GUDLAVALLERU ENGINEERING COLLEGE

(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada) Seshadri Rao Knowledge Village, GUDLAVALLERU-521 356, Krishna District, A.P., India (Approved by AICTE, New Delhi and Permitted by A.P. State Government)

Accredited by NAAC

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MISTE, MIETE, MIE, MCSI, MISRS, MIAPR, MCRSI

Principal

1.1.3: List of courses having focus on employability/entrepreneurship/ skill development offered by the institution during the academic year 2020 - 2021.

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
1.	Applied Mechanics	CE3501	B. Tech-CE	Employability
2.	Linear Algebra and Calculus	MA3501	B. Tech-CE	Employability
3.	Integral Transforms and Vector Calculus	MA3505	B. Tech-CE	Employability
4.	Engineering Chemistry	CH3501	B. Tech-CE	Employability
5.	Engineering Chemistry Lab	CH3502	B. Tech-CE	Skill Development
6.	Circuit Theory - I	EE3504	B. Tech-EEE	Employability
7.	Linear Algebra and Calculus	MA3501	B. Tech-EEE	Employability
8.	Integral Transforms and Vector Calculus	MA3505	B. Tech-EEE	Employability
9.	Solid State Physics	PH3504	B. Tech-EEE	Employability
10.	Solid State Physics Lab	PH3505	B. Tech-EEE	Skill Development
11.	Applied Chemistry	CH3503	B. Tech-ME	Employability
12.	Linear Algebra and Calculus	MA3501	B. Tech-ME	Employability
13.	Integral Transforms and Vector Calculus	MA3505	B. Tech-ME	Employability
14.	Physics for Engineers	PH3502	B. Tech-ME	Employability
15.	Chemistry for Engineers	CH3504	B. Tech-ME	Employability
16.	Engineering Mechanics Lab and Fuel & Lubricants Lab	ME3506	B. Tech-ME	Skill Development
17.	Problem Solving Using C	CT3501	B. Tech-ECE	Employability
18.	Electronic Workshop	EC3503	B. Tech-ECE	Employability
19.	Linear Algebra and Calculus	MA3501	B. Tech-ECE	Employability
20.	Integral Transforms and Vector Calculus	MA3505	B. Tech-ECE	Employability
21.	Solid State Physics	PH3504	B. Tech-ECE	Employability

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S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
22.	Solid State Physics Lab	PH3506	B. Tech-ECE	Skill Development
23.	Applied Chemistry	CH3503	B. Tech-ECE	Employability
24.	Programming for Problem Solving	CT3502	B. Tech-CSE	Employability
25.	C Programming Lab	CT3503	B. Tech-CSE	Skill Development
26.	Python Programming	CT3504	B. Tech-CSE	Employability
27.	Data Structures	CT3505	B. Tech-CSE	Employability
28.	Python Programming Lab	CT3506	B. Tech-CSE	Skill Development
29.	Data Structures Lab	CT3507	B. Tech-CSE	Skill Development
30.	Linear Algebra and Calculus	MA3501	B. Tech-IT	Employability
31.	Integral Transforms and Vector Calculus	MA3505	B. Tech-IT	Employability
32.	Applied Physics	PH3509	B. Tech-IT	Employability
33.	Applied Physics Lab	PH3510	B. Tech-IT	Skill Development
34.	Applied Chemistry	CH3506	B. Tech-IT	Employability
35.	Programming for Problem Solving	CT3502	B. Tech-IT	Employability
36.	Applied Chemistry Lab	CH3507	B. Tech-IT	Skill Development
37.	C Programming Lab	CT3503	B. Tech-IT	Skill Development
38.	Data Structures Lab	CT3507	B. Tech-IT	Skill Development
39.	Mechanics of Solids	CE2504	B. Tech-CE	Employability
40.	Mechanics of Fluids	CE2505	B. Tech-CE	Employability
41.	Mechanics of Solids Lab	CE2509	B. Tech-CE	Skill Development
42.	Structural Analysis	CE2511	B. Tech-CE	Employability
43.	Engineering Geology and Geomatics	CE2514	B. Tech-CE	Employability
44.	Building Materials and Construction	CE2506	B. Tech-CE	Employability
45.	Surveying	CE2507	B. Tech-CE	Employability
46.	Building Planning and Drawing	CE2508	B. Tech-CE	Skill Development
47.	Survey Field Work	CE2510	B. Tech-CE	Skill Development
48.	Hydraulics and Hydraulic Machines	CE2512	B. Tech-CE	Employability
49.	Concrete Technology	CE2513	B. Tech-CE	Employability
50.	Fluid Mechanics and Hydraulic Machines Lab	CE2517	B. Tech-CE	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
51.	Concrete Technology Lab	CE2518	B. Tech-CE	Employability
52.	Interior Design	CE2519	B. Tech-CE	Employability
53.	Building Bye Laws and Scientific Planning	CE2520	B. Tech-CE	Employability
54.	Data Structures	CT2505	B. Tech-CE	Employability
55.	Theory of Structures	CE2522	B. Tech-CE	Employability
56.	Geotechnical Engineering	CE2523	B. Tech-CE	Employability
57.	Hydrology and Water Resources Engineering	CE2524	B. Tech-CE	Employability
58.	Water and Waste Water Engineering	CE2525	B. Tech-CE	Employability
59.	Water and Waste Water Engineering Lab	CE2533	B. Tech-CE	Skill Development
60.	Infrastructure Development	CE2534	B. Tech-CE	Employability
61.	Foundation Engineering	CE2536	B. Tech-CE	Employability
62.	Highway Engineering	CE2537	B. Tech-CE	Employability
63.	Highway Engineering Lab	CE2546	B. Tech-CE	Skill Development
64.	Smart Buildings and Automation	CE2548	B. Tech-CE	Employability
65.	Building Information Modelling	CE2549	B. Tech-CE	Employability
66.	Project Management and Finance	CE2551	B. Tech-CE	Entrepreneurship
67.	Project Scheduling and Contracts	CE2566	B. Tech-CE	Employability
68.	Estimation, Costing and Valuation	CE2552	B. Tech-CE	Employability
69.	Design of Steel Structures	CE2553	B. Tech-CE	Employability
70.	Computer Applications in Civil Engineering Lab	CE2564	B. Tech-CE	Skill Development
71.	Internship / Industrial Training / Practical Training	CE2565	B. Tech-CE	Skill Development
72.	Geo informatics	CE2530	B. Tech-CE	Employability
73.	Environmental Sanitation	CE2531	B. Tech-CE	Employability
74.	Power Systems Engineering	EE2524	B. Tech-CE	Employability
75.	Elements of Mechanical Transmission	ME2532	B. Tech-CE	Employability
76.	Material Handling Equipment	ME2533	B. Tech-CE	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
77.	Introduction to MEMS	EC2544	B. Tech-CE	Employability
78.	Data Science	CS2508	B. Tech-CE	Employability
79.	Virtual and Augmented Reality	CT2524	B. Tech-CE	Employability
80.	Quality, Reliability and Operations Research	MA2517	B. Tech-CE	Employability
81.	Hydrology	CE2543	B. Tech-CE	Employability
82.	Planning for Sustainable Development	CE2544	B. Tech-CE	Employability
83.	Electrical and Hybrid Vehicles	EE2531	B. Tech-CE	Employability
84.	Material Science	ME2541	B. Tech-CE	Employability
85.	Bio-Medical Engineering	EC2507	B. Tech-CE	Employability
86.	Node and Angular JS	CS2512	B. Tech-CE	Employability
87.	Cyber Security	CS2513	B. Tech-CE	Employability
88.	Software Project Management	CT2531	B. Tech-CE	Employability
89.	Elements of Stochastic Processes	MA2518	B. Tech-CE	Employability
90.	Academic Communication	EG2505	B. Tech-CE	Employability
91.	Repair and Retrofitting Techniques	CE2563	B. Tech-CE	Employability
92.	Non Destructive Evaluation	ME2554	B. Tech-CE	Employability
93.	Cyber Physical Systems	EC2563	B. Tech-CE	Employability
94.	Digital Forensics	CS2521	B. Tech-CE	Employability
95.	Business Intelligence & Decision Support Systems	CS2522	B. Tech-CE	Employability
96.	Adhoc and Sensor Networks	IT2521	B. Tech-CE	Employability
97.	Information Retrieval Systems	CT2537	B. Tech-CE	Employability
98.	Fuzzy Logic	MA2514	B. Tech-CE	Employability
99.	Advanced Strength of Materials	CE2526	B. Tech-CE	Employability
100.	GIS and GPS	CE2527	B. Tech-CE	Employability
101.	Green Buildings	CE2528	B. Tech-CE	Employability
102.	Construction Management	CE2529	B. Tech-CE	Employability
103.	Ground Improvement Techniques	CE2542	B. Tech-CE	Employability
104.	Advanced Foundation Engineering	CE2555	B. Tech-CE	Employability
105.	Traffic Engineering	CE2556	B. Tech-CE	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
106.	Advanced Design of RC Structures	CE2558	B. Tech-CE	Employability
107.	Hydraulic Structures	CE2559	B. Tech-CE	Employability
108.	Geo synthetics	CE2560	B. Tech-CE	Employability
109.	Disaster Preparedness and Planning	CE2561	B. Tech-CE	Employability
110.	Logistics Infrastructure Engineering	CE2569	B. Tech-CE	Employability
111.	Pre-Engineered Buildings	CE2572	B. Tech-CE	Employability
112.	Urban Transportation Planning	CE2573	B. Tech-CE	Employability
113.	Soil Dynamics and Machine Foundations	CE2574	B. Tech-CE	Employability
114.	Numerical Methods with Computer Applications	MA2507	B. Tech-EEE	Employability
115.	Probability and Fuzzy Mathematics	MA2511	B. Tech-EEE	Employability
116.	Engineering Optimization	MA2512	B. Tech-EEE	Employability
117.	DC Machines and Transformers	EE2508	B. Tech-EEE	Employability
118.	Electric Circuit Analysis	EE2509	B. Tech-EEE	Employability
119.	Analog Electronics	EC2503	B. Tech-EEE	Employability
120.	Mechanical Engineering Lab	ME2504	B. Tech-EEE	Skill Development
121.	Electric Circuits Lab	EE2511	B. Tech-EEE	Skill Development
122.	Analog Electronics Lab	EC2504	B. Tech-EEE	Skill Development
123.	Digital Circuit Design	EC2505	B. Tech-EEE	Employability
124.	Engineering Economics and Project Management	BA2501	B. Tech-EEE	Entrepreneurship
125.	Induction and Synchronous Machines	EE2513	B. Tech-EEE	Employability
126.	Digital Circuit Design Lab	EC2506	B. Tech-EEE	Skill Development
127.	Biomedical Engineering	EC2507	B. Tech-EEE	Employability
128.	Computer Organisation and Architecture	CT2512	B. Tech-EEE	Employability
129.	Introduction to Quantum Mechanics for Engineers	EE2518	B. Tech-EEE	Employability
130.	Optional Elective-II MOOCS	EE2519	B. Tech-EEE	Employability
131.	Control System Design	EE2528	B. Tech-EEE	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
132.	Probability and Fuzzy Mathematics	MA2511	B. Tech-EEE	Employability
133.	Microprocessors, Microcontrollers and Its Applications	EC2510	B. Tech-EEE	Employability
134.	Microprocessors, Microcontrollers and Its Applications Lab	EC2515	B. Tech-EEE	Skill Development
135.	Electrical Measurements & Instrumentation	EE2520	B. Tech-EEE	Employability
136.	Signals and Systems	EC2508	B. Tech-EEE	Employability
137.	Power Systems - II	EE2521	B. Tech-EEE	Employability
138.	Control Systems Lab	EE2525	B. Tech-EEE	Skill Development
139.	Electrical Machines- II Lab	EE2526	B. Tech-EEE	Skill Development
140.	Mini Project	EE2527	B. Tech-EEE	Skill Development
141.	Power Electronics	EE2530	B. Tech-EEE	Employability
142.	Electrical Systems Simulation Lab	EE2533	B. Tech-EEE	Skill Development
143.	Electrical Measurements & Instrumentation Lab	EE2534	B. Tech-EEE	Skill Development
144.	Power System Analysis	EE2537	B. Tech-EEE	Employability
145.	Power Electronics Lab	EE2544	B. Tech-EEE	Skill Development
146.	Power Systems Lab	EE2545	B. Tech-EEE	Skill Development
147.	Data Base Management Systems	CT2513	B. Tech-EEE	Employability
148.	Nano Electronics	EC2516	B. Tech-EEE	Employability
149.	Solar and Wind Energy Systems	EE2535	B. Tech-EEE	Employability
150.	Optional Elective- IV MOOCS	EE2529	B. Tech-EEE	Employability
151.	Optional Elective- VI MOOCS	EE2536	B. Tech-EEE	Employability
152.	Engineering Optimization	MA2512	B. Tech-EEE	Employability
153.	Internship/Industrial Training/Practical Training	EE2546	B. Tech-EEE	Skill Development
154.	Analog and Digital Communication	EC2519	B. Tech-EEE	Employability
155.	Introduction to Python Programming	CS2502	B. Tech-EEE	Employability
156.	Integration of Renewable Energy Sources	Ee2547	B. Tech-EEE	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
157.	Optional Elective-VIII MOOCS	EE2548	B. Tech-EEE	Employability
158.	Elements of civil engineering	CE2515	B. Tech-EEE	Employability
159.	Building Services	CE2516	B. Tech-EEE	Employability
160.	Electrical Materials	EE2515	B. Tech-EEE	Employability
161.	Control Systems Engineering	EE2516	B. Tech-EEE	Employability
162.	Elements of Manufacturing Processes	ME2520	B. Tech-EEE	Employability
163.	Automotive Engineering	ME2521	B. Tech-EEE	Employability
164.	Fundamentals of Communications	EC2532	B. Tech-EEE	Employability
165.	Computer Graphics	CT2514	B. Tech-EEE	Employability
166.	Systems Software	CT2515	B. Tech-EEE	Employability
167.	Web Programming	IT2502	B. Tech-EEE	Employability
168.	Mathematical Cryptography	MA2516	B. Tech-EEE	Employability
169.	Semiconductor Physics	PH2508	B. Tech-EEE	Employability
170.	Mechatronics	ME2549	B. Tech-EEE	Employability
171.	Geoinformatics	CE2503	B. Tech-EEE	Employability
172.	Power Systems Engineering	EE2524	B. Tech-EEE	Employability
173.	Elements of Mechanical Transmission	ME2532	B. Tech-EEE	Employability
174.	Material Handling Equipment	ME2533	B. Tech-EEE	Employability
175.	Introduction to MEMS	EC2544	B. Tech-EEE	Employability
176.	Data Science	CS2508	B. Tech-EEE	Employability
177.	Virtual and Augmented Reality	CT2524	B. Tech-EEE	Employability
178.	Quality, Reliability and Operations Research	MA2517	B. Tech-EEE	Employability
179.	Hydrology	CE2543	B. Tech-EEE	Employability
180.	Planning for Sustainable Development	CE2544	B. Tech-EEE	Employability
181.	Electrical and Hybrid Vehicles	EE2531	B. Tech-EEE	Employability
182.	Material Science	ME2541	B. Tech-EEE	Employability
183.	Bio-Medical Engineering	EC2507	B. Tech-EEE	Employability
184.	Node and Angular JS	CS2512	B. Tech-EEE	Employability
185.	Cyber Security	CS2513	B. Tech-EEE	Employability
186.	Software Project Management	CT2531	B. Tech-EEE	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
187.	Elements of Stochastic Processes	MA2518	B. Tech-EEE	Employability
188.	Academic Communication	EG2505	B. Tech-EEE	Employability
189.	Big Data Analytics	CT2534	B. Tech-EEE	Employability
190.	CMOS Digital IC Design	EC2517	B. Tech-EEE	Employability
191.	Power Semiconductor Drives	EE2538	B. Tech-EEE	Employability
192.	Flexible AC Transmission Systems	EE2539	B. Tech-EEE	Employability
193.	Cyber Security	CS2513	B. Tech-EEE	Employability
194.	Digital Image Processing	EC2518	B. Tech-EEE	Employability
195.	Advanced Control Systems	EE2551	B. Tech-EEE	Employability
196.	Digital Control Systems	EE2554	B. Tech-EEE	Employability
197.	Disaster Management	CE2562	B. Tech-EEE	Employability
198.	Repair and Retrofitting Techniques	CE2563	B. Tech-EEE	Employability
199.	Non Destructive Evaluation	ME2554	B. Tech-EEE	Employability
200.	Cyber Physical Systems	EC2563	B. Tech-EEE	Employability
201.	Digital Forensics	CS2521	B. Tech-EEE	Employability
202.	Business Intelligence & Decision Support Systems	CS2522	B. Tech-EEE	Employability
203.	Adhoc and Sensor Networks	IT2521	B. Tech-EEE	Employability
204.	Information Retrieval Systems	CT2537	B. Tech-EEE	Employability
205.	Fuzzy Logic	MA2514	B. Tech-EEE	Employability
206.	Switch Gear and Protection	EE2522	B. Tech-EEE	Employability
207.	Computer Networks	CT2519	B. Tech-EEE	Employability
208.	Pulse and Integrated Circuits	EC2509	B. Tech-EEE	Employability
209.	Data Structures	CT2505	B. Tech-EEE	Employability
210.	Digital Signal Processing	EC2511	B. Tech-EEE	Employability
211.	Embedded System Design	EC2512	B. Tech-EEE	Employability
212.	Principles of VLSI Design	EC2513	B. Tech-EEE	Employability
213.	DSP Processors and Architecture	EC2514	B. Tech-EEE	Employability
214.	Elements of Electrical and Electronics Engineering	EE2501	B. Tech-ME	Employability
215.	Solid Mechanics	ME2512	B. Tech-ME	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
216.	Engineering Metallurgy	ME2513	B. Tech-ME	Employability
217.	Electrical and Electronics Engineering Lab	EE2502	B. Tech-ME	Skill Development
218.	Solid Mechanics and Metallurgy Lab	ME2514	B. Tech-ME	Skill Development
219.	Computer Aided Modelling Lab	ME2515	B. Tech-ME	Skill Development
220.	Applied Thermodynamics	ME2517	B. Tech-ME	Employability
221.	<u>Fuzzy</u> Logic Systems	EE2503	B. Tech-ME	Employability
222.	Thermal Engineering Lab	ME2522	B. Tech-ME	Skill Development
223.	Machine Dynamics Lab	ME2524	B. Tech-ME	Skill Development
224.	Control Systems	EE2512	B. Tech-ME	Employability
225.	Nano Technology	ME2525	B. Tech-ME	Employability
226.	Digital Logic Design	CT2506	B. Tech-ME	Employability
227.	Metal Cutting and Machine Tools	ME2527	B. Tech-ME	Employability
228.	Turbo Machinery	ME2528	B. Tech-ME	Employability
229.	Numerical and Statistical Methods	MA2509	B. Tech-ME	Employability
230.	Computer Aided Engineering Analysis Lab	ME2548	B. Tech-ME	Skill Development
231.	Computer Aided Machine Drawing Lab	ME2536	B. Tech-ME	Skill Development
232.	Computer Graphics	CT2514	B. Tech-ME	Employability
233.	Design of Machine Members	ME2539	B. Tech-ME	Employability
234.	Embedded System Design	EC2512	B. Tech-ME	Employability
235.	Engineering Economics and Accountancy	BA2503	B. Tech-ME	Entrepreneurship
236.	Fluid Mechanics and Turbo Machinery Lab	ME2534	B. Tech-ME	Employability
237.	Heat Transfer	ME2540	B. Tech-ME	Employability
238.	Heat Transfer Lab	ME2546	B. Tech-ME	Skill Development
239.	Mechatronics	ME2549	B. Tech-ME	Employability
240.	Micro Processors and Interfacing	EC2520	B. Tech-ME	Employability
241.	Industrial Engineering and Management	ME2551	B. Tech-ME	Entrepreneurship

