



AMRITA SAI INSTITUTE OF SCIENCE AND TECHNOLOGY (AUTONOMOUS)


Approved by AICTE, New Delhi; Permanently Affiliated to JNTUK, Kakinada,
Recognized by UGC under 2(f) & 12(B) of 1956 Act.,
An ISO 9001:2015 Certified institution, Accredited by NAAC "A" Grade,
Paritala, Kanchikacherla, Krishna Dist., Andhra Pradesh - 521 180.
www.amritasai.org.in, Phone: 0866-2428399



1.2.1 Percentage of New Courses introduced out of the total number of courses across all the programs offered during the last five years.

S.NO	YEAR	ENGINEERING	PG-MBA/MCA /M.TECH	TOTAL NO OF NEW COURSES	TOTAL COURSES	PERCENTAGE
1	2022-23	49	09	58	1357	24.02%
2	2021-22	49	67	116		
3	2020-21	59	49	108		
4	2019-20	33	11	44		
5	2018-19	--	--	--		
GRAND TOTAL				326		


COORDINATOR


IQAC Coordinator
Amrita Sai Institute of Science & Technology
Amrita Sai Nagar, Paritala -521180


PRINCIPAL

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Amrita Sai Institute of Science and Technology
Amrita Sai Nagar, Paritala
Krishna Dist 521 180



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NEWLY ADDED COURSES A.Y-2021-22

S.No	Name of the Course	Regulation	Year/Se m	Course Code	Name of New Courses Introduced	Year of Introduction	
1	B.Tech	AR18	IV-I	18CE7T5C	Tall Buildings	2021-22	
2	B.Tech		IV-I	18CE7T5D	Urban Hydrology	2021-22	
3	B.Tech		IV-I	18CE7T6E	Pavement Analysis And Design	2021-22	
4	B.Tech		IV-II	18CE8T4B	Soil Dynamics And Foundations	2021-22	
5	B.Tech		IV-II	18CE8T4D	Water Resource Systems Planning	2021-22	
6	B.Tech		IV-II	18CE8T4E	Urban Transportation Planning Engineering	2021-22	
7	B.Tech		II-I	20MC3T7	Essence Of Indian Traditional Knowledge	2021-22	
8	B.Tech		II-II	20SO4T5E	Computer Aided Drawing -1	2021-22	
9	B.Tech		II-II	20MC4T6	Constitution Of India	2021-22	
10	B.Tech		II-I	20EE3T6A	Electrical Safety	2021-22	
11	B.Tech		II-I	20MC3T7	Essence Of Indian Traditional Knowledge	2021-22	
12	B.Tech		II-II	20EE4L2	Electrical Machines-II Laboratory	2021-22	
13	B.Tech		II-II	20EE4L3	Control Systems Lab	2021-22	
14	B.Tech		II-II	20SE4T6A	Robotics And Humanoids	2021-22	
15	B.Tech		AR18	IV-I	18EE7T2	Oops Through Java	2021-22
16	B.Tech			IV-I	18EE7T4	Renewable Energy Sources	2021-22
17	B.Tech			IV-I	18EE7T6B	Robotics	2021-22
18	B.Tech	IV-I		18EE7L1	Microprocessors & Microcontrollers Laboratory	2021-22	
19	B.Tech	IV-II		18EE8T2	Hvdc Transmission & Facts	2021-22	
20	B.Tech	IV-II		18EE8T3	Electrical Distribution Systems Planning & Automation	2021-22	
21	B.Tech	IV-II		18EE8T4B	Power Quality	2021-22	
22	B.Tech	IV-II		18EE8T4C	Power System D Regulations	2021-22	
23	B.Tech	IV-I		18ME7T2	Micro Electro Mechanical Systems	2021-22	
24	B.Tech	AR-18		IV-I	18ME7P1	Project-1	2021-22
25	B.Tech			20ME3L1	Computer Aided Engineering Graphics Practice	2021-22	
26	B.Tech		II-I	20EC3L3	Switching Theory And Logic Design	2021-22	
27	B.Tech		II-I	20EC3S3	Pcb Design / Git	2021-22	

28	B.Tech		II-II	20EC4T4	Computer Architecture And Organisation	2021-22
29	B.Tech		II-II	20EC4L1	Mat Lab & Arduino Programming Lab	2021-22
30	B.Tech		II-II	20EC4L3	Analog & Digital Communication Lab	2021-22
31	B.Tech		II-II	20EC4S4	Mini Project	2021-22
32	B.Tech		IV-I	18CS7T2	Hadoop And Big Data	2021-22
33	B.Tech		IV-I	18CS7T3	Artificial Intelligence	2021-22
34	B.Tech		IV-I	18CS7T4	Adhoc & Sensor Networks	2021-22
35	B.Tech		IV-I	18CS7T5A	Mobile Computing	2021-22
36	B.Tech		IV-I	18CS7T5C	Forensic Computing	2021-22
37	B.Tech		IV-I	18CS7L1	Hadoop And Big Data Lab	2021-22
38	B.Tech		IV-I	18CS7L2	J2me & Android Programming Lab	2021-22
39	B.Tech		III-I	20CS3T3	Advanced Data Structures And Algorithms	2021-22
40	B.Tech		III-I	20CS3T5	Digital Logic Design	2021-22
41	B.Tech	AR-18	III-I	20CS3L1	Advanced Data Structures And Algorithms Lab	2021-22
42	B.Tech		III-I	20SE3T1	Introduction To Computer Fundamentals	2021-22
43	B.Tech		II-II	20CS4T1	Php Programming	2021-22
44	B.Tech		II-II	20CS4T3	Advanced Java Programming	2021-22
45	B.Tech		II-II	20CS4T5	Operating Systems	2021-22
46	B.Tech		II-II	20SE4T1	Solving Problems With Computers	2021-22
47	B.Tech		II-II	20CS4L1	Php Programming Lab	2021-22
48	B.Tech		II-II	20CS4L2	Advanced Java Programming Lab	2021-22
49	B.Tech		II-II	20CS4L4	Operating Systems Lab	2021-22
50	M.Tech	AR20	II-I	20SE3T1A	Design Of Pre -Stressed Concrete Structures	2021-22
51	M.Tech		II-I	20OE3T2	Green Buildings	2021-22
52	M.Tech		II-I	20PE3T1A	Digital Signal Processing Controlled Drives	2021-22
53	M.Tech		II-I	20PE3T1B	Smart Grid Technologies	2021-22
54	M.Tech	AR20	II-I	20PE3T1C	Modelling & Simulation Of Power Electronic Systems	2021-22
55	M.Tech		II-I	20PE3T2A	Industrial Safety	2021-22
56	M.Tech		II-I	20PE3T2B	Energy Audit, Conservation & Management	2021-22
57	M.Tech		II-I		Dissertation Phase - I	2021-22
58	M.Tech		II-II		Dissertation Phase - II	2021-22
59	MTECH		II-I	20VLES3T1	IoT And Its Applications	2021-22
60	MTECH	AR20	II-I	20VLES3T2	Business Analytics	2021-22
61	MTECH		II-I	20VLES3T3	Research Methodology And Ipr	2021-22
62	MBA (MHM)	AR-20	I-I	21MHIT1	Basic Biological Sciences	2021-22

