrade their professional and managerial skills in their workplace.
5. Ability to explore and reflect about managerial challenges, develop informed managerial decisions in a dynamically unstable environment.
6. Ability to take up challenging assignments.
7. Ability to understand one's own ability to set achievable targets and complete them.
8. Ability to pursue life long learning.
9. To have a fulfilling business career.
10. Ability to have financial literacy.
11. Ability to fulfill social out reach
12. Ability to understand business analytics

MAPPING OF PEOS WITH POS :

Programme Educational Objectives	Programme Outcomes											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
I	3	3	2	1	3	3	1	2	1	1	1	3
II	1	3	1	2	3	1	3	2	1	3	1	3
III	3	3	2	3	3	2	3	3	3	1	2	3
IV	2	1	2	3	3	1	3	3	3	1	2	1
V	1	3	3	2	2	3	1	2	3	1	3	1

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF COMPUTING

M.SC. (SOFTWARE SYSTEMS)

Curriculum - For the Students admitted during 2020 - 2021 and onwards

Semester I

Course Code	Course Name	L	T	P	C	CAT
	THEORY					
20MSS11	Technical English	2	0	0	2	HS
20MSS12	Applied Algebra and Calculus	3	1	0	4	BS
20MSS13	Structured Systems Analysis and Design	3	0	0	3	PC
20MSS14	Digital Electronics	3	0	0	3	PC
20MSS15	Problem Solving using C Programming	3	1	0	4	PC
	PRACTICALS					
20MSS16	Computing Laboratory	0	0	4	2	PC
20MSS17	Programming Laboratory in C	0	0	4	2	PC
20MSS18	Digital Electronics Laboratory	0	0	2	1	PC
20MSS19	Employability Skills	0	0	2	1	EEC
	TOTAL CREDITS				22	

Semester II

Course Code	Course Name	L	T	P	C	CAT
	THEORY					
	Language Elective	2	0	0	2	HS
20MSS21	Probability and Statistics - I	3	1	0	4	BS
20MSS22	Data Structures and Algorithms	3	1	0	4	PC
20MSS23	Fundamentals of Web Technology	3	0	0	3	PC
20MSS24	Object Oriented Programming	3	0	0	3	PC
	PRACTICALS					
20MSS25	Web Application Development Laboratory	0	0	4	2	PC
20MSS26	Data Structures and Algorithms Laboratory	0	0	4	2	PC
20MSS27	Object Oriented Programming Laboratory	0	0	4	2	PC
20MSS28	English for Employability	0	0	2	1	EEC
	TOTAL CREDITS				23	

Semester III

Course Code	Course Name	L	T	P	C	CAT
	THEORY					
20MSS31	Theoretical Computer Science	3	0	0	3	BS
20MSS32	Probability and Statistics - II	3	1	0	4	BS
20MSS33	Advanced Data Structures	3	0	0	3	PC
20MSS34	Computer Architecture	3	0	0	3	PC
20MSS35	Operating Systems	3	0	0	3	PC
	PRACTICALS					
20MSS36	Python Programming Laboratory	0	0	4	2	PC
20MSS37	Advanced Data Structures Laboratory	0	0	4	2	PC
20MSS38	Operating Systems Laboratory	0	0	4	2	PC
	TOTAL CREDITS				22	

Semester IV

Course Code	Course Name	L	T	P	C	CAT
	THEORY					
20MSS41	Resource Management Techniques	3	0	0	3	BS
20MSS42	Microprocessors and Microcontrollers	3	0	0	3	PC
20MSS43	Software Engineering	3	0	0	3	PC
20MSS44	Database Management Systems	3	0	0	3	PC
20MSS45	Java Programming	3	0	0	3	PC
	PRACTICALS					
20MSS46	Microprocessors and Microcontrollers Laboratory	0	0	4	2	PC
20MSS47	Database Management Systems Laboratory	0	0	4	2	PC
20MSS48	Java Programming Laboratory	0	0	4	2	PC
20MSS49	Personality Development	0	0	2	1	EEC
	TOTAL CREDITS				22	

Semester V

Course Code	Course Name	L	T	P	C	CAT
	THEORY					
20MSS51	Full Stack Application Development	3	0	0	3	PC
20MSS52	Computer Networks	3	0	0	3	PC
20MSS53	Design and Analysis of Algorithms	3	1	0	4	PC
20MSS54	Machine Learning	3	0	0	3	PC
	Elective I	3	0	0	3	PC
	PRACTICALS					
20MSS55	Full Stack Application Development Laboratory	0	0	4	2	PC
20MSS56	Network Programming Laboratory	0	0	4	2	PC
	Elective Laboratory I	0	0	4	2	PC
20MSS57	Communications Skills	0	0	2	1	EEC
	TOTAL CREDITS				23	