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
242.	Big Data Analytics	CT2534	B. Tech-ME	Employability
243.	Computer Organization and Architecture	CT2512	B. Tech-ME	Employability
244.	Cryogenics	ME2565	B. Tech-ME	Employability
245.	Simulation Lab	ME2562	B. Tech-ME	Skill Development
246.	Elements of Civil Engineering	CE2515	B. Tech-ME	Employability
247.	Building Services	CE2516	B. Tech-ME	Employability
248.	Electrical Materials	EE2515	B. Tech-ME	Employability
249.	Control Systems Engineering	EE2516	B. Tech-ME	Employability
250.	Elements of Manufacturing Processes	ME2520	B. Tech-ME	Employability
251.	Automotive Engineering	ME2521	B. Tech-ME	Employability
252.	Introduction to Microprocessors and Microcontrollers	EC2531	B. Tech-ME	Employability
253.	Fundamentals of Communications	EC2532	B. Tech-ME	Employability
254.	Computer Graphics	CT2514	B. Tech-ME	Employability
255.	Object Oriented Programming through JAVA	CT2507	B. Tech-ME	Employability
256.	Systems Software	CT2515	B. Tech-ME	Employability
257.	Web Programming	IT2502	B. Tech-ME	Employability
258.	Mathematical Cryptography	MA2516	B. Tech-ME	Employability
259.	Semiconductor Physics	PH2508	B. Tech-ME	Employability
260.	Academic Communication	EG2505	B. Tech-ME	Employability
261.	Assistive Technologies	EC2523	B. Tech-ME	Employability
262.	Bio-Medical Engineering	EC2507	B. Tech-ME	Employability
263.	Cyber Security	CS2513	B. Tech-ME	Employability
264.	Data Science	CS2508	B. Tech-ME	Employability
265.	Electrical and Hybrid Vehicles	EE2531	B. Tech-ME	Employability
266.	Elements of Mechanical Transmission	ME2532	B. Tech-ME	Employability
267.	Elements of Stochastic Processes	MA2518	B. Tech-ME	Employability
268.	Environmental Sanitation	CE2531	B. Tech-ME	Employability
269.	Hydrology	CE2543	B. Tech-ME	Employability
270.	Introduction to MEMS	EC2544	B. Tech-ME	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
271.	Material Handling Equipment	ME2533	B. Tech-ME	Employability
272.	Node and Angular JS	CS2512	B. Tech-ME	Employability
273.	Object Oriented Programming Through JAVA	CT2507	B. Tech-ME	Employability
274.	Planning for Sustainable Development	CE2544	B. Tech-ME	Employability
275.	Power Plant Instrumentation	EE2532	B. Tech-ME	Employability
276.	Power Systems Engineering	EE2524	B. Tech-ME	Employability
277.	Quality, Reliability and Operations Research	MA2517	B. Tech-ME	Employability
278.	Software Project Management	CT2531	B. Tech-ME	Employability
279.	Virtual and Augmented Reality	CT2524	B. Tech-ME	Employability
280.	Disaster Management	CE2562	B. Tech-ME	Employability
281.	Repair and Retrofitting Techniques	CE2563	B. Tech-ME	Employability
282.	Non Destructive Evaluation	ME2554	B. Tech-ME	Employability
283.	Cyber Physical Systems	EC2563	B. Tech-ME	Employability
284.	Signals and Systems	EC2508	B. Tech-ME	Employability
285.	Digital Forensics	CS2521	B. Tech-ME	Employability
286.	Business Intelligence and Decision Support Systems	CS2522	B. Tech-ME	Employability
287.	Adhoc and Sensor Networks	IT2521	B. Tech-ME	Employability
288.	Information Retrieval Systems	CT2537	B. Tech-ME	Employability
289.	Fuzzy Logic	MA2514	B. Tech-ME	Employability
290.	Data Structures	CT2505	B. Tech-ME	Employability
291.	Database Management Systems	CT2513	B. Tech-ME	Employability
292.	Mechanical Vibrations	ME2530	B. Tech-ME	Employability
293.	Mechanics of Composite Materials	ME2531	B. Tech-ME	Employability
294.	Non-Conventional Sources of Energy	ME2529	B. Tech-ME	Employability
295.	Principles of Finite Element Method	ME2543	B. Tech-ME	Employability
296.	Robotics	ME2544	B. Tech-ME	Employability
297.	Optimization Techniques	MA2515	B. Tech-ME	Employability
298.	Refrigeration and Air	ME2555	B. Tech-ME	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
	Conditioning			
299.	Unconventional Machining Processes	ME2556	B. Tech-ME	Employability
300.	Total Quality Management	ME2558	B. Tech-ME	Entrepreneurship
301.	Design of Transmission Elements	ME2561	B. Tech-ME	Employability
302.	Design for Manufacturing and Assembly	ME2567	B. Tech-ME	Employability
303.	Theory of Elasticity	ME2570	B. Tech-ME	Employability
304.	Gas Dynamics and Jet Propulsion	ME2572	B. Tech-ME	Employability
305.	Non Destructive Techniques	ME2574	B. Tech-ME	Employability
306.	Probability Theory and Stochastic Process	EC2524	B. Tech-ECE	Employability
307.	Electronic Devices	EC2525	B. Tech-ECE	Employability
308.	Engineering Economics And Project Management	BA2501	B. Tech-ECE	Entrepreneurship
309.	Elements of Electrical Engineering	EE2505	B. Tech-ECE	Employability
310.	Electronic Devices Lab	EC2527	B. Tech-ECE	Skill Development
311.	Analog Circuits	EC2529	B. Tech-ECE	Employability
312.	Analog Communications	EC2530	B. Tech-ECE	Employability
313.	Digital Circuit Design	EC2505	B. Tech-ECE	Employability
314.	Fundamentals of Data Structures	CS2501	B. Tech-ECE	Employability
315.	Analog Circuits Lab	EC2533	B. Tech-ECE	Skill Development
316.	Digital Circuit Design Lab	EC2506	B. Tech-ECE	Skill Development
317.	Electronic Switching Systems	EC2534	B. Tech-ECE	Employability
318.	Introduction to Python Programming	CS2502	B. Tech-ECE	Employability
319.	Database Management Systems	CT2513	B. Tech-ECE	Employability
320.	Linear Integrated Circuits Applications	EC2536	B. Tech-ECE	Employability
321.	Digital Communications	EC2537	B. Tech-ECE	Employability
322.	Antennas and Wave Propagation	EC2538	B. Tech-ECE	Employability
323.	Principles of VLSI Design	EC2539	B. Tech-ECE	Employability
324.	Introduction To MEMS	EC2544	B. Tech-ECE	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
325.	Linear Integrated Circuits Applications Lab	EC2545	B. Tech-ECE	Skill Development
326.	Analog and Digital Communications Lab	EC2546	B. Tech-ECE	Skill Development
327.	Microprocessors, Microcontrollers and Applications	EC2510	B. Tech-ECE	Employability
328.	Microprocessor and Microcontroller Interfacing Lab	EC2515	B. Tech-ECE	Skill Development
329.	VLSI Lab	EC2553	B. Tech-ECE	Skill Development
330.	Data Warehousing and Data Mining	CT2528	B. Tech-ECE	Employability
331.	Mechatronics	ME2549	B. Tech-ECE	Employability
332.	CMOS Digital IC Design	EC2517	B. Tech-ECE	Employability
333.	Embedded System Design	EC2512	B. Tech-ECE	Employability
334.	Digital Control Systems	EE2554	B. Tech-ECE	Employability
335.	Artificial Intelligence	CT2521	B. Tech-ECE	Employability
336.	Transform Techniques	EC2567	B. Tech-ECE	Employability
337.	Microwave and Optical Communications Lab	EC2564	B. Tech-ECE	Skill Development
338.	Mini Project on Smart Applications	EC2565	B. Tech-ECE	Skill Development
339.	Internship / Industrial Training / Practical Training	EC2566	B. Tech-ECE	Skill Development
340.	Elements of Civil Engineering	CE2515	B. Tech-ECE	Employability
341.	Building Services	CE2516	B. Tech-ECE	Employability
342.	Electrical Materials	EE2515	B. Tech-ECE	Employability
343.	Control Systems Engineering	EE2516	B. Tech-ECE	Employability
344.	Elements of Manufacturing Processes	ME2520	B. Tech-ECE	Employability
345.	Automotive Engineering	ME2521	B. Tech-ECE	Employability
346.	Fundamentals of Communications	EC2532	B. Tech-ECE	Employability
347.	Computer Graphics	CT2514	B. Tech-ECE	Employability
348.	Object Oriented Programming through JAVA	CT2507	B. Tech-ECE	Employability
349.	Systems Software	CT2515	B. Tech-ECE	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
350.	Web Programming	IT2502	B. Tech-ECE	Employability
351.	Mathematical Cryptography	MA2516	B. Tech-ECE	Employability
352.	Academic Communication	EG2505	B. Tech-ECE	Employability
353.	Cyber Security	CS2513	B. Tech-ECE	Employability
354.	Data Science	CS2508	B. Tech-ECE	Employability
355.	Electrical and Hybrid Vehicles	EE2531	B. Tech-ECE	Employability
356.	Elements of Mechanical Transmission	ME2532	B. Tech-ECE	Employability
357.	Elements of Stochastic Processes	MA2518	B. Tech-ECE	Employability
358.	Material Handling Equipment	ME2533	B. Tech-ECE	Employability
359.	Node and Angular JS	CS2512	B. Tech-ECE	Employability
360.	Planning for Sustainable Development	CE2544	B. Tech-ECE	Employability
361.	Power Plant Instrumentation	EE2532	B. Tech-ECE	Employability
362.	Power Systems Engineering	EE2524	B. Tech-ECE	Employability
363.	Quality, Reliability and Operations Research	MA2517	B. Tech-ECE	Employability
364.	Software Project Management	CT2531	B. Tech-ECE	Employability
365.	Virtual and Augmented Reality	CT2524	B. Tech-ECE	Employability
366.	Cyber Physical Systems	EC2563	B. Tech-ECE	Employability
367.	Digital Forensics	CS2521	B. Tech-ECE	Employability
368.	Business Intelligence and Decision Support Systems	CS2522	B. Tech-ECE	Employability
369.	Adhoc and Sensor Networks	IT2521	B. Tech-ECE	Employability
370.	Information Retrieval Systems	CT2537	B. Tech-ECE	Employability
371.	Fuzzy Logic	MA2514	B. Tech-ECE	Employability
372.	CAD for VLSI	EC2540	B. Tech-ECE	Employability
373.	Computer Organization	EC2541	B. Tech-ECE	Employability
374.	Computer And Communication Networks	EC2542	B. Tech-ECE	Employability
375.	Biomedical Engineering	EC2507	B. Tech-ECE	Employability
376.	Analog IC Design	EC2549	B. Tech-ECE	Employability
377.	Nano Electronics	EC2516	B. Tech-ECE	Employability
378.	Smart Antennas	EC2550	B. Tech-ECE	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
379.	Coding Theory	EC2551	B. Tech-ECE	Employability
380.	Mixed Signal IC Design	EC2557	B. Tech-ECE	Employability
381.	System on Chip Design	EC2560	B. Tech-ECE	Employability
382.	Low Power VLSI Circuits	EC2569	B. Tech-ECE	Employability
383.	Real Time Operating Systems	EC2570	B. Tech-ECE	Employability
384.	Adaptive Signal Processing	EC2572	B. Tech-ECE	Employability
385.	ASIC Design	EC2573	B. Tech-ECE	Employability
386.	Embedded C	EC2574	B. Tech-ECE	Employability
387.	Multi Rate Signal Processing	EC2576	B. Tech-ECE	Employability
388.	Object Oriented Programming through Java	CT2507	B. Tech-CSE	Employability
389.	Data Structures	CT2505	B. Tech-CSE	Employability
390.	Object Oriented Programming Lab	CT2509	B. Tech-CSE	Skill Development
391.	UNIX Programming Lab	CS2503	B. Tech-CSE	Skill Development
392.	Data Structures Lab	CT2508	B. Tech-CSE	Skill Development
393.	Database Management Systems	CT2513	B. Tech-CSE	Employability
394.	Operating Systems Lab	CS2504	B. Tech-CSE	Skill Development
395.	Computer Networks	CT2519	B. Tech-CSE	Employability
396.	Web Technologies	CT2520	B. Tech-CSE	Employability
397.	Computer Networks and Compiler Design Lab	CS2509	B. Tech-CSE	Skill Development
398.	Web Technologies Lab	CT2525	B. Tech-CSE	Skill Development
399.	Digital Signal Processing	EC2511	B. Tech-CSE	Employability
400.	Control Systems	EE2512	B. Tech-CSE	Employability
401.	UML and Design Patterns	CS2511	B. Tech-CSE	Employability
402.	Node and Angular JS	CS2512	B. Tech-CSE	Employability
403.	Data Mining Lab	CS2514	B. Tech-CSE	Skill Development
404.	Graph Theory	CS2516	B. Tech-CSE	Employability
405.	Embedded systems Design	EC2512	B. Tech-CSE	Employability
406.	Digital Control Systems	EE2554	B. Tech-CSE	Employability
407.	Cryptography and Network Security	CT2533	B. Tech-CSE	Employability
408.	Big Data Analytics	CT2534	B. Tech-CSE	Employability
409.		CT2538	B. Tech-CSE	Skill Development