63	MBA (MHM)	I-I	21MH IT2	Organizational Behaviour	2021-22
64	MBA (MHM)	I-I	21MHIT3	Human Resource Management	2021-22
65	MBA (MHM)	I-I	21MHIT4	Financial Management	2021-22
66	MBA (MHM)	I-I	21MH IT5	Purchasing Management And Inventory Control	2021-22
67	MBA (MHM)	I-I	21MH IT6	Hospital And Patient Relation Management	2021-22
68	MBA (MHM)	I-I	21MH IT7	Medical Insurance	2021-22
70	MBA (MHM)	I-I	21MH IT8	Communication Skills And Business Correspondence	2021-22
71	MBA (MHM)	I-II	21MH2T1	Marketing Management	2021-22
72	MBA (MHM)	I-II	21MH2T2	Strategic Management For Hospitals	2021-22
73	MBA (MHM)	I-II	21MH2T3	Biostatistics And Operation Research	2021-22
74	MBA (MHM)	I-II	21MH2T4	Hospital Architecture Planning Design & Maintenance	2021-22
75	MBA (MHM)	I-II	21MH2T5	Clinical Services	2021-22
76	MBA (MHM)	I-II	21MH2T6	Hospital Support Services	2021-22
77	MBA (MHM)	I-II	21MH2T7	Epidemiology And Public Health Systems	2021-22
78	MBA (MHM)	I-II	21MH2T8	Research Methodology	2021-22
79	MBA (MHM)	I-II	21MH2T9	Practical-Hospital Internship 30 Days Of Field Visit And Report*	2021-22
80	MBA (MHM)	II-I	21MH3T1	Hospital Information Systems	2021-22
81	MBA (MHM)	II-I	21MH3T2	Health Care Law And Ethics	2021-22
82	MBA (MHM)	II-I	21MH3T3	Networking	2021-22
83	MBA (MHM)	II-I	21MH3T4	Quality Management & Hospital Accreditation Systems	2021-22
84	MBA (MHM)	II-I	21MH3T5	Management Of Super Speciality Systems	2021-22
85	MBA (MHM)	II-I	21MH3T6	Housekeeping Management And Dietary System	2021-22
86	MBA (MHM)	II-I	21MH3T7	Medical Records Management	2021-22
87	MBA (MHM)	II-I	21MH3T8	Hospital Front Office Management	2021-22

88	MBA (MHM)		II-I	21MH3T9	Summer Project Work	2021-22
89	MBA (MHM)		II-I	21MH3T10	Seminar (Emerging Trends In Management -Case Study)	2021-22
90	MBA (MHM)		II-II	221MH4T1	Project Work	2021-22
91	MCA		I-II	20MC2405A	Artificial Intelligence	2021-22
92	MCA		I-II	20MC2405B	Computer Graphics	2021-22
93	MCA		I-II	20MC2405C	Distributed Systems	2021-22
94	MCA		I-II	20MC2405D	Optimization	2021-22
95	MCA		II-I	20MC4651	Major Project	2021-22
96	MBA		II-I	20AJMB303	Industrial Project based on Summer Internship	2021-22
97	MBA		II-I	20AJMB3H3	Human Capital Management	2021-22
98	MBA		II-I	20AJMB3H4	Manpower Planning, Recruitment, and Selection	2021-22
99	MBA		II-II	20AJMB4F1	Financial Derivatives	2021-22
100	MBA		II-II	20AJMB4F2	Global Financial Management	2021-22
101	MBA		II-II	20AJMB4F3	Financial Risk Management	2021-22
102	MBA		II-II	20AJMB4H1	Labour Welfare and employment laws	2021-22
103	MBA	II-II	20AJMB4H3	Employee Relations and Engagement	2021-22	
104	MBA	II-II	20AJMB4H4	Human Resources Development	2021-22	
105	MBA	II-I	20AJMB3F1	Investment Analysis and Portfolio Management	2021-22	
106	MBA	II-I	20AJMB3F2	Managing Banks and Financial Institutions	2021-22	
107	MBA	II-I	20AJMB3F4	Taxation	2021-22	
108	MBA	II-II	20AJMB4F1	Financial Derivatives	2021-22	
109	MBA	II-II	20AJMB3M4	Strategic Marketing Management	2021-22	
110	MBA	II-II	20AJMB4M3	Green Marketing	2021-22	
111	MBA	II-II	20AJMB4M4	Advertising and Brand Management	2021-22	
112	MBA	II-I	20AJMB3S1	Data Mining for Business Decisions	2021-22	
113	MBA	II-I	20AJMB3S2	Managing Software Projects	2021-22	
114	MBA	II-I	20AJMB3S3	Web Designing	2021-22	
115	MBA	II-I	20AJMB3S4	Business Analytics	2021-22	
116	MBA	II-II	20AJMB4S1	Big Data Analytics	2021-22	

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B. Tech. Course Structure – Computer Science & Engineering

II Year I Semester

S. No	Course Code	Course	L	T	P	C
1	18CS3T1	Unix and Shell Programming	3	1	--	3
2	18CS3T2	Mathematical Foundations for Computer Science	3	1	--	3
3	18CS3T3	Computer Organisation	3	1	--	3
4	18CS3T4	Java Programming	3	1	--	3
5	Elective I		3	1	--	3
	18CS3T5A	Digital Logic Design				
	18CS3T5B	Data Analytics-1				
	18CS3T5C	Cloud Computing-1				
	18CS3T5D	Web and Mobile Development-1				
18CS3T5E	Cyber Security-1					
6	18CS3T6	Data structures through c++	3	1	--	3
7	18CS3L1	Data Structures through C++ Lab	--	--	3	1
8	18CS3L2	Java Programming Lab	--	--	3	1
9	18CS3L3	Unix and Shell Programming Lab	3	--	--	2
Total Credits			20			

L-Lecture; T-Tutorial; P-Practical; C-Credits;

B. Tech. Course Structure – Computer Science & Engineering

II Year II Semester

S. No	Course Code	Course	L	T	P	C
1	18CS4T1	Python Programming	3	1	--	3
2	18CS4T2	Advanced Data Structures	3	1	--	3
3	18CS4T3	Database Management Systems	3	1	--	3
4	18CS4T4	Formal Languages and Automata Theory	3	1	--	3
5	Elective II		3	1	--	3
	18CS4T5A	Computer Graphics				
	18CS4T5B	Data Analytics-2				
	18CS4T5C	Cloud Computing-2				
	18CS4T5D	Web and Mobile Development-2				
18CS4T5E	Cyber Security-2					
6	18CS4T6	Operating Systems	3	1	--	3
7	18CS4L1	Advanced Data Structures Lab	--	--	3	1
8	18CS4L2	Python Programming Lab	--	--	3	1
9	18CS4L3	Database Management Systems Lab	3	--	--	2
Total Credits			20			

B. Tech. Course Structure – Computer Science & Engineering

III Year I Semester

S. No	Course Code	Course	L	T	P	C
1	18CS5T1	Web Technologies	3	1	--	3
2	18CS5T2	Statistics with R Programming	3	1	--	3
3	18CS5T3	Software Engineering	3	1	--	3
4	18CS5T4	Computer Networks	3	1	--	3
Elective III						
5	18CS5T5A	Compiler Design	3	1	--	3
	18CS5T5B	Data Analytics-3				
	18CS5T5C	Cloud Computing-3				
	18CS5T5D	Web and Mobile Development-3				
	18CS5T5E	Cyber Security-3				
6	18CS5L1	Statistics with R Programming Lab	--	--	3	1
7	18CS5L2	Computer Networks Lab	--	--	3	1
8	18CS5L3	Web Technologies Lab	--	--	3	1
9	18CS5T6	Professional Ethics & Intellectual Property Rights	3	--	--	2
Total Credits			20			