Semester VI

Course Code	Course Name	L	T	P	C	CAT
	THEORY					
20MSS61	Software Testing and Quality Assurance	3	0	0	3	PC
20MSS62	Mobile Computing	3	0	0	3	PC
20MSS63	Cloud Computing	3	0	0	3	PC
20MSS64	Software Architecture	3	0	0	3	PC
	Elective II	3	0	0	3	PC
	PRACTICALS					
20MSS65	Software Engineering Laboratory	0	0	4	2	PC
20MSS66	Cloud and Mobile Application Development Lab	0	0	4	2	PC
	Elective Laboratory II	0	0	4	2	PC
20MSS67	Hackathon	0	0	2	1	EEC
	TOTAL CREDITS				22	

Semester VII

Course Code	Course Name	L	T	P	C	CAT
20MSS71	Project Work and Viva Voce-I	0	0	0	18	EEC

Semester VIII

Course Code	Course Name	L	T	P	C	CAT
	THEORY					
20MSS81	Software Project Management	3	0	0	3	PC
20MSS82	Smart Sensors and Internet of Things	3	0	0	3	PC
20MSS83	Artificial Intelligence	3	0	0	3	PC
	Elective III	3	0	0	3	PC
	Elective IV	3	0	0	3	PC
	PRACTICALS					
20MSS84	Internet of Things Laboratory	0	0	4	2	PC
20MSS85	Artificial Intelligence Laboratory	0	0	4	2	PC
	Elective Laboratory III	0	0	4	2	PC
	TOTAL CREDITS				21	

Semester IX

Course Code	Course Name	L	T	P	C	CAT
	THEORY					
20MSS91	Agile Methods for Software Development	3	0	0	3	PC
20MSS92	Information Security	3	0	0	3	PC
20MSS93	Professional Ethics	3	0	0	3	EEC
	Elective V	3	0	0	3	PC
	Elective VI	3	0	0	3	PC
	PRACTICALS					
20MSS94	Information Security Laboratory	0	0	4	2	PC
	Elective Laboratory IV	0	0	4	2	PC
	Elective Laboratory V	0	0	4	2	PC
	TOTAL CREDITS				21	

Semester X

Course Code	Course Name	L	T	P	C	CAT
20MSS10	Project Work and Viva Voce-II	0	0	0	18	EEC
	TOTAL CREDITS				18	
	GRAND TOTAL OF CREDITS				212	

Coimbatore Institute of Technology, Coimbatore - 14

Department of Computing

M. Sc. DECISION AND COMPUTING SCIENCES

(Five year Integrated Programme)

Curriculum from the Academic Year 2022 – 2023 onwards

Semester I						
Course Code	Course Name	L	T	P	C	CAT
Theory						
22MDC11	Technical English	2	0	1	2	HS
22MDC12	Applied Algebra and Calculus	3	1	0	4	BS
22MDC13	Statistical Methods	3	0	0	3	BS
22MDC14	Principles of Management	3	0	0	3	PC
22MDC15	Problem Solving and Programming in C	3	0	0	3	PC
Practicals						
22MDC16	Mathematical and Statistical Computing Laboratory	0	0	4	2	PC
22MDC17	C Programming Laboratory	0	0	4	2	PC
22MDC18	Foundations of Computer Science Laboratory	0	0	4	2	PC
22MDC19	Employability Skills	0	0	2	1	EEC
	Total Credits				22	
Semester II						
Course Code	Course Name	L	T	P	C	CAT
Theory						
	Language Elective	2	0	1	2	HS
22MDC21	Probability Distributions and Applications	3	0	0	3	BS
22MDC22	Organisational Behavior	4	0	0	4	PC
22MDC23	Data Structures and Algorithms	3	0	0	3	PC
22MDC24	Computer Organization and Operating Systems	3	0	0	3	PC
Practicals						
22MDC25	Applied Probability Laboratory	0	0	4	2	PC
22MDC26	Data Structures and Algorithms Laboratory	0	0	4	2	PC
22MDC27	Python Programming Laboratory	0	0	4	2	PC
22MDC28	English for Employability	0	0	2	1	EEC
	Total Credits				22	

Curriculum and Syllabi

Semesters III - X and Electives

Semester III

Course Code	Course Name	L	T	P	C	Category
	THEORY					
22MDC31	Applied Statistics for Business Decisions	3	1	0	4	BS
22MDC32	Financial Analysis and Reporting	3	1	0	4	PC
22MDC33	Digital Marketing	3	0	0	3	PC
22MDC34	Database Management Systems	3	0	0	3	PC
22MDC35	Object Oriented Programming	3	0	0	3	PC
	PRACTICALS					
22MDC36	Digital Marketing Laboratory	0	0	4	2	PC
22MDC37	Database Management Systems Laboratory	0	0	4	2	PC
22MDC38	Object Oriented Programming Laboratory	0	0	4	2	PC
	Total Credits				23	