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
410.	Cryptography and Network Security Lab	CS2523	B. Tech-CSE	Skill Development
411.	Network Programming	CS2525	B. Tech-CSE	Employability
412.	Systems Software	CT2515	B. Tech-CSE	Employability
413.	Electrical Materials	EE2515	B. Tech-CSE	Employability
414.	Control Systems Engineering	EE2516	B. Tech-CSE	Employability
415.	Fundamentals of Communications	EC2532	B. Tech-CSE	Employability
416.	Computer Graphics	CT2514	B. Tech-CSE	Employability
417.	Systems Software	CT2515	B. Tech-CSE	Employability
418.	Academic Communication	EG2505	B. Tech-CSE	Employability
419.	Assistive Technologies	EC2523	B. Tech-CSE	Employability
420.	Bio-Medical Engineering	EC2507	B. Tech-CSE	Employability
421.	Cyber Security	CS2513	B. Tech-CSE	Employability
422.	Data Science	CS2508	B. Tech-CSE	Employability
423.	Electrical and Hybrid Vehicles	EE2531	B. Tech-CSE	Employability
424.	Elements of Stochastic Processes	MA2518	B. Tech-CSE	Employability
425.	Introduction to MEMS	EC2544	B. Tech-CSE	Employability
426.	Material Handling Equipment	ME2533	B. Tech-CSE	Employability
427.	Planning for Sustainable Development	CE2544	B. Tech-CSE	Employability
428.	Power Plant Instrumentation	EE2532	B. Tech-CSE	Employability
429.	Power Systems Engineering	EE2524	B. Tech-CSE	Employability
430.	Quality, Reliability and Operations Research	MA2517	B. Tech-CSE	Employability
431.	Software Project Management	CT2531	B. Tech-CSE	Employability
432.	Virtual and Augmented Reality	CT2524	B. Tech-CSE	Employability
433.	Cyber Physical Systems	EC2563	B. Tech-CSE	Employability
434.	Signals and Systems	EC2508	B. Tech-CSE	Employability
435.	Digital Forensics	CS2521	B. Tech-CSE	Employability
436.	Business Intelligence and Decision Support Systems	CS2522	B. Tech-CSE	Employability
437.	Adhoc and Sensor Networks	IT2521	B. Tech-CSE	Employability
438.	Information Retrieval Systems	CT2537	B. Tech-CSE	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
439.	Fuzzy Logic	MA2514	B. Tech-CSE	Employability
440.	C#.NET	CS2506	B. Tech-CSE	Employability
441.	Advanced Data Structures	CT2522	B. Tech-CSE	Employability
442.	Software Testing Methodologies	CT2523	B. Tech-CSE	Employability
443.	Principles of Programming Languages	CS2507	B. Tech-CSE	Employability
444.	Artificial Intelligence	CT2521	B. Tech-CSE	Employability
445.	Scripting Languages	CT2529	B. Tech-CSE	Employability
446.	microprocessors and Interfacing	EC2520	B. Tech-CSE	Employability
447.	Machine Learning	CS2518	B. Tech-CSE	Employability
448.	Internet of Things	CT2535	B. Tech-CSE	Employability
449.	NoSQL Databases	CS2519	B. Tech-CSE	Employability
450.	Software Requirements Engineering and Estimation	CS2520	B. Tech-CSE	Employability
451.	Mobile Computing	CT2536	B. Tech-CSE	Employability
452.	Image processing	CT2530	B. Tech-CSE	Employability
453.	Information Retrieval System	CT2537	B. Tech-CSE	Employability
454.	Optimization techniques	MA2515	B. Tech-CSE	Employability
455.	Web Mining	CS2527	B. Tech-CSE	Employability
456.	Cloud Computing	CT2540	B. Tech-CSE	Employability
457.	Agile Software Development Process	CT2532	B. Tech-CSE	Employability
458.	Block chain Technologies	CT2541	B. Tech-CSE	Employability
459.	Distributed Systems	CS2528	B. Tech-CSE	Employability
460.	Social Networks	CT2539	B. Tech-CSE	Employability
461.	Deep Learning	CS2530	B. Tech-CSE	Employability
462.	Data Structures	CT2505	B. Tech-IT	Employability
463.	UNIX and Shell Programming	IT2501	B. Tech-IT	Employability
464.	Object Oriented Programming Lab	CT2509	B. Tech-IT	Skill Development
465.	Computer Organization and Architecture	CT2512	B. Tech-IT	Employability
466.	Database Management Systems Lab	CT2516	B. Tech-IT	Skill Development
467.	Information and Communication Technology	IT2503	B. Tech-IT	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
468.	Web Technologies	CT2520	B. Tech-IT	Employability
469.	Web Technologies Lab	CT2525	B. Tech-IT	Skill Development
470.	Computer Networks and Data Mining Lab	IT2513	B. Tech-IT	Skill Development
471.	Big Data Analytics	CT2534	B. Tech-IT	Employability
472.	Big Data Analytics Lab	CT2538	B. Tech-IT	Skill Development
473.	Social Networks	CT2539	B. Tech-IT	Employability
474.	Software Engineering	CT2517	B. Tech-IT	Employability
475.	Compiler Design	CT2518	B. Tech-IT	Employability
476.	Operating Systems	CT2510	B. Tech-IT	Employability
477.	Operating Systems and Compiler Design Lab	IT2507	B. Tech-IT	Skill Development
478.	Design and Analysis of Algorithms	CT2527	B. Tech-IT	Employability
479.	Data Warehousing and Data Mining	CT2528	B. Tech-IT	Employability
480.	Object Oriented Analysis and Design	IT2510	B. Tech-IT	Employability
481.	Computer Networks	CT2519	B. Tech-IT	Employability
482.	Mini Project	IT2522	B. Tech-IT	Skill Development
483.	Internship / Industrial Training / Practical Training	IT2523	B. Tech-IT	Skill Development
484.	Control Systems Engineering	EE2516	B. Tech-IT	Employability
485.	Fundamentals of Communications	EC2532	B. Tech-IT	Employability
486.	Systems Software	CT2515	B. Tech-IT	Employability
487.	Semiconductor Physics	PH2508	B. Tech-IT	Employability
488.	Mathematical Cryptography	MA2516	B. Tech-IT	Employability
489.	Academic Communication	EG2505	B. Tech-IT	Employability
490.	Assistive Technologies	EC2523	B. Tech-IT	Employability
491.	Bio-Medical Engineering	EC2507	B. Tech-IT	Employability
492.	Cyber Security	CS2513	B. Tech-IT	Employability
493.	Data Science	CS2508	B. Tech-IT	Employability
494.	Electrical and Hybrid Vehicles	EE2531	B. Tech-IT	Employability
495.	Elements of Stochastic Processes	MA2518	B. Tech-IT	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
496.	Introduction to MEMS	EC2544	B. Tech-IT	Employability
497.	Material Handling Equipment	ME2533	B. Tech-IT	Employability
498.	Node and Angular JS	CS2512	B. Tech-IT	Employability
499.	Planning for Sustainable Development	CE2544	B. Tech-IT	Employability
500.	Power Plant Instrumentation	EE2532	B. Tech-IT	Employability
501.	Power Systems Engineering	EE2524	B. Tech-IT	Employability
502.	Quality, Reliability and Operations Research	MA2517	B. Tech-IT	Employability
503.	Software Project Management	CT2531	B. Tech-IT	Employability
504.	Virtual and Augmented Reality	CT2524	B. Tech-IT	Employability
505.	Cyber Physical Systems	EC2563	B. Tech-IT	Employability
506.	Signals and Systems	EC2508	B. Tech-IT	Employability
507.	Digital Forensics	CS2521	B. Tech-IT	Employability
508.	Business Intelligence and Decision Support Systems	CS2522	B. Tech-IT	Employability
509.	Adhoc and Sensor Networks	IT2521	B. Tech-IT	Employability
510.	Information Retrieval Systems	CT2537	B. Tech-IT	Employability
511.	Fuzzy Logic	MA2514	B. Tech-IT	Employability
512.	Cyber Laws	IT2506	B. Tech-IT	Employability
513.	Systems Software	CT2515	B. Tech-IT	Employability
514.	Scripting Languages	CT2529	B. Tech-IT	Employability
515.	Open Source Software	IT2505	B. Tech-IT	Employability
516.	Embedded System Design	EC2512	B. Tech-IT	Employability
517.	Advanced Data Structures	CT2522	B. Tech-IT	Employability
518.	Soft Computing Techniques	IT2511	B. Tech-IT	Employability
519.	Real Time Systems	T2512	B. Tech-IT	Employability
520.	Agile Software Development Process	CT2532	B. Tech-IT	Employability
521.	Machine Learning and Pattern Recognition	IT2517	B. Tech-IT	Employability
522.	Distributed Operating Systems	IT2518	B. Tech-IT	Employability
523.	Software Testing Methodologies	CT2523	B. Tech-IT	Employability
524.	Stenography and Biometrics	IT2525	B. Tech-IT	Employability
525.	Parallel Computing	T2526	B. Tech-IT	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
526.	Virtual and Augmented Reality	CT2524	B. Tech-IT	Employability
527.	Internet of Things	CT2535	B. Tech-IT	Employability
528.	Cloud Computing	CT2540	B. Tech-IT	Employability
529.	Block chain Technologies	CT2541	B. Tech-IT	Employability
530.	Design Patterns	IT2528	B. Tech-IT	Employability
531.	Advanced Structural Analysis	CE3901	M. Tech-SE	Employability
532.	Advanced R.C Design	CE3903	M. Tech-SE	Employability
533.	Experimental Stress Analysis	CE3904	M. Tech-SE	Employability
534.	Repairs and Retrofitting of Structures	CE3916	M. Tech-SE	Employability
535.	Research Methodology and IPR	BA3901	M. Tech-SE	Employability
536.	English for Research Paper Writing	EG3901	M. Tech-SE	Employability
537.	Sustainable Development	CE3924	M. Tech-SE	Employability
538.	Theory of Elasticity	CE3902	M. Tech-SE	Employability
539.	Advanced Structural Engineering Lab	CE3908	M. Tech-SE	Skill Development
540.	Advanced Concrete Technology Lab	CE3909	M. Tech-SE	Skill Development
541.	Finite Element Methods in Structural Engineering	CE3910	M. Tech-SE	Employability
542.	Structural Dynamics	CE3911	M. Tech-SE	Employability
543.	Computer Applications in Structural Engineering Lab	CE3918	M. Tech-SE	Skill Development
544.	Structural Design Lab	CE3919	M. Tech-SE	Skill Development
545.	Mini Project with Seminar	CE3920	M. Tech-SE	Skill Development
546.	Analysis of Power Electronic Converters	EE3902	M. Tech-PEED	Employability
547.	Power Electronics Simulation Laboratory	EE3909	M. Tech-PEED	Skill Development
548.	Power Converters Laboratory	EE3910	M. Tech-PEED	Skill Development
549.	Research Methodology and IPR	BA3901	M. Tech-PEED	Employability
550.	Switched Mode Power Conversion	EE3911	M. Tech-PEED	Employability
551.	Power Electronic Control of Electrical Drives	EE3912	M. Tech-PEED	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
552.	Electric Drives Simulation Laboratory	EE3919	M. Tech-PEED	Skill Development
553.	Electric Drives Laboratory	EE3920	M. Tech-PEED	Skill Development
554.	Mini Project with Seminar	EE3921	M. Tech-PEED	Skill Development
555.	English for Research Paper Writing	EG3901	M. Tech-PEED	Employability
556.	Modern Control Theory	EE3903	M. Tech-PEED	Employability
557.	Power Quality and custom power devices	EE3904	M. Tech-PEED	Employability
558.	Programmable Logic Controllers and Applications	EE3905	M. Tech-PEED	Employability
559.	Artificial Intelligence Techniques	EE3906	M. Tech-PEED	Employability
560.	Renewable Energy Technologies	EE3907	M. Tech-PEED	Employability
561.	Flexible AC Transmission Systems	EE3908	M. Tech-PEED	Employability
562.	Control & Integration of Renewable Energy Systems	EE3913	M. Tech-PEED	Employability
563.	Hybrid Electric Vehicles	EE3914	M. Tech-PEED	Employability
564.	Advanced Digital Control Systems	EE3915	M. Tech-PEED	Employability
565.	Advanced Digital Signal Processing	EE3916	M. Tech-PEED	Employability
566.	Application of Power Converters	EE3917	M. Tech-PEED	Employability
567.	Microcontrollers	EE3918	M. Tech-PEED	Employability
568.	Digital Signal Processing Controlled Drives	EE3922	M. Tech-PEED	Employability
569.	Smart Grid Technologies	EE3923	M. Tech-PEED	Employability
570.	MOOCs-I	EE3924	M. Tech-PEED	Employability
571.	Energy audit conservation and management	EE3925	M. Tech-PEED	Employability
572.	Mechanical Vibrations and Acoustics	ME3901	M. Tech-MD	Employability
573.	Advanced Mechanics of Solids	ME3902	M. Tech-MD	Employability
574.	Machine Dynamics Lab	ME3909	M. Tech-MD	Employability
575.	Advanced Material Testing Lab	ME3910	M. Tech-MD	Skill Development
576.	Research Methodology and IPR	BA3901	M. Tech-MD	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
577.	Computational Methods in Engineering	MA3902	M. Tech-MD	Employability
578.	Advanced Finite Element Methods	ME3911	M. Tech-MD	Employability
579.	Modelling and Simulation Lab	ME3918	M. Tech-MD	Skill Development
580.	Computational Methods Lab	ME3919	M. Tech-MD	Skill Development
581.	Mini Project with Seminar	ME3920	M. Tech-MD	Skill Development
582.	English for Research Paper Writing	EG3901	M. Tech-MD	Employability
583.	Tribology	ME3921	M. Tech-MD	Employability
584.	Composite Materials	ME3922	M. Tech-MD	Employability
585.	Analysis and Synthesis of Mechanisms	ME3903	M. Tech-MD	Employability
586.	Advanced materials	ME3904	M. Tech-MD	Employability
587.	Industrial Robotics	ME3905	M. Tech-MD	Employability
588.	Gear Engineering	ME3906	M. Tech-MD	Employability
589.	Advanced Optimization Techniques	ME3907	M. Tech-MD	Employability
590.	Rotor Dynamics	ME3908	M. Tech-MD	Employability
591.	Design for Manufacturing and Assembly	ME3912	M. Tech-MD	Employability
592.	Mechatronics	ME3913	M. Tech-MD	Employability
593.	Vehicle Dynamics	ME3914	M. Tech-MD	Employability
594.	Signal Analysis and Condition Monitoring	ME3915	M. Tech-MD	Employability
595.	Fracture Mechanics	ME3916	M. Tech-MD	Employability
596.	Experimental Stress Analysis	ME3917	M. Tech-MD	Employability
597.	Sustainable Development	CE3923	M. Tech-MD	Employability
598.	Energy Audit, Conservation & Management	EE3924	M. Tech-MD	Employability
599.	Rapid Prototyping	ME3924	M. Tech-MD	Employability
600.	Automotive Electronics	EC4924	M. Tech-MD	Employability
601.	Soft Computing Techniques	CS3924	M. Tech-MD	Employability
602.	CMOS VLSI Design	EC4901	M. Tech- VLSI&ES	Employability
603.	Advanced Microcontrollers	EC4902	M. Tech-	Employability

5. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
			VLSI&ES	
604.	CMOS VLSI Design Lab	EC4909	M. Tech- VLSI&ES	Employability
605.	Advanced Microcontrollers Lab	EC4910	M. Tech- VLSI&ES	Skill Development
606.	Research Methodology and IPR	BA3901	M. Tech- VLSI&ES	Employability
607.	Embedded Systems based IoT	EC4912	M. Tech- VLSI&ES	Employability
608.	VLSI System Design Lab	EC4919	M. Tech- VLSI&ES	Skill Development
609.	Embedded Systems and IoT Lab	EC4920	M. Tech- VLSI&ES	Skill Development
610.	Mini Project with Seminar	EC4921	M. Tech- VLSI&ES	Skill Development
611.	Communication Buses and Interfaces	EC4917	M. Tech- VLSI&ES	Employability
612.	Digital Signal and Image Processing	EC4905	M. Tech- VLSI&ES	Employability
613.	VLSI Signal Processing	EC4906	M. Tech- VLSI&ES	Employability
614.	System Design with Embedded Linux	EC4907	M. Tech- VLSI&ES	Employability
615.	Parallel Processing	EC4908	M. Tech- VLSI&ES	Employability
616.	Advances in VLSI Design	EC4913	M. Tech- VLSI&ES	Employability
617.	Low power VLSI Design	EC4922	M. Tech- VLSI&ES	Employability
618.	Network Security and Cryptography	EC4923	M. Tech- VLSI&ES	Employability
619.	MOOCs	EC4924	M. Tech- VLSI&ES	Employability
620.	Sustainable Development	CE3924	M. Tech- VLSI&ES	Employability
621.	Energy Audit, Conservation & Management	EE3924	M. Tech- VLSI&ES	Employability
622.	Rapid Prototyping	ME4924	M. Tech- VLSI&ES	Employability

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
623.	Automotive Electronics	EC4925	M. Tech- VLSI&ES	Employability
624.	Soft Computing Techniques	CS4924	M. Tech- VLSI&ES	Employability
625.	English for Research Paper Writing	EG5901	M. Tech- VLSI&ES	Employability
626.	Data Science	CS3902	M. Tech-AI&ML	Employability
627.	Digital Image Processing	CS3903	M. Tech-AI&ML	Employability
628.	Ad hoc and Sensor Networks	CS3904	M. Tech-AI&ML	Employability
629.	Intelligent Systems	CS3905	M. Tech-AI&ML	Employability
630.	Principles of Computer Security	CS3907	M. Tech-AI&ML	Employability
631.	Distributed Systems	CS3908	M. Tech-AI&ML	Employability
632.	Data Science Lab	CS3910	M. Tech-AI&ML	Skill Development
633.	MEAN Stack Technologies	CS3911	M. Tech-AI&ML	Employability
634.	Block chain Technology	CS3913	M. Tech-AI&ML	Employability
635.	Data Preparation and Analysis	CS3914	M. Tech-AI&ML	Employability
636.	Natural Language Processing	CS3915	M. Tech-AI&ML	Employability
637.	Quantum Computing	CS3917	M. Tech-AI&ML	Employability
638.	Cloud Computing	CS3916	M. Tech-AI&ML	Employability
639.	Research Methodology and IPR	BA3901	M. Tech-AI&ML	Employability
640.	Digital Forensics	CS3918	M. Tech-AI&ML	Employability
641.	MEAN Stack Technologies Lab	CS3919	M. Tech-AI&ML	Skill Development
642.	Machine Learning using Python Lab	CS3920	M. Tech-AI&ML	Skill Development
643.	Mini Project with Seminar	CS3921	M. Tech-AI&ML	Skill Development
644.	English for Research Paper Writing	EG3901	M. Tech-AI&ML	Employability
645.	Deep Learning	CS3922	M. Tech-AI&ML	Employability
646.	Recommender Systems	CS3923	M. Tech-AI&ML	Employability
647.	Soft Computing Techniques	CS3924	M. Tech-AI&ML	Employability
648.	Retail Management	BA3919	MBA	Entrepreneurship
649.	Human Resources Analytics	BA3925	MBA	Entrepreneurship
650.	Business communication and skill development	BA3905	MBA	Entrepreneurship
651.	Management of Retail Operations	BA3928	MBA	Entrepreneurship

S. No	Name of the Course	Course Code	Programme Name	Focus on Employability/ Entrepreneurship/ Skill Development
652.	Perspectives of Management	BA3902	MBA	Employability
653.	Managerial Economics	BA3903	MBA	Employability
654.	Accounting for Managers	BA3904	MBA	Employability
655.	Business Communication & Skill Development	BA3905	MBA	Skill Development
656.	Business Environment and Legislation	BA3906	MBA	Employability
657.	Quantitative Analysis for Business Decisions	BA3907	MBA	Employability
658.	Business Law	BA3908	MBA	Employability
659.	Information Technology Lab for Business Management	BA3909	MBA	Skill Development
660.	Financial Management	BA3910	MBA	Employability
661.	Marketing Management	BA3911	MBA	Employability
662.	Human Resource Management	BA3912	MBA	Employability
663.	Production & Operations Management	BA3913	MBA	Employability
664.	Business Research Methods	BA3914	MBA	Employability
665.	International Business	BA3915	MBA	Employability
666.	Organizational Behaviour	BA3916	MBA	Employability

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Principal PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District. A.P.

COURSE STRUCTURE

I Year - I Semester

SI.	Course	Name of the Course / Laboratory	No.e	No.of		
No.	Code		L	Т	Р	Credits
1	EG3501	Functional English	3	-	-	3
2	MA3501	Linear Algebra and Calculus	3	1	-	4
3	PH3501	Engineering Physics	3	-	-	3
4	CT3501	Problem Solving Using C *	3	-	2	4
5	ME3503	Engineering Graphics *	2	-	4	4
6	EG3502	Functional English Lab	-	-	2	1
7	PH3503	Engineering Physics Lab	-	-	2	1
		Total	14	1	10	20
8	EN3501	Environmental Studies (Mandatory Non-Credit Course)	2	5	-	-

* Integrated Course with Theory and Laboratory

I Year - II Semester

SI. No.	Course	Name of the Course / Laboratory	No.of Periods per week			No.of
	Code		L	Т	Р	Credits
1	EG3503	Professional Communication	2	-	-	2
2	MA3505	Integral Transforms and Vector Calculus	3	1	-	4
3	CH3501	Engineering Chemistry	3	-	-	3
4	CE3501	Applied Mechanics	3	1	-	4
5	UH3501	Universal Human Values 2:	2	1	-	3
		Understanding Harmony				
6	EG3504	Professional Communication Lab	1	-	4	2
7	CH3502	Engineering Chemistry Lab	-	-	2	1
8	CE3502	Applied Mechanics Lab & Building Trade Practice	-	-	2	1
		Total	13	3	8	20
9	BA3501	Constitution of India (Mandatory Non-Credit Course)	2		-	-

L : Lecture T : Tutorial P : Practical

Civil Engineering

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Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

SI.	Course	Name of the Course / Laboratory		of Per er we	No.of	
No.	Code		L	Т	Р	Credits
1	EG3501	Functional English	3	-	-	3
2	MA350	Linear Algebra and Calculus	3	1	-	4
3	CH3503	Applied Chemistry	3	-	-	3
4	CT3501	Problem Solving Using C *	3	-	2	4
5	UH3501	Universal Human Values 2: Understanding Harmony	2	1	-	3
6	CH3504	Applied Chemistry Lab	-	-	2	1
7	EG3502	Functional English Lab	-	-	2	1
		Total	14	2	6	19
8	BA3501	Constitution of India (Mandatory Non-Credit Course)	2	-	-	-

* Integrated Course with Theory and Laboratory

I Year - II Semester

SI.	Course	Name of the Course / Laboratory		of Per er we	No.of	
No.	Code		L	Т	Р	Credits
1	EG3503	Professional Communication	2	4	-	2
2	MA3505	Integral Transforms and Vector Calculus	3	1	-	4
3	PH3504	Solid State Physics	3	-	-	3
4	EE3504	Circuit Theory - I	2	1	-	3
5	MA3506	Discrete Mathematics	2	1	-	3
6	ME3501	Engineering Drawing	1	-	4	3
7	EG3504	Professional Communication Lab	-	-	4	2
8	PH3505	Solid State Physics Lab	-	-	2	1
		Total	13	3	10	21
9	EN3501	Environmental Studies (Mandatory Non-Credit Course)	2	-	-	-