L-Lecture; T-Tutorial; P-Practical; C-Credits;

B. Tech. Course Structure – Computer Science & Engineering

III Year II Semester

S. No	Course Code	Course	L	T	P	C
1	18CS6T1	Principles of Programming Languages	3	1	--	3
2	18CS6T2	Design and Analysis of Algorithms	3	1	--	3
3	18CS6T3	Data Warehousing and Data Mining	3	1	--	3
4	18CS6T4	Object Oriented Analysis and Design using UML	3	1	--	3
Elective III						
5	18CS6T5A	TCP/IP Protocols	3	1	--	3
	18CS6T5B	Data Analytics-4				
	18CS6T5C	Cloud Computing-4				
	18CS6T5D	Web and Mobile Development-4				
	18CS6T5E	Cyber Security-4				
6	18CS6L1	Object Oriented Analysis and Design using UML Lab	--	--	3	1
7	18CS6L2	Data Mining Lab	--	--	3	1
8	18CS6I1	Internship & Mini Project	--	--	--	2
Total Credits			20			

B. Tech. Course Structure – Computer Science & Engineering

IV Year I Semester

S. No	Course Code	Course	L	T	P	C
1	18CS7T1	Cryptography and Network Security	3	1	--	3
2	18CS7T2	Hadoop and Big Data	3	1	--	3
3	18CS7T3	Artificial Intelligence	3	1	--	3
4	18CS7T4	Adhoc & Sensor Networks	3	1	--	3
Elective IV						
5	18CS7T5A	Mobile Computing	3	1	--	3
	18CS7T5B	Cloud Computing				
	18CS7T5C	Forensic Computing				
6	18CS7L1	Hadoop & Big Data Lab	--	--	3	1
7	18CS7L2	J2ME & Android Programming Lab	--	--	3	1
8						
Total Credits			20			

B. Tech. Course Structure – Computer Science & Engineering

IV Year II Semester

S. No	Course Code	Course	L	T	P	C
1	18CS8T1	Distributed Systems	3	1	--	3
2	18CS8T2	Machine Learning	3	1	--	3
3	18CS8T3A	Natural Language Processing	3	1	--	3
	18CS8T3B	Natural Language Processing	3	1	--	3
	18CS8T3C	Deep learning	3	1	--	3
4	18CS8T4	Management science				
5		Project Work				8
Total Credits			20			



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II Year I Semester

S:No	Course Code	Course	L	T	P	C
1	18EC3T1	Signals & Systems	3	1	-	3
2	18EC3T2	Electronic Devices and Circuits	3	1	-	3
3	18EC3T3	Probability Theory and Random Process ✓	3	1	-	3
4	18EC3T4	Switching Theory and Logic Design	3	1	-	3
5	ELECTIVE-I		3	1		3
	18EC3T5A	Managerial Economics & Financial Analysis				
	18EC3T5B	Data Analysis-I ✓				
	18EC3T5C	Cloud computing-I ✓				
	18EC3T5D	Web and mobile development-I ✓				
	18EC3T5E	Cyber Security-I ✓				
6	18EC3T6	Network Theory ✓	3	1	-	3
7	18EC3L1	Electronics and Devices Circuits Lab	-	-	3	1
8	18EC3L2	Network Theory Lab ✓	-	-	3	1
Total credits			20			

II Year II Semester

S:No	Course Code	Course	L	T	P	C
1	18EC4T1	Electromagnetic Theory and Transmission Lines ✓	3	1	-	3
2	18EC4T2	Electronic Circuit Analysis	3	1	-	3
3	18EC4T3	Analog & Digital Communication ✓	3	1	-	3
4	18EC4T4	Pulse and Digital Circuits	3	1	-	3
5	ELECTIVE-II		3	1		3
	18EC4T5A	Management Science				
	18EC4T5B	Data Analysis-II ✓				
	18EC4T5C	Cloud computing-II ✓				
	18EC4T5D	Web and mobile development-II ✓				
18EC4T5E	Cyber Security-II ✓					
6	18EC4L1	Pulse and Digital Circuits Lab ✓	3	-	-	2
7	18EC4L2	Analog Communication Lab			3	1
8	18EC4L3	Electronic Circuits Analysis Lab	-	-	3	1
9	18EC4T6	Personality development ✓	-	-	3	1
Total credits			20			

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III Year I Semester

S:No	Course Code	Course	L	T	P	C
1	18EC5T1	Analog IC Applications ✓	3	--	--	3
2	18EC5T2	Control Systems ✗	3	--	--	3
3	18EC5T3	Antenna and wave propagation	3	1	--	3
4	18EC5T4	Digital Signal Processing	3	1	--	3
5	ELECTIVE-III		3	1		3
	18EC5T5	Biomedical Engineering				
	18EC5T5	Data Analysis-III				
	18EC5T5	Cloud computing-III ✓				
	18EC5T5	Web and mobile development-III ✓				
	18EC5T5	Cyber Security-III ✓				
6	18EC5L1	Digital Communication Lab	1	--	--	1
7	18EC5L2	Analog IC Applications Lab ✓	--	--	3	1
8	18EC5L3	Digital Signal Processing Lab ✓	--	--	3	1
9	18EC5T6	Professional Ethics and Human Values	--	--	3	1
Total credits			19			

III Year II Semester

S:No	Course Code	Course	L	T	P	C
1	18EC6T1	Microwave Engineering	3	1	--	3
2	18EC6T2	Microprocessors and Microcontrollers	3	1	--	3
3	18EC6T3	Digital IC Applications	3	1	--	3
4	18EC6T4	Application Oriented Internet of Things ✗	4	1		3
5	Open Elective		3	1		3
	18EC6T5A	OOPs Through JAVA				
	18EC6T5B	Computer Architecture and Organization ✓				
	18EC6T5C	Cryptography and Network Security				
	18EC6T5D	WEB AND MOBILE DEVELOPMENT ✓				
6	18EC6T6	IPR & Patents	3	--	--	3
7	18EC6L1	Microprocessors and Microcontrollers Lab	--	--	3	1
8	18EC6L2	Digital IC Application Lab	--	--	3	1
Total credits			20			

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**IV Year I Semester**

S:No	Course Code	Course	L	T	P	C
1	18EC7T1	VLSI Design	3	1	--	3
2	18EC7T2	Digital Image Processing	3	1	--	3
3	18EC7T3	Radar Engineering	3	1	--	3
4	18EC7T4	Optical Communication	3	1	--	3
5	Elective IV		3	1	--	3
	18EC7T5A	Robotics				
	18EC7T5B	Satellite Communication				
	18EC7T5C	Scripting Languages				
	18EC7T5D	Advanced Wireless Sensor Networks				
6	18EC7L1	VLSI Design Lab	--	--	3	1
7	18EC7L2	Microwave and Optical Communication Lab	--	--	3	1
8	18EC7T6	Summer Training Program	--	--	--	1
9	18EC7T7	Seminar	--	--	--	0
Total credits			18			

IV Year II Semester

S:No	Course Code	Course	L	T	P	C
1	18EC8T1	Cellular and Mobile Communication	3	1	--	3
2	18EC8T2	Electronics Measurements and Instrumentation	3	1	--	3
3	18EC8T3	Embedded Systems ✗	3	1	--	3
4	Elective V		3	1	--	4
	18EC8T4A	Speech and Audio Processing ✓				
	18EC8T4B	Television Engineering ✗				
	18EC8T4C	Artificial Neural Networks ✗				
	18EC8T4D	Computer Network ✗				
5	18EC8L1	**Project Work	--	--	10	8
Total credits			21			