Semester IV

Course Code	Course Name	L	T	P	C	Category
	THEORY					
22MDC41	Predictive Analytics	3	0	0	3	BS
22MDC42	Operations Research for Business	3	1	0	4	PC
22MDC43	Financial Engineering	3	0	0	3	PC
22MDC44	Advanced Data Structures and Algorithms	3	0	0	3	PC

22MDC45	Artificial Intelligence	3	0	0	3	PC
	PRACTICALS					
22MDC46	Predictive Analytics Laboratory	0	0	4	2	PC
22MDC47	Financial Engineering Laboratory	0	0	4	2	PC
22MDC48	Advanced Data Structures and Algorithms Laboratory	0	0	4	2	PC
22MDC49	Personality Development	0	0	2	1	EEC
	Total Credits				23	

Semester V

Course Code	Course Name	L	T	P	C	Category
	THEORY					
22MDC51	Human Resource Management and Analytics	3	1	0	4	PC
22MDC52	Software Engineering	3	0	0	3	PC
22MDC53	Computer Networks	3	0	0	3	PC
22MDC54	Machine Learning	3	0	0	3	PC
	Elective - I	3	0	0	3	PE
	PRACTICALS					
22MDC55	Full Stack Application Development lab	0	0	4	2	PC
22MDC56	Machine Learning Laboratory	0	0	4	2	PC
	Elective Laboratory - I	0	0	4	2	PE
22MDC57	Managerial Communication Skills	0	0	2	1	EEC
	Total Credits				23	

Semester VI

Course Code	Course Name	L	T	P	C	Category
	THEORY					
22MDC61	Economic Foundations of Business	3	0	0	3	PC
22MDC62	Systems for Decision Support	3	0	0	3	PC
22MDC63	Cloud Computing	3	0	0	3	PC
22MDC64	Deep Learning	3	0	0	3	PC

Semester V

	Elective - II	3	0	0	3	PE
	PRACTICALS					
22MDC65	Cloud and Mobile Application Development Laboratory	0	0	4	2	PC
22MDC66	Deep Learning Laboratory	0	0	4	2	PC
	Elective Laboratory - II	0	0	4	2	PE
22MDC67	Hackathon	0	0	2	1	EEC
	Total Credits				22	

Semester VII

Course Code	Course Name	L	T	P	C	Category
22MDC71	Project Work and Viva Voce-I	0	0	0	18	EEC
	Total Credits				18	

COIMBATORE INSTITUTE OF TECHNOLOGY

(Government Aided Autonomous Institution Affiliated to Anna University, Chennai)

DEPARTMENT OF COMPUTING - ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

M.Sc. ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

(Five-Year Integrated Programme)

Curriculum from the Academic Year 2019 - 2020 and onwards

Semester VII

Course Code	Course Name	L	T	P	C	CAT
19MAM71	Project Work and Viva Voce - I	0	0	0	18	EEC
	TOTAL CREDITS				18	

Semester X

Course Code	Course Name	L	T	P	C	CAT
19MAM101	Project Work and Viva Voce - II	0	0	0	18	EEC
	Total Credits				18	
	Grand Total of Credits				210	

Coimbatore Institute of Technology, Coimbatore - 14.

(Government Aided Autonomous Institution Affiliated to Anna University)

Department of Computing

M. Sc. DATA SCIENCE

CHOICE BASED CREDIT SYSTEM

Five year Integrated Programme

Curriculum for the Academic Year 2021 – 2026

Semester 1

Subject code	Name of the Subject	L	T	P	C	CAT
	THEORY					
21MDS11	Technical English	2	0	0	2	HS
21MDS12	Algebra and Applications	3	1	0	4	BS
21MDS13	Statistical Methods	3	0	0	3	PC
21MDS14	Problem Solving and Programming in Python	3	0	0	3	PC
21MDS15	Principles of Digital Electronics	3	0	0	3	PC
	PRACTICALS					
21MDS16	Computing Laboratory I	0	0	4	2	PC
21MDS17	Programming Laboratory in Python	0	0	4	2	PC
21MDS18	Digital Electronics Laboratory	0	0	4	2	PC
21MDS19	English for Employability	0	0	2	1	EEC
	Total Credits				22	

Semester 2

Subject code	Name of the Subject	L	T	P	C	CAT
	THEORY					
	Language Elective	2	0	0	2	HS

21MDS21	Calculus and Applications	3	1	0	4	BS
21MDS22	Probability Distributions and Applications	3	0	0	3	PC
21MDS23	Data Structures and Algorithms I	3	0	0	3	PC
21MDS24	Object Oriented Programming	3	0	0	3	PC
	PRACTICALS					
21MDS25	Computing Laboratory II	0	0	4	2	PC
21MDS26	Data Structures and Algorithms Laboratory I	0	0	4	2	PC
21MDS27	Object Oriented Programming Laboratory	0	0	4	2	PC
21MDS28	Employability Skills	0	0	2	1	EEC
	Total Credits				22	