L:Lecture T:Tutorial

P : Practical

Electrical and Electronics Engineering

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Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

I Year - I Semester

SI.	Course	ode Name of the Course / Laboratory	No.0	No.of		
No.	Code		L	Т	Р	Credits
1	EG3501	Functional English	3	-	-	3
2	MA3501	Linear Algebra and Calculus	3	1	-	4
3	PH3502	Physics for Engineers	3	-	-	3
4	CT3501	Problem Solving Using C *	3	-	2	4
5	ME3503	Engineering Graphics *	2	-	4	4
6	EG3502	Functional English Lab	-		2	1
7	PH3503	Engineering Physics Lab			2	1
		Total	14	1	10	20
8	EN3501	Environmental Studies (Mandatory Non-Credit Course)	2		-	-

* Integrated Course with Theory and Laboratory

I Year - II Semester

SI. No.	Course	ode Name of the Course / Laboratory	No.of Periods per week			No.of
	Code		L	Т	Р	Credits
1	EG3503	Professional Communication	2	-	-	2
2	MA3505	Integral Transforms and Vector Calculus	3	1	-	4
3	CH3504	Chemistry for Engineers	3	-	-	3
4	ME3504	Engineering Mechanics	3	1	-	4
5	UH3501	Universal Human Values 2: Understanding Harmony	2	1	ŭ.	3
6	EG3504	Professional Communication Lab		-	4	2
7	ME3505	Engineering Workshop	-	-	2	1
8	ME3506	Engineering Mechanics Lab and Fuel & Lubricants Lab	-	-	2	1
		Total	13	3	8	20
9	BA3501	Constitution of India (Mandatory Non-Credit Course)	2	-	-	-

Mechanical Engineering

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SI.	Course		No.of Periods per week			No.of
No.	Code		L	Т	Р	Credits
1	EG3501	Functional English	3	-		3
2	MA350	Linear Algebra and Calculus	3	1	-	4
3	CH3503	Applied Chemistry	3	-	-	3
4	CT3501	Problem Solving Using C *	3	-	2	4
5	UH3501	Universal Human Values 2:	2	1	-	3
6	EC3503	Understanding Harmony Electronic Workshop	-		4	2
7	-	Functional English Lab	-	-	2	1
8	CH3504	Applied Chemistry Lab	-		2	1
		Total	14	2	10	21
9	BA3501	Constitution of India (Mandatory Non-Credit Course)	2	-	-	-

* Integrated Course with Theory and Laboratory

I Year - II Semester

SI.	Course	Name of the Course / Laboratory		of Per er wee	No.of	
No.	Code		L	Т	Р	Credits
1	EG3503	Professional Communication	2	-	-	2
2	MA3505	Integral Transforms and Vector Calculus	3	1	-	4
3	EE3502	Linear Electrical Networks	3	-	-	3
4	PH3504	Solid State Physics	3	-	-	3
5	ME3501	Engineering Drawing	1	-	4	3
6	EG3504	Professional Communication Lab	- 2	-	4	2
7	PH3506	Solid State Physics Lab	-		4	2
		Total	12	1	12	19
8	EN3501	Environmental Studies (Mandatory Non-Credit Course)	2	•	-	•

L : Lecture T : Tutorial

P: Practical

Electronics and Communication Engineering

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Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

SI.	Course	Course Name of the Course / Laboratory	No.of Periods per week			No.of
No.	Code		L	Т	Р	Credits
1	EG3501	Functional English	3	-	-	3
2	MA350	Linear Algebra and Calculus	3	1	-	4
3	PH3509	Applied Physics	3	-	-	3
4	CT3502	Programming for Problem Solving	3	-	-	3
5	UH3501	Universal Human Values 2: Understanding Harmony	2	1	-	3
6	EG3502	Functional English Lab	÷	-	2	1
7	PH3510	Applied Physics Lab	-	-	2	1
8	CT3503	C Programming Lab	-	-	4	2
		Total	14	2	8	20
9	BA3501	Constitution of India (Mandatory Non-Credit Course)	2	-	2	-

I Year - II Semester

SI.	Course	Name of the Course / Laboratory	No.of Periods per week			No.of
No.	Code		L	Т	Р	Credits
1	EG3503	Professional Communication	2	-	-	2
2	MA3505	Integral Transforms and Vector Calculus	3	1	-	4
3	EC3502	Basic Electronic Devices	2	-	-	2
4	CT3504	Python Programming	3	-	-	3
5	CT3505	Data Structures	3	-	-	3
6	EG3504	Professional Communication Lab	Ξ	-	4	2
7	CT3506	Python Programming Lab	× .	-	4	2
8	CT3507	Data Structures Lab	-	121	4	2
		Total	13	1	12	20
9	EN3501	Environmental Studies (Mandatory Non-Credit Course)	2	-	-	-

T : Tutorial L : Lecture

P : Practical

Computer Science and Engineering

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SI.	Course	Name of the Course / Laboratory	No.	No.of		
No.	Code	•	L	Т	Р	Credits
1	EG3501	Functional English	3	-	-	3
2	MA3501	Linear Algebra and Calculus	3	1	-	4
3	CH3506	Applied Chemistry	3	r.	-	3
4	EC3501	Elements of Electronics Engineering	3	-	-	3
5	CT3502	Programming for Problem Solving	3	-	*	3
6	EG3502	Functional English Lab	-	-	2	1
7	CH3507	Applied Chemistry Lab	-	-	2	1
8	CT3503	C Programming Lab	-	-	4	2
		Total	15	1	8	20
9	EN3501	Environmental Studies (Mandatory Non-Credit Course)	2	-	-	-

I Year - II Semester

SI.	Course	Name of the Course / Laboratory		of Per er wee		No.of Credits
No.	Code		L	Т	Р	Credits
1	EG3503	Professional Communication	2	-	141	2
2	MA3505	Integral Transforms and Vector Calculus	3	1	-	4
2		Applied Physics	3	-	-	3
4	CT3505	Data Structures	3	-	-	3
5	UH3501	Universal Human Values 2: Understanding Harmony	2	1	-	3
6	EG3504	Professional Communication Lab	-		4	2
7	PH3510	Applied Physics Lab	-	-	2	1
8	CT3507	Data Structures Lab		-	4	2
	-	Total	13	2	10	20
9	BA3501	Constitution of India (Mandatory Non-Credit Course)	2	-	-	-

L : Lecture T : Tutorial P : Practical

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Information Technology

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SI. No.	Course Code	Name of the Course / Laboratory No.of Period L T			No.of Credits	
1	CE2504	Mechanics of Solids	3	1	-	3
2	CE2505	Mechanics of Fluids	3	1	-	3
3	CE2506	Building Materials and Construction	2	1	-	2
4	CE2507	Surveying	3	1	-	3
5	ME2502	Elements of Mechancial and Electrical Engineering	4	-	-	3
6	CE2508	Building Planning and Drawing	2	-	3	3
7	CE2509	Mechanics of Solids Lab	-	-	4	2
8	CE2510	Survey Field Work	-	-	4	2
		Total	17	4	11	21
9	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)	-	-	2	-

	Course	Name of the Course / Laboratory	12000000	of Per		No.of
No.	Code		L	Т	Р	Credits
1	MA2509	Numerical and Statistical Methods	3	1	-	3
2	CE2511	Structural Analysis	2	1	-	2
3	CE2512	Hydraulics and Hydraulic Machines	2	1	÷	2
4	CE2513	Concrete Technology	4		1	3
5	CE2514	Engineering Geology and Geomatics *	3	-	2	3
6		Open Elective-I (see list of Open Electives)	4	-	-	3
7	CE2517	Fluid Mechanics and Hydraulic Machines Lab	-		4	2
8	CE2518	Concrete Technology Lab	-	-	4	2
		Total	18	3	10	20
9	NS2501	NSS / Fine Arts / Yoga / Self Defense (Mandatory Non-Credit Course)	-	-	2	-
	CE2519	Optional Elective - I i) Interior Design ii) Building Bye Laws and Scientific Planning iii) Data Structures	-	2 -	1	3
11	CE2521	Optional Elective - II (MOOCs) Student shall opt from the list of MOOCs given by	- / the I	- Depart	- ment)	2

* Integrated Course with Theory and Laboratory

Civil Engineering

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SI. No.	Course Code	Name of the Course / Laboratory		No.of Periods per week L T P		No.of Credits
1	CE2522	Theory of Structures	3	1	-	3
2	CE2523	Geotechnical Engineering	2	1	-	2
3	CE2524	Hydrology and Water Resources Engineering	4	-	-	3
4	CE2525	Water and Waste Water Engineering	3	1	-	3
5		Professional Elective - I	4	194	-	3
6		Open Elective-II (see list of Open Electives)	4	-	-	3
7	CE2532	Geotechnical Engineering Lab	-	-	4	2
8	CE2533	Water and Waste Water Engineering Lab	-	-	4	2
		Total	20	3	8	21
9	ME2509	Optional Elective - III i) Infrastructure Development ii) Basics of Power Plant Engineering iii) Object Oriented Programming through JAVA	1		-	3
10		Optional Elective - IV (MOOCs) Students shall opt from the list of MOOCs given l	-	- Depar	-	2

SI.	Course	Name of the Course / Laboratory		of Per er wee	1220-2220 122	No.of	
No.	Code		L	Т	Р	Credits	
1	CE2536	Foundation Engineering	3	-	-	2	
2	CE2537	Highway Engineering	4	-	-	3	
3	CE2538	Design of RC Structures	3	1	-	3	
4		Professional Elective - II	4	-		3	
5		Open Eletive-III (see list of Open Electives)	4	-	-	3	
6	CE2545		-	-	4	2	
7	CE2546	Highway Engineering Lab		-	4	2	
8	CE2547	Mini Project / Survey Camp	-	-	4	2	
		Total	18	1	12	20	
9	CE2548 CE2549 CT2513	Optional Elective - V i) Smart Buildings and Automation ii) Building Information Modeling iii) Database Management Systems			-	3	
10	CE2550	Optional Elective - VI (MOOCs)	-	-	-	2	
		Students shall opt from the list of MOOCs given I	by the	Depar	tment)		

P : Practical L : Lecture T: Tutorial

Civil Engineering

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PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District. A.P.

SI. Course No. Code		Name of the Course / Laboratory	101000	of Per er we		No.of Credits
1	CE2551	Project Management and Finance	4	-	-	3
2	CE2552	Estimation, Costing and Valuation	3	1	-	3
3	CE2553	Design of Steel Structures	3	1	-	3
4		Professional Elective - III	4	-		3
5		Professional Elective - IV	4	-	-	3
6		Open Elective-IV(see list of Open Electives)	4	-	-	3
7	CE2564	Computer Applications in Civil Engineering Lab.	-	-	4	2
8	CE2565	Internship / Industrial Training / Practical Training	-	-	-	2
		Total	22	2	4	22
9	CE2566 MA2515 BA2504	Optional Elective - VII i) Project Scheduling and Contracts ii) Optimization Techniques iii) Entrepreneurship	10		•	3
10	CE2567	Optional Elective - VIII (MOOCs) Students shall opt from the list of MOOCs given b	- by the	- Depar	- tment)	2

IV Year - II Semester

		Name of the Course / Laboratory	No.of Periods per week			No.of Credits	
No.			L	Т	P	Creans	
1		Professional Elective - V	4	-	-	3	
2		Professional Elective - VI	4	-	-	3	
3	CE2576	Project	-	-	20	10	
_		Total	8	-	20	16	

L : Lecture

P : Practical

T : Tutorial

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Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

S1.		Title of the Subject	Department Offering the	1.	of Per r weel		No.of
No.			Subject	L	Т	Р	Credits
1		Elements of Civil Engineering (Other than CE)	CE	4	-	240	3
2		Building Services	CE	4	-	-	3
3		Electrical Materials	EEE	4	-		3
4	EE2516	Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	-	3
5		Elements of Manufacturing Processes	ME	4	-	-	3
6		Automotive Engineering (Other than ME)	ME	4	-	-	3
7	EC2531		ECE	4	.*	-	3
8	EC2532		ECE	4	-	-	3
9	CT2514	Computer Graphics (Other than IT)	CSE	4	-	-	3
	CT2507	Object Oriented Programming through Java (other than CSE & 1T)	CSE	4		-	3
11	CT2515	Systems Software	IT	4	-	(iiii)	3
12		Web Programming(Other than CSE & IT)	IT	4	-	-	3
	MA2516	Mathematical Cryptography(Other than CSE)	BS&H	4			3
14		Semiconductor Physics (Other than ECE)	BS&H	4		-	3

Open Elective - I

SI.		Title of the Subject	Department Offering the		of Peri r week		No.of
No.			Subject	L	Т	Р	Credits
1	CE2530	Geoinformatics (other than CE)	CE	4	-	-	3
2	CE2531	Environmental Sanitation	CE	4	-	-	3
3	EE2523	Modeling & Simulation of Engineering Systems	EEE	4	(-1)	-	3
4	EE2524	Power Systems Engineering (Other than EEE)	EEE	4	-	-	3
5	ME2532	Elements of Mechanical Transmission (Other than ME)	ME	4	-		3
6	ME2533	Material Handling Equipment	ME	4		-	3
7	EC2543	Automotive Electronics	ECE	4	-	-	333
8	EC2544	Introduction to MEMS (other than ECE)	ECE	4	-	*	
9	CS2508	Data Science	CSE	4	- 14 C	-	3
10	CT2524	Virtual and Augmented Reality (other than IT)	CSE	4	-	*	3
11	IT2505	Open Source Software	1T	4	-	-	3
	IT2506	Cyber Laws	IT	4	-	-	3
0.27	MA2517		BS&H	4	-	-	3

Open Elective - II

Civil Engineering

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Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District A.P.