L-Lecture; T-Tutorial; P- Practical; C-Credits

One Lecture/Tutorial instructional span is 50 minutes

Total Course Credits → 21+21+20+20+19+20+18+21=160



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B. Tech. Course Structure – Mechanical Engineering (AR-18)

I Semester

S. No	Course Code	Course	L	T	P	C
1	18BS1T1	English – I	3	--	--	2
2	18BS1T2	Mathematics – I	3	1	--	4
3	18BS1T3	Engineering Chemistry	4	--	--	3
4	18ME1T4	Engineering Mechanics	3	1	--	3
5	18CS1T5	Computer Programming	4	--	--	3
6	18BS1T6	Environmental Science	4	--	--	3
7	18HS1L1	English Language Communication Skills – I	--	--	3	1
8	18HS1L2	Engineering chemistry Lab	--	--	3	1
9	18CS1L3	Computer Programming Lab	--	--	3	1
Total Credits			21			

II Semester

S. No	Course Code	Course	L	T	P	C
1	18BS2T1	English - II	3	--	--	2
2	18BS2T2	Mathematics - III	4	1	--	4
3	18BS2T3	Mathematics - II	4	--	--	3
4	18BS2T4	Basic Electrical & Electronics Engineering	4	--	--	3
5	18BS2T5	Engineering Physics	4	--	--	3
6	18ME2T5	Engineering Drawing-I	2	--	3	3
7	18BS2L1	English Language Communication Skills - II	--	--	3	1
8	18HS2L2	Engineering Physics Lab	--	--	3	1
9	18ME2L3	Engineering & IT work shop	--	--	3	1
10	18BS2L4	Engineering Physics Virtual Labs	--	--	2	--
Total Credits			21			

III Semester

S. No	Course Code	Course	L	T	P	C
1	18ME3T1	Metallurgy & Materials Science	4	--	--	3
2	18ME3T2	Engineering Drawing-II	2	--	4	4
3	18ME3T3	Thermodynamics	3	1	--	3
4	18ME3T4	Mechanics of Solids	3	1	--	3
Elective- I						
5	18ME3T5A	Engineering Economics	3	--	--	3
	18CS3T5B	Data Analysis-I				
	18CS3T5C	Cloud Computing-I				
	18CS3T5D	Web and Mobile Development -I				
	18CS3T5E	Cyber Security-I				
	18CE3T5F	Industrial applications of CAD-I				
6	18ME3L1	Electrical & Electronics Engineering Lab	--	--	3	1
7	18ME3L2	Mechanics of Solids & Metallurgy Lab	--	--	3	1
8	18ME3L3	Auto CAD-LAB	--	--	3	1
Total Credits			19			

IV Semester

S. No	Course Code	Course	L	T	P	C
1	18ME4T1	Fluid Mechanics & Hydraulic Machines	3	1	--	3
2	18ME4T2	Theory of Machines-I	4	--	--	3
3	18ME4T3	Manufacturing Processes	3	1	--	3
4	18ME4T4	Applied Thermodynamics	3	1	--	3
5	Elective- II		3	1	--	3
	18ME4T5A	Machine Drawing				
	18CS4T5B	Data Analytics-II				
	18CS4T5C	Cloud Computing-II				
	18CS4T5D	Web and Mobile Development -II				
	18CS4T5E	Cyber Security-II				
	18CE4T5F	Industrial applications of CAD-II				
6	18ME4T6	Design of Machine Members -I	4	1	--	4
7	18ME4L1	Manufacturing Processes Lab	--	--	3	1
8	18ME4L2	Fluid Mechanics & Hydraulic Machinery Lab	--	--	3	1
Total Credits			21			

V Semester

S. No	Course Code	Course	L	T	P	C
1	18ME5T1	I.C Engines & Gas Turbines	4	--	--	3
2	18ME5T2	Theory of Machines-II	3	1	--	3
3	18ME5T3	Manufacturing Technology	4	--	--	3
4	18ME5T4	Design of Machine Members-II	4	1	--	4
5	Elective - III		3	1	--	3
	18ME5T5A	Industrial Engineering and Management				
	18CS5T5B	Data Analytics-III				
	18CS5T5C	Cloud Computing-III				
	18CS5T5D	Web and Mobile Development -III				
	18CS5T5E	Cyber Security-III				
	18CE5T5F	Industrial applications of CAD-III				
6	Mandatory course	IPR&P	2	--	--	0
7	18ME5L1	Theory of Machines Lab	--	--	3	1
8	18ME5L2	Manufacturing Technology Lab	--	--	3	1
9	18ME5L3	Thermal Engineering Lab	--	--	3	1
10	18ME5L4	Personality Development	--	--	3	1
Total Credits			20			

VI Semester

S. No	Course Code	Course	L	T	P	C
1	18ME6T1	Instrumentation & Control Systems	4	--	--	3
2	18ME6T2	Metrology	4	--	--	3
3	18ME6T3	Operations Research	3	1	--	3
4	18ME6T4	Refrigeration & Air-conditioning	4	--	--	3
5	Elective - IV		3	1	--	3
	18ME6T5A	Green Engineering Systems				
	18CS6T5B	Data Analytics-IV				
	18CS6T5C	Cloud Computing-IV				
	18CS6T5D	Web and Mobile Development -IV				
	18CS6T5E	Cyber Security-IV				
	18CE6T5F	Industrial applications of CAD-IV				
6	18ME6T6	Heat Transfer	4	--	--	3
7	Mandatory course	Constitution of India	2	--	--	0
8	18ME6L1	Heat Transfer Lab	--	--	3	1
9	18ME6L2	Metrology & Instrumentation Lab	--	--	3	1
10	18ME6L3	Industrial Internship	--	--	3	1
Total Credits			21			

VII Semester

S. No	Course Code	Course	L	T	P	C
1	18ME7T1	Finite Element Methods	3	1	--	3
2	18ME7T2	Micro Electro Mechanical Systems	4	--	--	3
3	18ME7T3	CAD/CAM	4	--	--	3
4	18ME7T4	Power Plant Engineering	4	--	--	3
5	18ME7T5	Production Planning and control	4	--	--	3
6	Elective - V		4	--	--	3
	18ME7T6A	Computational Fluid Dynamics				
	18ME7T6B	Condition Monitoring				
	18ME7T6C	Additive Manufacturing				
7	18ME7PI	Project-1	--	--	3	1
8	18ME7L1	Simulation Lab	--	--	3	1
Total Credits			20			

VIII Semester

S. No	Course Code	Course	L	T	P	C
1	18ME8T1	Unconventional Machining Processes	4	--	--	3
2	18ME8T2	Automobile Engineering	4	--	--	3
3	Elective -VI		4	--	--	3
	18ME8T3A	Advanced Materials				
	18ME8T3B	Design for Manufacture				
	18ME8T3C	Gas Dynamics & Jet Propulsion				
4	Elective VII		4	--	--	3
	18ME8T4A	Thermal Equipment Design				
	18ME8T4B	Non Destructive Evaluation				
	18ME8T4C	Quality and Reliability Engineering				
5	18ME8P2	Project-2	--	--	10	5
Total Credits			17			

L-Lecture; T-Tutorial; P-Practical; C-Credits;

One Lecture/Tutorial instructional span is 50 minutes

Total Course Credits → 21+21+19+21+20+21+20+17 = 160



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

The program structure of the curriculum

The regulations verses batches is shown in table 2.5. The Curriculum for the regulations AR18, AR20 & AR22 are given below Table.