Semester 3

Subject code	Subject Name	L	T	P	C	CAT
	THEORY					
21MDS31	Business Statistics	3	0	0	3	PC
21MDS32	Discrete Structures and Automata Theory	3	0	0	3	PC
21MDS33	Operating Systems	3	0	0	3	PC
21MDS34	Database Systems	3	0	0	3	PC
21MDS35	Data Structures and Algorithms II	3	0	0	3	PC
	PRACTICALS					
21MDS36	Database Systems Laboratory	0	0	4	2	PC
21MDS37	Data Structures and Algorithms Laboratory II	0	0	4	2	PC
21MDS38	Web Technology Framework Laboratory	0	0	4	2	PC
	Total Credits				21	

Semester 4

Subject code	Subject Name	L	T	P	C	CAT
	THEORY					

21MDS41	Multivariate Data Analysis	3	0	0	3	PC
21MDS42	Graph Theory	3	0	0	3	PC
21MDS43	Design and Analysis of Algorithms	3	0	0	3	PC
21MDS44	Computer Networks	3	0	0	3	PC
21MDS45	Machine Learning	3	0	0	3	PC
	PRACTICALS					
21MDS46	Predictive Analytics Laboratory	0	0	4	2	PC
21MDS47	Design and Analysis of Algorithms Laboratory	0	0	4	2	PC
21MDS48	Machine Learning Laboratory	0	0	4	2	PC
21MDS49	Personality Development	0	0	2	1	EEC
	Total Credits				22	

Semester 5

Subject code	Subject Name	L	T	P	C	CAT
	THEORY					
21MDS51	Operations Research	3	0	0	3	PC
21MDS52	Deep Learning	3	0	0	3	PC
21MDS53	Big Data Computing	3	0	0	3	PC
21MDS54	Artificial Intelligence	3	0	0	3	PC
	Elective - I	3	0	0	3	PE
	PRACTICALS					
21MDS55	Deep Learning Laboratory	0	0	4	2	PC
21MDS56	Big Data Computing Laboratory	0	0	4	2	PC
	Elective Lab - I	0	0	4	2	PE
21MDS57	Communication Skills	0	0	2	1	EEC
	Total Credits				22	

Semester 6

Subject code	Subject Name	L	T	P	C	CAT
	THEORY					
21MDS61	Stochastic Models	3	0	0	3	PC
21MDS62	Cloud Computing	3	0	0	3	PC
21MDS63	Data Mining	3	0	0	3	PC
21MDS64	Software Engineering	3	0	0	3	PC
	Elective- II	3	0	0	3	PE
	PRACTICALS					
21MDS65	Cloud Computing Laboratory	0	0	4	2	PC
21MDS66	Data Mining and Visualization Laboratory	0	0	4	2	PC
	Elective Lab - II	0	0	4	2	PE
21MDS67	Hackathon	0	0	2	1	EEC
	Total Credits				22	

Semester 7

Subject code	Subject Name	L	T	P	C	CAT
21MDS71	Project Work and Viva Voce-I	0	0	0	18	EEC
	Total Credits				18	

Semester 8

Subject code	Subject Name	L	T	P	C	CAT
	THEORY					
21MDS81	Data Privacy and Security Analytics	3	0	0	3	PC
21MDS82	Quantum Machine Learning	3	0	0	3	PC
21MDS83	Ethics in Data Science	3	0	0	3	PC

	Elective - III	3	0	0	3	PE
	Elective - IV	3	0	0	3	PE
	PRACTICALS					
21MDS84	Data Privacy and Security Analytics Laboratory	0	0	4	2	PC
21MDS85	Quantum Machine Learning Laboratory	0	0	4	2	PC
	Elective Lab - III	0	0	4	2	PE
	Total Credits				21	

Semester 9

Subject code	Subject Name	L	T	P	C	CAT
	THEORY					
21MDS91	Econometric Analysis	3	1	0	4	PC
21MDS92	Web Analytics	3	0	0	3	PC
21MDS93	Healthcare Analytics	3	1	0	4	PC
	Elective - V	3	0	0	3	PE
	Elective - VI	3	0	0	3	PE
	PRACTICALS					
21MDS94	Econometric Analysis Laboratory	0	0	4	2	PE
21MDS95	Web Analytics Laboratory	0	0	4	2	PE
	Elective Lab - IV	0	0	4	2	PE
	Total Credits				23	

Semester 10

Subject code	Subject Name	L	T	P	C	CAT
21MDS101	Project Work and Viva Voce- II	0	0	0	18	EEC
	Total Credits				18	
Grand Total of Credits					211	