SI.		Title of the Subject	Department Offering the		of Per er weel		No.of
No.			Subject	L	Т	Р	Credits
1	CE2543	Hydrology (Other than CE)	CE	4	-	-	3
2	CE2544	Planning for Sustainable Development	CE	4	-	-	3
3	EE2531	Electrical and Hybrid Vehicles	EEE	4		-	3
4	EE2532	Power Plant Instrumentation	EEE	4	-	-	3
5	ME2541	Material Science (Other than ME)	ME	4	-	-	3 3 3
6	ME2542	Renewable Energy Sources (Other than ME)	ME	4	-	-	3
7	EC2523	Assistive Technologies (Other than ECE)	ECE	4	-	-	3
8	EC2507	Bio-Medical Engineering (Other than EEE & ECE)	ECE	4		-	3
9	CS2512	Node and Angular JS	CSE	4	-	-	3
10	CS2513	Cyber Security	CSE	4	-	-	3
11	CT2529	Scripting Languages (Other than CSE)	IT	4	-	π.	
12	CT2531	Software Project Management (Other than CSE)	IT	4	-	-	3
13		Elements of Stochastic Processes	BS&H	4		-	3
14	EG2505	Academic Communication	ENGLISH	4		-	3

Open Elective - III

SI.		Title of the Subject	Department Offering the		of Peri r week		No.of
No.			Subject	L	Т	Р	Credits
1	CE2562	Disaster Management (Other than CE)	CE	4	-	-	3
2	CE2563	Repair and Retrofitting Techniques	CE	4	-	-	3
3	EE2542	Modern Optimization Techniques	EEE	4	-	-	3
4	EE2543	Electrical Power Utilization (Other than EEE)	EEE	4	-	1	175.0
5	ME2553	Green Engineering	ME	4		-	3
6	ME2554	Non Destructive Evaluation (Other than ME)	ME	4	-		
7	EC2563	Cyber Physical Systems	ECE	4	14	-	3
8	EC2508	Signals and Systems (Other than EEE & ECE)	ECE	4	-	7	2.000
9	CS2521	Digital Forensics	CSE	4		-	3 3 3 3
10	CS2522	Business Intelligence & Decision Support Systems	CSE	4	-	-	3
11	IT2521	Adhoc and Sensor Networks	IT	4		-	3
12	CT2537	Information Retrieval Systems (Other than CSE)	IT	4	-	-	
13	MA2514	Fuzzy Logic (Other than EEE, ME & CSE)	BS&H	4	: -	-	3

Open Elective - IV

Civil Engineering

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Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District A.P.

SI. No.	Course Code	Name of the Course / Laboratory		of Per er we T		No.of Credits
	CE2527 CE2528	Professional Elective - 1 i) Advanced Strength of Materials ii) GIS and GPS iii) Green Buildings iv) Construction Management	4	-		3
	CE2540 CE2541	 Professional Elective - II i) Advanced Structural Analysis ii) Environmental Pollution and Its Control iii) Ground Water Development and Management iv) Ground Improvement Techniques 	4	÷	•	3
	CE2555 CE2556	Professional Elective - III i) Pre-stressed Concrete ii) Advanced Foundation Engineering iii) Traffic Engineering iv) Industrial Wastewater Management	4		-	3
	CE2559 CE2560	Professional Elective - IV i) Advanced Design of RC Structures ii) Hydraulic Structures iii) Geosynthetics iv) Disaster Preparedness and Planning	4		-	3
	CE2569 CE2570	 Professional Elective - V i) Earthquake Resistant Design of Structures ii) Logistics Infrastructure Engineering iii) Finite Element Methods iv) Design and Drawing of Irrigation Structures 	4	-	-	3
	CE2573 CE2574	Professional Elective - VI i) Pre-Engineered Buildings ii) Urban Transportation Planning iii) Soil Dynamics and Machine Foundations iv) Environmental Impact Assessment	4	*		3

Professional Electives

Civil Engineering

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PRIMCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

SI. No.	Course Code	Name of the Course / Laboratory	No.of Periods per week			No.of Credits
1	EE2508	DC Machines and Transformers	3	1	-	3
2	EE2509	Electric Circuit Analysis	3	1	-	3
3	EC2503	Analog Electronics	3	1	-	3
4	EE2510	Power Systems - I	3	1	-	3
5	MA2507	Numerical Methods with Computer Applications *	3	-	2	3
6	ME2504	Mechanical Engineering Lab	-	-	4	2
7	EE2511	Electric Circuits Lab	-		4	2
8	EC2504	Analog Electronics Lab	-	-	4	2
		Total	15	4	14	21
9	NS2501	NSS / Fine Arts / Yoga / Self Defense (Mandatory Non-Credit Course)		-	2	-

* Integrated Course with Theory and Laboratory

II Year - II Semester

1.000	Course Code	Name of the Course / Laboratory		of Per	No.of	
No.			L	Т	P	Credit
1	EC2505	Digital Circuit Design	3	1	-	3
2	EE2512	Control Systems	3	1	-	3
3	BA2501	Engineering Economics and Project Management	3		-	2
4	EE2513	Induction and Synchronous Machines	3	1	-	3
5	EE2514	Electromagnetic Fields	3	1	-	3
6		Open Elective-I (see list of Open Electives)	4	-	-	3
7	EC2506			-	4	2
	EE2517	Electrical Machines - I Lab	-	-	4	2
-		Total	19	4	8	21
9	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)		-	2	-
10		Optional Elective - I	-		-	3
	EC2507					
	CT2512					
	EE2518	iii) Introduction to Quantum Mechanics for Engineers				
11	EE2519	Optional Elective - II (MOOCs) Student shall opt from the list of MOOCs given by	- y the I	- Depart	- ment)	2

Electrical and Electronics Engineering

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Gudlavalleru - 521 356, Kric AD

SI. No.	Course Code	Name of the Course / Laboratory		No.of Periods per week L T P		No.of Credits	
1	EE2520	Electrical Measurements & Instrumentation	4	-	-	3	
2	EC2508	Signals and Systems	3	1	-	3	
3	EE2521	Power Systems - II	3	1	-	3	
4		Professional Elective - I	4	-	-	3	
5		Open Elective-II (see list of Open Electives)	4	-	-	3	
6	EE2525	Control Systems Lab	-	-	4	2	
7	EE2526	Electrical Machines- II Lab	141	-	4	2	
8	EE2527	Mini Project	-	-	4	2	
		Total	18	2	12	21	
9	ME2549 CT2507 EE2528	Optional Elective - III i) Mechatronics ii) Object Oriented Programming Through Java iii) Control System Design	1.	-	-	3	
10	EE2529	Optional Elective - IV (MOOCs) Students shall opt from the list of MOOCs given b	- by the	- Depar	- tment)	2	

III Year - II Semester

SI.	Course	Name of the Course / Laboratory	045 25755	of Per er we	No.of	
No.	Code		L	Т	Р	Credits
1	EE2530	Power Electronics	3	1	-	3
2	MA251	Probability and Fuzzy Mathematics	3	1	-	3
3		licroprocessors, Microcontrollers and Its Applications **	3	1	-	3
4		Professional Elective - II	4	-	-	3
5		Open Elective-III(see list of Open Electives)	4			3
6	EE2533	Electrical Systems Simulation Lab	-	-	4	2
7		Electrical Measurements & Instrumentation Lab	-	-	4	2
8		icroprocessors, Microcontrollers and Its Applications Lab	1	-	4	2
-		Total	17	3	12	21
9	EC2516	Optional Elective - V i) Data Base Management Systems ii) Nano Electronics iii)Solar and Wind Energy Systems		-		3
10	EE2536	Optional Elective - VI (MOOCs) Students shall opt from the list of MOOCs given b	- by the	- Depar	- tment)	2

Electrical and Electronics Engineering

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PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishne District, A.P,

IV Year - I Semester

SI.	Course	Name of the Course / Laboratory		of Per	No.of	
No.	Code		L	Т	Р	Credits
1	EE2537	Power System Analysis	3	1	-	3
2		Professional Elective - III	3	1	-	3
3		Professional Elective - IV	3	1	-	3
4		Open Elective-IV(see list of Open Electives)	4	-	-	3
5	MA251	Engineering Optimization	2	1	-	2
6	EE2544	Power Electronics Lab	-	-	4	2
7	EE2545	Power Systems Lab	-	-	4	2
8	EE2546	nternship / Industrial Training / Practical Training	-	-	4	2
		Total	15	4	12	20
9		Optional Elective - VII	-	-	-	3
	EC2519	i) Analog and Digital Communication				
	CS2502	ii) Introduction to Python Programming				
	EE2547	iii) Integration of Renewable Energy Sources				
10	EE2548	Optional Elective - VIII (MOOCs)	-	-	-	2
		Students shall opt from the list of MOOCs given I	by the	Depar	tment)	6

IV Year - II Semester

	Course	Name of the Course / Laboratory	No.of Periods per week			No.of	
No.	Code		L	Т	Р	Credits	
1		Professional Elective - V	3	1	-	3	
2		Professional Elective - VI	3	1	-	3	
3	EE2557	Project	-	-	20	10	
-		Total	6	2	20	16	

L : Lecture

T: Tutorial

P: Practical

Electrical and Electronics Engineering

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PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District A.P.

SI.		Title of the Subject	Department Offering the		of Per r weel		No.of
No.			Subject	L	Т	Р	Credits
1	CE2515	Elements of Civil Engineering (Other than CE)	CE	4	-	-	3
2	CE2516	Building Services	CE	4		-	3
2 3		Electrical Materials	EEE	4	-	-	333
4		Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	-	
5	ME2520	Elements of Manufacturing Processes	ME	4	-	-	3
6	ME2521	Automotive Engineering (Other than ME)	ME	4	-	-	3
7	EC2531	Introduction to MPMC (Other than ECE/EEE/CSE/IT)	ECE	4	-	-	3
8	EC2532	Fundamentals of Communications (Other than ECE)	ECE	4	-	-	3
9	CT2514	Computer Graphics (Other than IT)	CSE	4		-	3
10		Object Oriented Programming through Java (other than CSE & IT)	CSE	4	-	-	3
11	CT2515	Systems Software	IT	4	-	-	3
12		Web Programming(Other than CSE & IT)	IT	4			3
13		Mathematical Cryptography(Other than CSE)	BS&H	4	-	-	3 3 3
14		Semiconductor Physics (Other than ECE)	BS&H	4	-	-	3

Open Elective - I

SI.		Title of the Subject	Department Offering the		of Per r weel		No.of	
No.			Subject	L	Т	Р	Credit	
1	CE2530	Geoinformatics (other than CE)	CE	4	-	-	3	
2	CE2531	Environmental Sanitation	CE	4	-	-	3	
3	EE2523	Modeling & Simulation of Engineering Systems	EEE	4	-	<u></u>	3	
4	EE2524	Power Systems Engineering (Other than EEE)	EEE	4	-	-	3	
5	ME2532	Elements of Mechanical Transmission (Other than ME)	ME	4	-	-	3	
6	ME2533	Material Handling Equipment	ME	4	-		3	
7	EC2543	Automotive Electronics	ECE	4	-	-	3	
8	EC2544	Introduction to MEMS (other than ECE)	ECE	4	-	-	3	
9	CS2508	Data Science	CSE	4	-	-	3	
10	CT2524	Virtual and Augmented Reality (other than IT)	CSE	4	-	-		
11	IT2505	Open Source Software	IT	4	14	-	3	
12	IT2506	Cyber Laws	IT	4	2.44	-		
13	MA2517	Quality, Reliability and Operations Research	BS&H	4		-	3	

Open Elective - II

Electrical and Electronics Engineering

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PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District. A.P.

SI.		Title of the Subject	Department Offering the		of Peri r weel		No.of
No.			Subject	L	Т	Р	Credits
1	CE2543	Hydrology (Other than CE)	CE	4	5.4.C	~	3
2	CE2544	Planning for Sustainable Development	CE	4	-	-	3
3	EE2531	Electrical and Hybrid Vehicles	EEE	4	520	-	3
4	EE2532	Power Plant Instrumentation	EEE	4	375	-	3 3 3 3
5	ME2541	Material Science (Other than ME)	ME	4	142	2	3
6	ME2542	Renewable Energy Sources (Other than ME)	ME	4	-	-	-
7	EC2523	Assistive Technologies (Other than ECE)	ECE	4	-		3
8	EC2507	Bio-Medical Engineering (Other than EEE & ECE)	ECE	4	-	*	3
9	CS2512	Node and Angular JS	CSE	4	H	-	3
10	CS2513	Cyber Security	CSE	4	-	-	333
11	CT2529	Scripting Languages (Other than CSE)	IT	4	-	-	3
12	CT2531	Software Project Management (Other than CSE)	IT	4	-	-	3
13	MA2518	Elements of Stochastic Processes	BS&H	4		-	3
14	EG2505	Academic Communication	ENGLISH	4	-	-	3

Open Elective - III

SI.		Title of the Subject	Department Offering the		of Per r weel	No.of	
No.			Subject	L	Т	Р	Credits
1	CE2562	Disaster Management (Other than CE)	CE	4	-	-	3
2	CE2563	Repair and Retrofitting Techniques	CE	4		-	3
3	EE2542	Modern Optimization Techniques	EEE	4	-	-	333
	EE2543	Electrical Power Utilization (Other than EEE)	EEE	4	-	-	
5	ME2553	Green Engineering	ME	4	-	-	3
		Non Destructive Evaluation (Other than ME)	ME	4		-	
7	EC2563	Cyber Physical Systems	ECE	4	-	-	3
8	EC2508	Signals and Systems (Other than EEE & ECE)	ECE	4	*	-	3
9	CS2521	Digital Forensics	CSE	4	-	-	3
10	CS2522	Business Intelligence & Decision Support Systems	CSE	4	-	-	3
	IT2521	Adhoc and Sensor Networks	IT	4	-	-	3333
12	CT2537	Information Retrieval Systems (Other than CSE)	IT	4	-	-	
13	MA2514	Fuzzy Logic (Other than EEE, ME & CSE)	BS&H	4	-	-	3

Open Elective - IV

Electrical and Electronics Engineering

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SI. No.	Course Code	Name of the Course / Laboratory		of Per er wee T		No.of Credits
	CT2519 EC2509	Professional Elective - I i) Switch Gear and Protection ii) Computer Networks iii) Pulse and Integrated Circuits iv) Data Structures	4			3
	EC2512 EC2513	Professional Elective - II i) Digital Signal Processing ii) Embedded System Design iii) Principles of VLSI Design iv) DSP Processors and Architecture	4		-	3
	EC2517 EE2538	Professional Elective - III i) Big Data Analytics ii) CMOS Digital IC Design iii) Power Semiconductor Drives iv) Flexible AC Transmission Systems	3	1		3
		Professional Elective - IV i) Cyber Security ii) Digital Image Processing iii) Power System Operation & Control iv) High Voltage Engineering	3	1	-	3
	EE2549	Professional Elective - V i) Electrical Distribution System	-3	- 1	-	3
	EE2550		4	-	-	
	EE2551	iii) Advanced Control Systems	3	1	-	
	EE2552	iv) Energy Audit, Conservation and Management	3	1		
	EE2553 EE2554 EE2555 EE2556	iii) Utilization of Electrical Energy	3	1	÷	3

Professional Electives

Electrical and Electronics Engineering

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PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District. A.P.