Table: Regulation followed Vs. Batch

S.NO.	Regulation	Batch
1	AR18	2018-22
2	AR18	2019-23
3	AR20	2020-24
4	AR20	2021-25
5	AR22	2022-26

The Curriculum for the regulations AR18 is given below in Table

Table : Structure of the Curriculum Regulation – for AR18

I B. TECH - I Semester

S. No	Subject Code	Subject	L	T	P	C
1	18BS1T1	English - I	3	--	--	2
2	18BS1T2	Mathematics - I	4	1	--	4
3	18BS1T3	Engineering Chemistry	3	1	--	3
4	18ME1T4	Engineering Mechanics	3	1	--	3
5	18CS1T5	Computer Programming	3	1	--	3
6	18BS1T6	Environmental Studies	3	1	--	3
7	18BS1L1	English- Communication Skills Laboratory - I	--	--	3	1
8	18HS1L2	Engineering Chemistry Laboratory	--	--	3	1
9	18CS1L3	Computer Programming Laboratory	--	--	3	1
Total Credits					21	

I B. TECH - II Semester

S. No	Subject Code	Subject	L	T	P	C
1	18BS2T1	English - II	3	--	--	2
2	18BS2T2	Mathematics - III	4	1	--	4
3	18HS2T3	Mathematics - II (Mathematical Methods)	3	1	--	3
4	18EE2T4	Electrical Circuit Analysis - I	3	1	--	3
5	18BS2T5	Engineering Physics	3	1	--	3
6	18ME2T6	Engineering Drawing-I	2	--	4	3
7	18BS2L1	English - Communication Skills Laboratory - II	--	--	3	1
8	18HS2L2	Engineering Physics Laboratory	--	--	3	1
9	18ME2L3	Engineering Workshop & IT Workshop	--	--	3	1
10	18BS2L4	Applied / Engineering Physics - Virtual Labs- Assignments	--	--	2	0
Total Credits					21	

II B. TECH - I Semester

S. No	Subject Code	Subject	L	T	P	C
1	18EE3T1	Electrical Circuit Analysis - II	3	1	--	3
2	18EE3T2	Electrical Machines-I	3	1	--	3
3	18EE3T3	Electronic Devices & Circuits	3	1	--	3
4	18EE3T4	Electro Magnetic Fields	3	1	--	3
5	18EE3T5	Thermal and Hydro Prime Movers/ELECTIVE	3	1	--	3
		Cloud Computing-I	3	1	--	3
		Cyber security-I	3	1	--	3
		Data Analytics-I	3	1	--	3
		Web & Mobile App development-I	3	1	--	3
6	18EE3T6	Power Systems-I	3	--	--	3
7	18EE3L1	Thermal and Hydro Laboratory	--	--	3	1
8	18EE3L2	Electrical Circuits Laboratory	--	--	3	1
Total Credits						20

II B. TECH - II Semester

S. No	Subject Code	Subject	L	T	P	C
1	18EE4T1	Electrical Measurements	3	1	--	3
2	18EE4T2	Electrical Machines-II	3	1	--	3
3	18EE4T3	Switching Theory and Logic Design	3	1	--	3
4	18EE4T4	Control Systems	3	1	--	3
5	18EE4T5	Managerial Economics & Financial Analysis	3	1	--	3
		Cloud Computing-II	3	1	--	3
		Cyber security-II	3	1	--	3
		Data Analytics-II	3	1	--	3
		Web & Mobile App development-II	3	1	--	3
6	18EE4T6	Power Systems -II	--	--	3	1
7	18EE4L1	Electrical Machines -I Laboratory	--	--	3	1
8	18EE4L2	Electronic Devices & Circuits Laboratory	--	--	3	1
Total Credits						20

III B. TECH - I Semester

S. No	Subject Code	Subject	L	T	P	C
1	18EE5T1	Power Electronics	3	1	--	3
2	18EE5T2	Power System Analysis	3	1	--	3
3	18EE5T3	Signals and Systems	3	1	--	3
4	18EE5T4	Pulse & Digital Circuits	3	1	--	3
5	18EE5T5	Management Science	3	1	--	3
		Cloud Computing-III	3	1	--	3
		Cyber security-III	3	1	--	3
		Data Analytics-III	3	1	--	3
		Web & Mobile App development-III	3	1	--	3
6	18EE5T6	IPR & Patents	3	--	--	1
7	18EE5L1	Electrical Machines-II Laboratory	--	--	3	1
8	18EE5L2	Control Systems & Simulation Laboratory	--	--	3	1
9	18EE5L3	Electrical Measurements Laboratory	--	--	3	1
Total Credits						19

III B. TECH - II Semester

S. No	Subject Code	Subject	L	T	P	C
1	18EE6T1	Power Electronic Controllers & Drives	3	1	--	3
2	18EE6T2	Micro Processors and Micro controllers	3	1	--	3
3	18EE6T3	Switchgear and Protection	3	1	--	3
4	18EE6T4	Linear IC Applications	3	1	--	3
5	18EE6T5	Open Elective	3	1	--	3
6	18EE6T6	Data Structures	3	--	--	2
7	18EE6L1	Data Structures Laboratory	--	--	3	1
8	18EE6T7	Professional Ethics & Human Values	3	--	--	0
9	18EE6L2	Power Electronics & Simulation Laboratory	--	--	3	1
Total Credits						19

IV B. TECH - I Semester

S. No	Subject Code	Subject	L	T	P	C	
1	18EE7T1	Utilization of Electrical Energy	3	1	--	3	
2	18EE7T2	OOPS Through JAVA	3	1	--	3	
3	18EE7T3	Power System Operation & Control	3	--	--	3	
4	18EE7T4	Renewable Energy Sources	3	1	--	3	
5	18EE7T5	Elective - I (Instrumentation)	3	1	--	3	
6	18EE7T6	Elective - II (Cloud Computing)	--	--	3	1	
7	18EE7L1	Microprocessors & Microcontrollers Laboratory	--	--	3	1	
8	18EE7L2	Power Systems & Simulation Laboratory	Total Credits			20	

IV B. TECH - II Semester

S. No	Course Code	Course	L	T	P	C
1	18EE8T1	Digital Control Systems	3	1	--	3
2	18EE8T2	HVDC Transmission & FACTS	3	1	--	3
3	18EE8T3	Electrical Distribution Systems Planning & Automation	3	--	--	3
4	18EE8T4	Elective - III (Power Quality)	3	1	--	3
5	18EE8S1	Seminar	--	2	--	0
5	18EE8P1	Project	--	--	--	08
Total Credits						20

List of Professional Electives

S. No	Subject Code	Subject	L	T	P	C
Professional Elective - I						
1	18EE7T5A	Electrical Machine Modelling and Analysis	3	1	--	3
2	18EE7T5B	Advanced Control Systems	3	1	--	3
3	18EE7T5C	Programmable Logic Controllers & Applications	3	1	--	3
4	18EE7T5D	Instrumentation	3	1	--	3
Professional Elective - II						
1	18EE7T6A	Optimization Techniques	3	1	--	3
2	18EE7T6B	Robotics	3	1	--	3
3	18EE7T6C	Special Electrical Machines	3	1	--	3
Professional Elective - III						
1	18EE8T4A	High Voltage Engineering	3	1	--	3
2	18EE8T4B	Power Quality	3	1	--	3
3	18EE8T4C	Power System D regulations	3	1	--	3

List of open Electives

S. No	Subject Code	Subject	L	T	P	C
Open Elective - I						
1	18CS5T5A	Cloud Computing-IV	3	1	--	3
2	18CS5T5B	Cyber security-IV	3	1	--	3
3	18CS5T5C	Data Analytics-IV	3	1	--	3
4	18CS5T5D	Web & Mobile App development-IV	3	1	--	3
5	18CS5T5E	Unix and Shell Programming	3	1	--	3
6	18EC5T5F	VLSI DESIGN	3	1	--	3
7	18CS5T5G	Neural Networks & Fuzzy Logic	3	1	--	3
8	18EE5T5H	Energy Audit and Conservation & Management	3	1	--	3

Table: Curriculum Components for the regulation AR18 is given below.