SI.	Course	Name of the Course / Laboratory	No.of Periods per week			No.of Credits
No.	Code		L	Т	Р	Creans
1	EE2501	Elements of Electrical and Electronics Engineering	3	1	-	3
2	ME2510	Engineering Thermodynamics	3	1	-	3
3	ME2511	Kinematics of Machines	3	1	-	3
4	ME2512	Solid Mechanics	3	1	-	3
5	ME2513	Engineering Metallurgy	4	-		3
6	EE2502	Electrical and Electronics Engineering Lab		-	2	1
7	ME2514	Solid Mechanics and Metallurgy Lab	-	-	4	2
8	ME2515	Computer Aided Modeling Lab	-	-	2	1
	-	Total	16	4	8	19
9	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)	-	-	2	-

II Year - II Semester

SI. No.	Course Code	Name of the Course / Laboratory		of Per er we T		No.of Credits
1	ME2516	Manufacturing Processes	4	-	-	3
2	ME2517	Applied Thermodynamics	3	1	-	3
3	ME2518	Dynamics of Machines	3	1	-	3
4	ME2519	Fluid Mechanics	3	1	-	3
5		Open Elective-I (see list of Open Electives)	4	-	-	3
6	ME2522	Thermal Engineering Lab	4	-	4	2
		Manufacturing Processes Lab	-	-	4	2
		Machine Dynamics Lab	-	-	2	1
		Total	17	3	10	20
9	NS2501	NSS /Fine Arts / Yoga / Self Defense (Mandatory Non-Credit Course)	-	-	2	-
	ME2525	Optional Elective - I i) Control Systems ii) Nano Technology iii) Digital Logic Design	-	-	-	3
11	ME2526	Optional Elective - II (MOOCs) Student shall opt from teh list of MOOCs given by the	-	-	- Depart	2 ment)

Mechanical Engineering

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PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna Dirak 1 P.

SI. No.	Course Code	Name of the Course / Laboratory	No.of Periods per week		No.of Credits	
1	MA2509	Numerical and Statistical Methods	3	1	-	3
2	ME2527	Metal Cutting and Machine Tools	4	-		3
3	ME2528	Turbo Machinery	3	1	-	3
4		Professional Elective - I	4	-	-	3
5		Open Elective-II (see list of Open Electives)	4	-	-	3
6	ME2534	Fluid Mechanics and Turbo Machinery Lab	-	-	4	2
7	ME2535	Machine Tools Lab	-	-	4	2
8	ME2536	Computer Aided Machine Drawing Lab	-	-	4	2
		Total	18	2	12	21
9	EE2503	Optional Elective - III i) Computer Graphics ii) Fuzzy Logic Systems iii) Micro Processors and Interfacing		-	-	3
10	and the second se	Optional Elective - IV (MOOCs) Students shall opt from the list of MOOCs given	- by the	- Depar	- tment)	2

III Year - II Semester

	Course	Name of the Course / Laboratory		of Per er wee	No.of	
No.	Code		L	Т	Р	Credits
1	BA2503	Engineering Economics and Accountancy	4	-	-	3
2	ME2538	Metrology and Instrumentation	3	1	-	3
3	ME2539	Design of Machine Members	3	1	-	3
4	and the second data and th	Heat Transfer	3	1	-	3
5		Professional Elective - II	4			3
6	-	Open Elective-III(see list of Open Electives)	4	-	-	3
7	ME2546	Heat Transfer Lab	-		4	2
8	ME2547	Metrology and Instrumentation Lab	-	-	4	2
9	ME2548	Computer Aided Engineering Analysis Lab	-	-	2	1
		Total	21	3	10	23
10	CT2507	Optional Elective - V i) Object Oriented Programming through Java ii) Mechatronics Embedded System Design	-	-	-	3
11	ME2550	Optional Elective - VI (MOOCs) Students shall opt from the list of MOOCs given b	- by the	- Depar	- tment)	2

Mechanical Engineering

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8 PRINCIPAL Sashadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishni Di Lint, A.P.

IV Year - I Semester

SI.	Course Code	Name of the Course / Laboratory		of Per er wee		No.of Credits
No.			L	Т	Р	Creans
1	ME2551	Industrial Engineering and Management	3	1	-	3
2	ME2552	CAD / CAM	3	1	-	3
3		Professional Elective - III	4	-	-	3
4		Professional Elective - IV	4	-	-	3
5		Open Elective-IV(see list of Open Electives)	4	-	-	3
6	ME2562	Simulation Lab	-	-	4	2
7	ME2563	Mini Project		-	4	2
8	ME2564	Internship / Industrial Training / Practical Training	-	-	-	2
		Total	18	2	8	21
9	CT2512	Optional Elective - VII i) Big Data Analytics ii) Computer Organization and Architecutre iii) Cryogenics	-		-	3
10		Optional Elective - VIII (MOOCs) Students shall opt from the list of MOOCs given	- by the	- Depar	- tment	2

IV Year - II Semester

SI. No.	Course Code	Name of the Course / Laboratory		of Periods er week		No.of Credits	
1	cour	Professional Elective - V	L 4	-	Р -	3	
2		Professional Elective - VI	4	-	-	3	
3	ME2575	Project	-	-	20	10	
_		Total	8	-	20	16	

T : Tutorial P : Practical L : Lecture

Mechanical Engineering

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PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District. A.P.

SI.		Title of the Subject	Department Offering the	No.of Periods per week			No.of
No.			Subject	L	T	Р	Credits
1	CE2515	Elements of Civil Engineering (Other than CE)	CE	4	-	-	3
2	CE2516	Building Services	CE	4		-	3
3		Electrical Materials	EEE	4		-	333
4		Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	-	19957
5	ME2520	Elements of Manufacturing Processes (Other than ME)	ME	4	-	-	3
6	ME2521	Automotive Engineering (Other than ME)	ME	4	-	-	3
7	EC2531	Introduction to MPMC (Other than ECE/EEE/CSE/IT)	ECE	4	-	-	3
8	EC2532	Fundamentals of Communications (Other than ECE)	ECE	4	-	-	3
9	CT2514	Computer Graphics (Other than IT)	CSE	4	-	-	3
10	CT2507	Object Oriented Programming through Java (other than CSE & IT)	CSE	4	-	-	3
11	CT2515	Systems Software	IT	4	-	-	3
12		Web Programming(Other than CSE & IT)	IT	4	-	-	3
13	MA2516	Mathematical Cryptography(Other than CSE)	BS&H	4	-	120	3333
14	PH2508	Semiconductor Physics (Other than ECE)	BS&H	4	-	-	3

Open Elective - I

SI.			Department Offering the	No.of Periods per week			No.of	
No.			Subject	L	Т	Р	Credits	
1	CE2530	Geoinformatics (other than CE)	CE	4	-	1.0	3	
2	CE2531	Environmental Sanitation	CE	4	-	-	3 3 3	
3	EE2523	Modeling & Simulation of Engineering Systems	EEE	4	- 20	-	3	
4	EE2524	Power Systems Engineering (Other than EEE)	EEE	4	-	-		
5	ME2532	Elements of Mechanical Transmission (Other than ME)	ME	4	•	-	3	
6	ME2533	Material Handling Equipment	ME	4		-	3	
7	EC2543	Automotive Electronics	ECE	4	-	-	3	
8	EC2544	Introduction to MEMS (other than ECE)	ECE	4	-	•		
9	CS2508	Data Science	CSE	4	-	-	3	
10	CT2524	Virtual and Augmented Reality (other than IT)	CSE	4	-	-		
11	IT2505	Open Source Software	IT	4	-	-	3 3 3	
12	IT2506	Cyber Laws	IT	4	-	-	3	
13	MA2517	Quality, Reliability and Operations Research	BS&H	4	-	-	3	

Open Elective - II

Mechanical Engineering

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PRINCTPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna Dirici I, A.P.

SI.		Title of the Subject	Department Offering the		of Peri r weel		No.of
No.			Subject	L	Т	Р	Credits
1	CE2543	Hydrology (Other than CE)	CE	4	-	-	3
2	CE2544	Planning for Sustainable Development	CE	4	-	-	3
3	EE2531	Electrical and Hybrid Vehicles	EEE	4	-	-	3
4	EE2532	Power Plant Instrumentation	EEE	4	-	-	3
5	ME2541	Material Science (Other than ME)	ME	4	-	-	3
6	ME2542	Renewable Energy Sources (Other than ME)	ME	4	-	-	3
7	EC2523	Assistive Technologies (Other than ECE)	ECE	4	-	-	3
8	EC2507	Bio-Medical Engineering (Other than EEE & ECE)	ECE	4	-	-	3
9	CS2512	Node and Angular JS	CSE	4	-	-	333
10	CS2513	Cyber Security	CSE	4			3
11	CT2529	Scripting Languages (Other than CSE)	IT	4	-	-	3
	CT2531	Software Project Management (Other than CSE)	IT	4		-	3
13		Elements of Stochastic Processes	BS&H	4	-	-	3
14	EG2505	Academic Communication	ENGLISH	4	-	-	3

Open Elective - III

Open	Elective -	- IV

SI.			Department Offering the		of Peri r week	No.of	
No.			Subject	L	Т	Р	Credits
1	CE2562	Disaster Management (Other than CE)	CE	4	-	-	3
2	CE2563	Repair and Retrofitting Techniques	CE	4		(1)	3
3	EE2542	Modern Optimization Techniques	EEE	4	-	-	333
4	EE2543	Electrical Power Utilization (Other than EEE)	EEE	4			
5	ME2553	Green Engineering	ME	4	-	-	3
6	ME2554	Non Destructive Evaluation (Other than ME)	ME	4	1	() # (1.1
7	EC2563	Cyber Physical Systems	ECE	4	-	-	3
8	EC2508	Signals and Systems (Other than EEE & ECE)	ECE	4	-	-	3
9	CS2521	Digital Forensics	CSE	4	-	-	3
10	CS2522	Business Intelligence & Decision Support Systems	CSE	4	1.00	-	333
	IT2521	Adhoc and Sensor Networks	IT	4		-	3
12	CT2537	Information Retrieval Systems (Other than CSE)	IT	4	1	-	1000
13	MA2514	Fuzzy Logic (Other than EEE, ME & CSE)	BS&H	4		-	3

Mechanical Engineering

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PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowiedge Village Gudlavalleru - 521 356, Krishna District. A.P.

SI. No.	Course Code	Code Name of the Course / Laboratory	1 1011	of Per er we T		No.of Credits	
	ME2530 ME2531	Professional Elective - 1 i) Non Conventional Sources of Energy ii) Mechancial Vibrations iii) Mechancis of Composite Materials iv) Data Structures	4		-	3	
	ME2544 ME2545	Professional Elective - II i) Principles of Finite Element Method ii) Robotics iii) Automobile Engineering iv) Database Management Systems	4	3	-	3	
	ME2555 ME2556	 Professional Elective - III i) Optimization Techniques ii) Refrigeration and Air Conditioning iii) Unconventional Machining Process iv) Tribology 	4	-	Ŧ	3	
	ME2559 ME2560	Professional Elective - IV i) Total Quality Management ii) Computational Fluid Dynamics iii) Condition Monitoring iv) Design of Transmission Elements	4	-	-	3	
	ME2568 ME2569	 Professional Elective - V i) Design for Manufacturing and Assembly ii) Production Planning and Control iii) Power Plant Engineering iv) Theory of Elasticity 	4	-	-	3	
	ME2572 ME2573	 Professional Elective - VI i) Rapid Prototyping ii) Gas Dynamics and Jet Propulsion iii) Automation in Manufacturing iv) Non Destructive Techniques 	4		-	3	

Professional Electives

Mechanical Engineering

PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

SI.	Course	Name of the Course / Laboratory	No.of Periods per week			No.of Credits
No.	Code		L	Т	Р	Creans
1	EC2524	Probability Theory and Stochastic Process	3	1	-	3
2	EC2525	Electronic Devices	4	-	-	3
3	EC2508	Signals and Systems	3	1	2	3
4	BA2501	Engineering Economics and Project Management	3	-	-	2
5	EC2526	Electromagnetic Field Theory	4	-	-	3
6	EE2505	Elements of Electrical Engineering	3	-	4	2
7	EC2527	Electronic Devices Lab	-	4	4	2
8	EE2507	Networks and Electrical Technology Lab	-	-	2	1
		Total	20	2	6	19
9	NS2501	NSS / Fine Arts / Yoga / Self Defense (Mandatory Non-Credit Course)	-	-	2	-

II Year - II Semester

	Course Code	Name of the Course / Laboratory	No.of Periods per week			No.of Credits
No.			L	Т	Р	Credits
1	EC2528	Transmission Lines and Waveguides	4	-	-	3
2	EC2529	Analog Circuits	4	-	-	3
3	EC2530	Analog Communications	3	-	-	2
4	EC2505	Digital Circuit Design	3	1		3
5	CS2501	Fundamentals of Data Structures	3	-		2
6		Open Elective-I (see list of Open Electives)	4	-	-	3
7	EC2533	Analog Circuits Lab	-	-	4	2
8	EC2506	Digital Circuit Design Lab	-	-	4	2
		Total	21	1	8	20
9	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)	•		2	-
10	CS2502 CT2513 EC2534	ii) Database Managemnent Systems		-	1	3
11	EC2535	Optional Elective - II (MOOCs) Student shall opt from teh list of MOOCs given by	- y the I	- Departi	- nent)	2

Electronics and Communication Engineering

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SI. No.	Course Code	Name of the Course / Laboratory	oratory No.of Periods per week L T P		ek	No.of Credits	
1	EC2536	Linear Integrated Circuits Applications	3	1	-	3	
2	EC2537	Digital Communications	3	-	12	2	
3	EC2538	Antennas and Wave Propagation	4	-	-	3	
4	EC2539	Principles of VLSI Design	3	-	-	2	
5		Professional Elective - I	4	-	-	3	
6		Open Elective-II (see list of Open Electives)	4	-	-	3	
7	EC2545	Linear Integrated Circuits Applications Lab	-	-	4	2	
8	EC2546	Analog and Digital Communications Lab	-	-	4	2	
		Total	21	1	8	20	
9	and the second se	Optional Elective - III i) Data Warehousing and Data Mining ii) Mechatronics iii) Introduction to MEMS	-	-	-	3	
10	EC2547	Optional Elective - IV (MOOCs) Students shall opt from the list of MOOCs given	- by the	- Depar	- tment)	2	

III Year - II Semester

SI. No.	Course	Name of the Course / Laboratory		of Per er we	No.of	
	Code		L	Т	P	Credits
1	EC2511	Digital Signal Processing	4	-	- <u>u</u>	3
2	EE2512	Control Systems	3	1	- × -	3
3	EC2510	Microprocessors, Microcontrollers and Applications**	3	-	1	3
4	EC2548		3	-	-	2
5		Professional Elective - II	4	-	-	3
6		Open Eletive-III (see list of Open Electives)	4	-	-	3
7	EC2515	Microprocessor and Microcontroller Interfacing Lab	-	-	4	2
8	EC2552	Digital Signal Processing Lab	-		4	2
9	EC2553	VLSI Lab		-	4	2
		Total	21	1	13	23
10	CT2534 EC2554 CT2533	ii) Cognitive Radio Networks	1	-	-	3
10	EC2555		-	-	-	2
		Students shall opt from the list of MOOCs given t	ov the	Depar	tment)	

Electronics and Communication Engineering

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PRINCIPAL Storadii Rao Gudiavallera Er Sinteering College Seshadri Rao Knowledge Village Gudiavalleru - 521 356, Krishna District, A.P.