Program Educational Objectives – CE

PEO-1	Pursue successful careers or higher studies in civil engineering with morals and ethics through their strong foundation in mathematics, science and engineering
PEO-2	Analyze and design appropriate solutions for socially relevant problems by using current engineering techniques and tools
PEO-3	Engage in professional development through effective communication, team work and lifelong learning

B. Tech. Course Structure – Civil Engineering

I Semester

S. No	Course Code	Course	L	T	P	C
1	18BS1T1	English – I	3	-	--	2
2	18BS1T2	Mathematics - I	4	1	--	4
3	18BS1T3	Engineering Chemistry	4	-	--	3
4	18BS1T4	Engineering Mechanics	4	-	--	3
5	18BS1T5	Computer Programming	4	-	--	3
6	18BS1T6	Environmental Studies	4	-	--	3
7	18BS1L1	English- Communication Skills Laboratory - I	-	--	3	1
8	18BS1L2	Engineering Chemistry Laboratory	-	--	3	1
9	18BS1L3	Computer Programming Laboratory	-	--	3	1
Total Credits			21			

II Semester

s.NO	Course Code	Course	L	T	P	C
1	18BS2T1	English – II	3	-	--	2
2	18BS2T2	Mathematics - III	4	1	--	4
3	18HS2T3	Mathematics - II	4	-	--	3
4	18CE2T4	Elements of Mechanical Engineering	4	--	--	3
5	18BS2T5	Engineering Physics	4	-	-	3
6	18ME2T6	Engineering Drawing	4	-	4	3
7	18BS2L1	English - Communication Skills Laboratory - II	-	--	3	1
8	18HS2L2	Engineering Physics Laboratory	-	--	3	1
9	18ME2L3	Engineering Workshop & IT Workshop	-	--	3	1
10	18BS2L4	Engineering Physics – Virtual Labs	-	--	2	--
Total Credits			21			

III Semester

S. No	Course Code	Course	L	T	P	C
1	18CE3T1	Probability & Statistics	3	1	--	3
2	18CE3T2	Basic Electrical and Electronics Engineering	3	1	--	3
3	18CE3T3	Strength of Materials - I	3	1	--	3
4	18CE3T4	Building Materials and Construction	3	1	--	3
5	18CE3T5	Surveying	3	1	--	3
6	18CE3T6	Fluid Mechanics	3	1	--	3
7	18CE3L1	Surveying Field work - I	--	--	3	1
8	18CE3L2	Strength of Materials Laboratory	--	--	3	1
9	18CE3T7	Managerial Economics and Real Estate Fundamentals	2	--	--	1
Total Credits			21			

IV Semester

S. No	Course Code	Course	L	T	P	C
1	18CE4T1	Building Planning and Drawing	3	1	--	3
2	18CE4T2	Strength of Materials - II	3	1	--	3
3	18CE4T3	Hydraulics and Hydraulic Machinery	3	1	--	3
4	18CE4T4	Concrete Technology	3	1	--	3
5	18CE4T5	Structural Analysis - I	3	1	--	3
6	18CE4T6	Transportation Engineering - I	3	1	--	3
7	18CE4L1	FM & HHM Laboratory	--	--	3	1
8	18CE4L2	Surveying Field work - II	--	--	3	1
9	18CE4T7	Professional Ethics and Human Values	1	--	--	1
Total Credits			21			

V Semester

S. No	Course Code	Course	L	T	P	C
1	18CE5T1	Management Science & Financial Analysis	3	1	--	3
2	18CE5T2	Engineering Geology	3	1	--	3
3	18CE5T3	Structural Analysis - II	3	1	--	3
4	18CE5T4	Design and Drawing of Reinforced Concrete Structures	3	1	--	3
5	18CE5T5	Transportation Engineering - II	3	1	--	3
6	18CE5L1	Concrete Technology Laboratory	--	--	3	1
7	18CE5L2	Engineering Geology Laboratory	--	--	3	1
8	18CE5L3	Transportation Engineering Laboratory	--	--	3	1
9	18CE5T6	Personality Development	2	--	--	1
Total Credits			19			

VI Semester

S. No	Course Code	Course	L	T	P	C
1	18CE6T1	Design and Drawing of Steel Structures	3	1	--	3
2	18CE6T2	Geotechnical Engineering - I	3	1	--	3
3	18CE6T3	Environmental Engineering - I	3	1	--	3
4	18CE6T4	Water Resources Engineering - I	3	1	--	3
5	18CE6T5	Open Elective	3	1	--	3
6	18CE6L1	Geotechnical Engineering Laboratory	--	--	3	1
7	18CE6L2	Environmental Engineering Laboratory	--	--	3	1
8	18CE6L3	Computer Aided Engineering Laboratory	--	--	3	1
9	18CE6I1	Internship & Summer Training	--	--	--	1
Total Credits			19			

VII Semester

S. No	Course Code	Course	L	T	P	C
1	18CE7T1	Environmental Engineering - II	3	1	--	3
2	18CE7T2	Water Resources Engineering - II	3	1	--	3
3	18CE7T3	Geotechnical Engineering - II	3	1	--	3
4	18CE7T4	Remote Sensing and GIS Applications	3	1	--	3
5	18CE7T5	Elective - I	3	1	--	3
6	18CE7T6	Elective - II	3	1	--	3
7	18CE7L1	CAD and GIS Laboratory	--	--	3	1
8	18CE7L2	Irrigation Design and Drawing	--	--	3	1
9	18CE7T7	IPR & Patents	2	--	--	--
Total Credits			20			

VIII Semester

S. No	Course Code	Course	L	T	P	C
1	18CE8T1	Estimation Specification and Contracts	3	1	--	3
2	18CE8T2	Construction Technology and Management	3	1	--	3
3	18CE8T3	Pre-Stressed Concrete	3	1	--	3
4	18CE8T4	Elective - III	3	1	--	3
5	18CE8P1	Project Work	--	--	12	6
Total Credits			18			

Open Elective		Elective - I	
18CE6T5A	Electronic Instrumentation & Sensor Technology	18CE7T4A	Finite Element Methods
18CE6T5B	Database Management System	18CE7T4B	Ground Improvement Techniques
18CE6T5C	Alternative Engineering Source	18CE7T4C	Tall Buildings
18CE6T5D	Disaster Management	18CE7T4D	Urban Hydrology
18CE6T5E	Fundamentals of Liquefied Natural Gas	18CE7T4E	Traffic Engineering
18CE6T5F	Green Buildings		

Elective - II		Elective - III	
18CE7T5A	Advanced Structural Analysis	18CE8T3A	Bridge Engineering
18CE7T5B	Advanced Foundation Engineering	18CE8T3B	Soil Dynamics and Foundations
18CE7T5C	Environmental Impact Assessment and Management	18CE8T3C	Solid & Hazardous Waste Management
18CE7T5D	Ground Water Development	18CE8T3D	Water Resource Systems Planning
18CE7T5E	Pavement Analysis and Design	18CE8T3E	Urban Transportation Planning Engineering

L-Lecture; T-Tutorial; P-Practical; C-Credits;

One Lecture/Tutorial instructional span is 50 minutes

Total Course Credits → 21+21+21+21+19+19+20+18 = 160

AR-18-MCA

III Semester

SNO	Subject code	Subject Title	T	P
1	18MC3T1	THEORY OF COMPUTATIONS	4	--
2	18MC3T2	COMPUTER NETWORKS	4	--
3	18MC3T3	SOFTWARE ENGINEERING	4	--
4	18MC3T4	ADVANCED JAVA & WEB TECHNOLOGIES	4	--
5	18MC3T5	DESIGN AND ANALYSIS OF ALGORITHMS	4	--
6	18MC3L1	ADVANCED JAVA & WEB TECHNOLOGIES LAB	--	3
7	18MC3L2	SHELL SCRIPTING LAB	--	3
8	18MC3L3	COMPUTER NETWORKS LAB	--	3

IV Semester

SNO	Subject code	Subject Title	T	P
1	18MC4T1	OBJECT ORIENTED ANALYSIS AND DESIGN	4	--
2	18MC4T2	COMPILER DESIGN	4	--
3	18MC4T3	DATA WAREHOUSING AND MINING	4	--
4	----	ELECTIVE-1	4	--
5	----	ELECTIVE-2	4	--
6	18MC4L1	CLOUD COMPUTING LAB	--	3
7	18MC4L2	DATA WAREHOUSING AND MINING LAB	--	3
8	18MC4L3	OBJECT ORIENTED ANALYSIS AND DESIGN LAB	--	3

V Semester

SNO	Subject code	Subject Title	T	P
1	18MC5T1	BIG DATA ANALYTICS	4	--
2	18MC5T2	CYBER SECURITY	4	--
3	18MC5T3	PYTHON PROGRAMMING	4	--
4	----	ELECTIVE-3	4	--
5	----	ELECTIVE-4	4	--
6	18MC5L1	BIG DATA ANALYTICS LAB	--	3
7	18MC5L2	SOFTWARE TESTING LAB	--	3
8	18MC5L3	PYTHON PROGRAMMING LAB	--	3

VI Semester

SNO	Subject code	SUBJECT
1	18MC6S1	SEMINAR ON PROJECT
2	18MC6P1	DISSERTATION/ THESIS

Elective: 01

sno	Subject code	Subject Title
1	18MC4T4A	MOBILE COMPUTING
2	18MC4T4B	HUMAN COMPUTER INTERACTION
3	18MC4T4C	CLOUD COMPUTING

Elective: 02

sno	Subject code	Subject Title
1	18MC4T5A	SOFTWARE PROJECT MANAGEMENT
2	18MC4T5B	ARTIFICIAL INTELLIGENCE
3	18MC4T5C	EMBEDDED SYSTEMS

Elective: 03

sno	Subject code	Subject Title
1	18MC5T4A	SOFTWARE TESTING METHODOLOGIES
2	18MC5T4B	COMPUTER FORENSICS
3	18MC5T4C	E-COMMERCE

Elective: 04

sno	Subject code	Subject Title
1	18MC5T5A	INTERNET OF THINGS
2	18MC5T5B	MULTIMEDIA APPLICATION DEVELOPMENT
3	18MC5T5C	NETWORK PROGRAMMING

M. Tech. Course Structure - Structural Engineering

I Semester

S. No	Course Code	Course	L	T	P	C
1	18SE1T1	Advanced Mathematics	4	--	--	3
2	18SE1T2	Theory of Elasticity	4	--	--	3
3	18SE1T3	Matrix Analysis of Structures	4	--	--	3
4	18SE1T4	Structural Dynamics	4	--	--	3
5	18SE1T5A 18SE1T5B 18SE1T5C	Elective - I i. Experimental Stress Analysis ii. Sub Structure Design iii. Structural Optimization	4	--	--	3
6	18SE1T6A 18SE1T6B 18SE1T6C	Elective - II i. Repair and Rehabilitation of Structures ii. Analysis and Design of Tall Buildings iii. Plastic Analysis and Design	4	--	--	3
7	18SE1L1	Advanced Structural Engineering Laboratory	--	--	4	2
8	18SE1G1	Green Buildings (GRIHA - Criterion 1-31) ✓	1	--	--	--
Total Credits						20

II Semester

S. No	Course Code	Course	L	T	P	C
1	18SE2T1	Finite Element Methods	4	--	--	3
2	18SE2T2	Earthquake Resistant Design	4	--	--	3
3	18SE2T3	Stability of Structures	4	--	--	3
4	18SE2T4	Theory of Plates and Shells	4	--	--	3
5	18SE2T5A 18SE2T5B 18SE2T5C	Elective - III i. Pre-Stressed Concrete ii. Mechanics of Composite Materials iii. Fracture Mechanics	4	--	--	3
6	18SE2T6A 18SE2T6B 18SE2T6C	Elective - IV i. Industrial Structures ii. Bridge Engineering iii. Earth Retaining Structures	4	--	--	3
7	18SE2L1	CAD & GIS Laboratory ✓	--	--	4	2
Total Credits						20

III Semester

S. No	Course Code	Course	L	T	P	C
1	18SE3S1	Seminar	--	--	--	3
2	18SE3J1	Thesis-Part-I	--	--	--	7
3	18SE3R1	Research Methodologies ✓	1	--	--	--
Total Credits						10

IV Semester

S. No	Course Code	Course	L	T	P	C
1	18SE4P1	Project Work & Thesis Part-II	--	--	--	10
Total Credits						10

L-Lecture; T-Tutorial; P-Practical; C-Credits

Total Course Credits → 20+20+10+10 = 60

[Signature]
(BOS CHAIRMAN)

[Signature]
16818
[K.V.S.G. MURALI KRISHNA
UNIVERSITY NOMINEE]
[Dr. I.V. MURALI KRISHNA
SUBJECT EXPERT]
[G. M. SUMANTH
INDUSTRY EXPERT]

AR-18-CSE-M.Tech



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Paritala, Kanchikacherla, Krishna Dist, Andhra Pradesh- 521180.
www.amritasai.edu.in, Phone: 0866 2428399.



I Year I Semester

S. No	Course Code	Course	L	T	P
1	18CP1T1	Data Structures and Algorithm Analysis ✓	4	1	--
2	18CP1T2	Mathematical Foundations for Computer Science	4	1	--
3	18CP1T3	Computer Organization and Architecture ✓	4	1	--
4	18CP1T4	Database Management Systems ✓	4	1	--
5	18CP1T5	Advanced Operating Systems	4	1	--
6	18CP1T6	Data Warehousing and Data Mining ✓	4	1	--
7	18CP1L1	CSE Lab-1 ✓	--	--	4

I Year II Semester

S. No	Course Code	Course	L	T	P
1	18CP2T1	Cyber Security ✓	4	1	--
2	18CP2T2	Computer Networks ✓	4	1	--
3	18CP2T3	Big Data Analytics ✓	4	1	--
4	18CP2T4	Advanced Unix Programming ✓	4	1	--
5	18CP2T5	Elective - I i. Software Engineering ✓ ii. Artificial Intelligence ✓ iii. Compiler Design ✓ iv. Machine Learning ✓	4	1	--
6	18CP2T6	Elective - II i. Image Processing ✓ ii. Parallel Algorithms ✓ iii. Cloud Computing ✓ iv. Mobile Computing ✓	4	1	--
7	18CP2L1	CSE Lab-2	--	--	4

II Year I Semester

S. No	Course Code	Course	L	T	P
1	18CP3S1	Seminar	--	--	--
2	18CP3J1	Journal Publication	--	--	--

II Year II Semester

S. No	Course Code	Course	L	T	P
1	18CP4P1	Project Work	--	--	--

L-Lecture; T-Tutorial; P-Practical; C-Credits

Total Course Credits → 20+20+10+10 = 60

MBA - Hospitality Mgmt.

Ist YEAR

I-SEMESTER

S.No	Course Code	course	Marks	L	T	P	C
1	22MH1T1	Basic biological sciences	100	3	0	0	3
2	22MH1T2	Organizational behaviour	100	3	0	0	3
3	22MH1T3	Human resource management	100	3	0	0	3
4	22MH1T4	Financial management	100	3	1	0	4
5	22MH1T5	Purchasing management and inventory control	100	3	0	0	3
6	22MH1T6	Hospital and patient relation management	100	3	0	0	3
7	22MH1T7	Medical insurance	100	3	0	0	3
8	22MH1T8	Communication skills and business correspondence	100	3	0	0	3
		TOTAL	800				25

II SEMESTER

S.No	Course Code	Courses	Marks	L	T	P	C
1	22MH2T1	Marketing Management	100	3	0	0	3
2	22MH2T2	Strategic Management for Hospitals	100	3	1	0	4
3	22MH2T3	Biostatistics and Operation Research	100	3	0	0	3
4	22MH2T4	Hospital Architecture Planning Design & Maintenance	100	3	0	0	3
5	22MH2T5	Clinical Services	100	3	0	0	3
6	22MH2T6	Hospital Support Services	100	3	0	0	3
7	22MH2T7	Epidemiology and Public Health Systems	100	3	0	0	3
8	22MH2T8	Research Methodology	100	3	0	0	3
9	22MH2T9	Practical-Hospital Internship 30 days of Field visit and Report*	50	0	0	3	1
		TOTAL	850				26

I SEMESTE

IInd YEAR

S.No	Course Code	Courses	Marks	L	T	P	C
1	22MH3T1	Hospital Information Systems	100	3	0	0	3
2	22MH3T2	Health care Law and Ethics	100	3	0	0	3
3	22MH3T3	NETWORKING	100	3	0	0	3
4	22MH3T4	Quality Management & Hospital Accreditation Systems	100	3	0	0	3
5	22MH3T5	Management of super speciality systems.	100	3	0	0	3
6	22MH3T6	Housekeeping management and dietary system	100	3	0	0	3
7	22MH3T7	Medical Records Management	100	3	0	0	3
8	22MH3T8	Hospital Front Office Management	100	3	0	0	3
9	22MH3T9	Summer Project Work	100	0	0	4	2
10	22MH3T10	Seminar (Emerging Trends in Management -Case Study Analysis and Seminar)	50	0	0	2	1
Total			950				27

IV SEMESTER

S.No	Course Code	Courses	Marks	L	T	P	C
1	22MH4T1	Project Work	100	0	0	24	12
TOTAL			100				12
Total Marks / Credits			2700				90

AR-20 CSE M.Tech



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PARITALA(P), KANCHIKACHERLA(M), KRISHNA (D)-521 180(A. P.)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

I-SEMESTER

S.No	Course Code	Courses	Category	L	T	P	C
1	20CP1T1	Program Core-1 Mathematical Foundations of Computer Science	PC	3	0	0	3
2	20CP1T2	Program Core-2 Advanced Data Structures & Algorithms	PC	3	0	0	3
Program Elective-1							
3	20CP1T3A	1. Big Data Analytics	PE	3	0	0	3
	20CP1T3B	2. Digital Image Processing					
	20CP13C	3. Advanced Operating Systems					
Program Elective-2							
4	20CP1T4A	1. Advanced Computer Networks ✓	PE	3	0	0	3
	20CP1T4B	2. Internet of Things ✓					
	20CP1T4C	3. Object Oriented Software Engineering ✓					
5	20CP1C1	Research Methodology and IPR ✓	CC			0	2
6	20CP1L1	Laboratory-1 Advanced Data Structures & Algorithms Lab	LB	0	0	4	2
7	20CP1L2	Laboratory-2 Advanced Computing Lab	LB	0	0	4	2
8	20CP1A1	Audit Course-1* ✓	AC	2	0	0	0
Total Credits							18

*Student has to choose any one audit course listed below.

II SEMESTER

S.No	Course Code	Courses	Cat	L	T	P	C
1	20CP2T1	(Program Core-3) Machine learning	PC	3	0	0	3
2	20CP2T2	(Program Core-4) MEAN Stack Technologies	PC	3	0	0	3
Program Elective-3							
3	20CP2T3A	Advanced Databases and Mining ✓	PE	3	0	0	3
	20CP2T3B	Ad Hoc & Sensor Networks ✓					
	20CP2T3C	Soft Computing ✓					
Program Elective-4							
4	20CP2T4A	1. Cloud Computing	PE	3	0	0	3
	20CP2T4B	2. Principles of computer security ✓					
	20CP2T4C	3. High Performance Computing ✓					
5	20CP2L1	Laboratory-3 Machine Learning with python lab ✓	LB	0	0	4	2
6	20CP2L2	Laboratory-4 MEAN Stack Technologies Lab ✓	LB	0	0	4	2
7		Mini Project with Seminar ✓	MP	2	0	0	2
8	20CP2A1	Audit Course-2* ✓	AC	2	0	0	0
Total Credits							18



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*Student has to choose any one audit course listed below.

Audit Course 1 & 2:

- | | |
|---------------------------------------|--|
| 1. English for Research Paper Writing | 5. Constitution of India |
| 2. Disaster Management | 6. Pedagogy Studies |
| 3. Sanskrit for Technical Knowledge | 7. Stress Management by Yoga |
| 4. Value Education III- | 8. Personality Development through Life Enlightenment Skills |

SEMESTER

S.No	Course Code	Courses	Category	L	T	P	C
1	20CP3T1A	Program Elective-5 1. Deep Learning ✓	PE	3	0	0	3
	20CP3T1B	2. Social Network Analysis ✓					
	20CP3T1C	3. MOOCs-1 (NPTEL/SWAYAM) 12					
	20CP3T1D	4. Week Program related to the programme which is not listed in the course structure ✓					
2	20CP3T2A	Open Elective 1. MOOCs-2 (NPTEL/SWAYAM)-Any 12 Week Course on Engineering/ Management/ Mathematics offered by other than parent department	OE	3	0	0	3
	20CP3T2B	2. Course offered by other departments in the college ✓					
3	20CP3P1	Dissertation-I/ Industrial Project # ✓	PJ	0	0	20	10
Total Credits							16

#Students going for Industrial Project/Thesis will complete these courses through MOOCs

M. Tech. (CSE) IV SEMESTER							
S.No	Course Code	Courses	Category	L	T	P	C
1	20CP4P1	Dissertation-II	PJ	0	0	32	16
Total Credits							16

Open Electives offered by the Department of CSE

1. Python Programming
2. Principles of Cyber Security
3. Internet of Things
4. Machine Learning
5. Digital forensics
6. Next Generation Databases