IV Year - I Semester

SI.	Course	Name of the Course / Laboratory	1.00.00000.00	of Per	No.of	
No.	Code		L	Т	P	Credits
1	EC2517	CMOS Digital IC Design	4	-	-	3
2	EC2512	Embedded System Design	3	-	-	2
3	EC2556	Electronic Measurements and Instrumentation	3	-	-	2
4		Professional Elective - III	4	-	-	3
5		Professional Elective - IV	4	-	-	3
6		Open Elective-IV(see list of Open Electives)	4	-	-	3
7	EC2564	Microwave and Optical Communications Lab	-	-	4	2
8	EC2565	Mini Project on Smart Applications	-	-	4	2
9	EC2566	Internship / Industrial Training / Practical Training	-	-	-	2
_		Total	22	-	8	22
9		Optional Elective - VII		-	-	3
	EE2554	i) Digital Control Systems				
	CT2521	ii) Artificial Intelligence				
	EC2567	iii) Transform Techniques				
10	EC2568	Optional Elective - VIII (MOOCs)	-	-	-	2
		Students shall opt from the list of MOOCs given	by the	Depar	rtment)

IV Year - II Semester

SI. No.	Course Code	Name of the Course / Laboratory		No.of Per		No.of Credits	
1		Professional Elective - V	4	-	-	3	
2		Professional Elective - VI	4	-	-	3	
3	EC2577	Project	-	-	20	10	
-		Total	8	-	20	16	

L : Lecture

P: Practical

Electronics and Communication Engineering

T: Tutorial

PRETCIPAL

Standar Rao Gudiavallera & Galeering College Seshadri Rao Knowledge Village Gudiavallera - 521 356, Krishna District. A.P.

SI.		Title of the Subject	Department Offering the		of Per r weel		No.of	
No.			Subject	L	Т	Р	Credits	
1	CE2515	Elements of Civil Engineering (Other than CE)	CE	4	-	-	3	
2	CE2516	Building Services	CE	4	-	-	3	
23		Electrical Materials	EEE	4	-	-	333	
4	EE2516	Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	-		
5	ME2520	Elements of Manufacturing Processes (Other than ME)	ME	4	-	-	3	
6	ME2521	Automotive Engineering (Other than ME)	ME	4	-	-	3	
7	EC2531	Introduction to MPMC (Other than ECE/EEE/CSE/IT)	ECE	4	-	-	3	
8	EC2532	Fundamentals of Communications (Other than ECE)	ECE	4	-	-	3	
9	CT2514	Computer Graphics (Other than IT)	CSE	4	-	-	3	
10	CT2507	Object Oriented Programming through Java (other than CSE & IT)	CSE	4	-	-	3	
11	CT2515	Systems Software	IT	4	-	-	3	
12	IT2502	Web Programming(Other than CSE & IT)	IT	4		-	333	
13		Mathematical Cryptography(Other than CSE)	BS&H	4	-	-	3	
14	PH2508	Semiconductor Physics (Other than ECE)	BS&H	4	-	-	3	

Open Elective - I

SI.		Title of the Subject	Department Offering the		of Per r weel		No.of
No.			Subject	L	Т	Р	Credits
1	CE2530	Geoinformatics (other than CE)	CE	4		-	3
2	CE2531	Environmental Sanitation	CE	4	-	-	3
3	EE2523	Modeling & Simulation of Engineering Systems	EEE	4	-	-	3
4	EE2524	Power Systems Engineering (Other than EEE)	EEE	4	-	-	3
5	ME2532	Elements of Mechanical Transmission (Other than ME)	ME	4	-	-	3
6	ME2533	Material Handling Equipment	ME	4	-	-	3
7	EC2543	Automotive Electronics	ECE	4	-	-	333
8	EC2544	Introduction to MEMS (other than ECE)	ECE	4	-	-	
9	CS2508	Data Science	CSE	4	-	-	3
10	CT2524	Virtual and Augmented Reality (other than IT)	CSE	4	-	-	0.85
11	1T2505	Open Source Software	IT	4	-		3
12	IT2506	Cyber Laws	IT	4	-	-	
13	MA2517	Quality, Reliability and Operations Research	BS&H	4	-	-	3

Open Elective - II

Electronics and Communication Engineering

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Stast of Rao Gudiavallero E. Gineering College Seshadri Rao Knowledge Village Gudiavalleru - 521 356, Krishna District, A.P.

SI.		Title of the Subject	Department Offering the					
No.			Subject	L	Т	Р	Credits	
1	CE2543	Hydrology (Other than CE)	CE	4	-	-	3	
2	CE2544	Planning for Sustainable Development	CE	4	-	-	3	
3	EE2531	Electrical and Hybrid Vehicles	EEE	4	-	-	3	
4	EE2532	Power Plant Instrumentation	EEE	4	-	-	3	
5		Material Science (Other than ME)	ME	4	- e -	-	3	
6	ME2542		ME	4	-	-		
7	EC2523	Assistive Technologies (Other than ECE)	ECE	4	-	•	3	
8	EC2507	Bio-Medical Engineering (Other than EEE & ECE)	ECE	4	-	•	3	
9	CS2512	Node and Angular JS	CSE	4			3	
10	CS2513	Cyber Security	CSE	4	-	-	3	
11	CT2529	Scripting Languages (Other than CSE)	IT	4	-	-	3	
12	CT2531	Software Project Management (Other than CSE)	IT	4			3	
13	MA2518	Elements of Stochastic Processes	BS&H	4	194	-	3	
	EG2505		ENGLISH	4	-	-	3	

Open Elective - III

SI.		Title of the Subject Of	Department Offering the		of Per r weel	No.of	
No.			Subject	L	Т	Р	Credits
1	CE2562	Disaster Management (Other than CE)	CE	4	-	-	3
2	CE2563	Repair and Retrofitting Techniques	CE	4		-	3
3	EE2542	Modern Optimization Techniques	EEE	4		-	333
4	EE2543	Electrical Power Utilization (Other than EEE)	EEE	4	-		
5	ME2553	Green Engineering	ME	4	1	-	3
		Non Destructive Evaluation (Other than ME)	ME	4	-	-	
7	EC2563	Cyber Physical Systems	ECE	4	<u></u>	-	3
8	EC2508	Signals and Systems (Other than EEE & ECE)	ECE	4	-	-	
9	CS2521	Digital Forensics	CSE	4		-	333
10	CS2522	Business Intelligence & Decision Support Systems	CSE	4	-	-	3
11	IT2521	Adhoc and Sensor Networks	IT	4	-	-	3
12	CT2537	Information Retrieval Systems (Other than CSE)	IT	4	-	-	
13	MA2514	Fuzzy Logic (Other than EEE, ME & CSE)	BS&H	4	-	-	3

Open Elective - IV

Electronics and Communication Engineering

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Gudlavalleru - 521 306, Krishna District, A.P.

SI. No.	Course Code	Code Name of the Course / Laboratory		of Per er we T		No.of Credits	
	EC2541 EC2542	Professional Elective - I i) CAD for VLSI ii) Computer Organization iii) Computer and Communication Networks iv) Biomedical Engineering	4		-	3	
	EC2516 EC2550	Professional Elective - II i) Analog IC Design ii) Nano Electronics iii) Smart Antennas iv) Coding Theory	4		-	3	
	EC2558 EC2559	Professional Elective - III i) Mixed Signal IC Design ii) Cellular and Mobile Communications iii) Digital TV Engineering iv) DSP Processors and Architectures	4	-	-	3	
	EC2561 EC2562	Professional Elective - IV i) System on Chip Design ii) Wireless Sensor Networks iii) Satellite Communication iv) Digital Image Processing	4	-	820	3	
	EC2570 EC2571	Professional Elective - V i) Low Power VLSI Circuits ii) Real Time Operating Systems iii) Speech Processing iv) Adaptive Signal Processing	4	-	-	3	
	EC2574 EC2575	Professional Elective - VI i) ASIC Design ii) Embedded C iii) RADAR Engineering iv) Multi Rate Signal Processing	4	-	-	3	

Professional Electives

Electronics and Communication Engineering

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SI.	Course	Name of the Course / Laboratory	(ALCON)	of Per	No.of Credits	
No.	Code		L	Т	Р	creans
1	BA2502	Managerial Economics and Financial Analysis	3	-		2
2	MA2508	Discrete Mathematical Structures	3	1	-	3
3	CT2505	Data Structures	3	1	-	3
4	CT2506	Digital Logic Design	3	1	-	3
5	CT2507	Object Oriented Programming through Java	4	-	-	3
6	CT2508	Data Structures Lab	-	-	4	2
7	CT2509	Object Oriented Programming Lab	-	-	4	2
8	CS2503	UNIX Programming Lab	-	-	4	2
		Total	16	3	12	20
9	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)	-	-	2	-

II Year - II Semester

SI.	Course	Name of the Course / Laboratory		of Per er we	No.of	
No.	Code		L	Т	Р	Credits
1	MA2510	Probability and Statistics	3	1	-	3
2	CT2510	Operating Systems	3	1	. .	3
3	CT2511	Formal Languages and Automata Theory	3	1	-	3
4	CT2512	Computer Organization and Architecture	3	1	-	3
5		Database Management Systems	3	1	-	3
6		Open Elective-I (see list of Open Electives)	4		-	3
7	CS2504	Operating Systems Lab	-	-	4	2
8	CT2516	Database Management Systems Lab	-	-	4	2
		Total	19	5	8	22
9	NS2501	NSS / Fine Arts / Yoga / Self Defense (Mandatory Non-Credit Course)	-	-	2	-
10	CE2575 EC2508	Optional Elective - I i) Environmental Impact Assessment ii) Signals and Systems iii) Fuzzy Logic		-		3
11	CS2505	Optional Elective - II (MOOCs) Students shall opt from the list of MOOCs given I	- by the	- Depai	- rtment	2

Computer Science and Engineering

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PRINCIPAL

Sesh art Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

SI.	Course	Name of the Course / Laboratory	No.of Periods per week			No.of
No.	Code		L	Т	P	Credits
1	CT2517	Software Engineering	3	1	-	3
2	CT2518	Compiler Design	3	1	-	3
3	CT2519	Computer Networks	3	1	-	3
4	CT2520	Web Technologies	4	-	-	3
5		Professional Elective - I	4	-	-	3
6		Open Elective-II (see list of Open Electives)	4	-	-	3
7	CS2509	Computer Networks and Compiler Design Lab	-	-	4	2
8	CT2525	Web Technologies Lab	-	-	4	2
		Total	21	3	8	22
9	CT2526 EC2511 EE2512	Optional Elective - III i) Human Computer Interaction ii) Digital Signal Processing iii) Control Systems	-	-	-	3
10	CS2510	Optional Elective - IV (MOOCs) Students shall opt from the list of MOOCs given b	-	- Denar	-	2

III Year - II Semester

SI. No.	Course Code	Name of the Course / Laboratory		of Per er we		No.of Credits
No.			L	Т	Р	
1	CT2527	Design and Analysis of Algorithms	3	1	-	3
2	CT2528	Data Warehousing and Data Maining	4	-		3
3	CS2511	UML and Design Patterns *	3	-	2	3
5		Professional Elective - II (OR) Any other Elective Depending on Industry Needs	4	-	-	3
6		Open Elective-III(see list of Open Electives)	4	-	-	3
7	CS2514	Data Mining Lab	-	-	4	2
8	CS2515	Mini Project	-	-	4	2
		Total	18	1	10	19
	CS2516 EC2512 EE2554	ii) Embedded System Design	-	-		3
10	CS2517	Optional Elective - VI (MOOCs)	-	-	-	2
		Students shall opt from the list of MOOCs given b	y the	Depar	tment)	

* Integrated Course with Theory and Laboratory

L: Lecture T: Tutorial P: Practical

Computer Science and Engineering

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PRINCIPAL

Sesh Mill Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krislina District, A.P.

IV Year - I Semester

SI.	Course	Name of the Course / Laboratory	No.of Periods per week			No.of Credits
No.	Code		L	Т	P	Creans
1	CT2533	Cyptography and Network Secuirty	4	-	-	3
2	CT2534	Big Data Analytics	4	-	-	3
3		Professional Elective - III	4	-	-	3
4		Professional Elective - IV	4	-	-	3
5		Open Elective-IV(see list of Open Electives)	4	-	-	3
6	CT2538	Big Data Analytics Lab	-	-	4	2
7	CS2523	Cryptography and Network Security Lab	-	1 - .	4	2
8	CS2524	Internship / Industrial Training / Practical Training	-	-	-	2
		Total	20	-	8	21
9	CT2515	Optional Elective - VII i) Network Programming i) Systems Software iii) Robotics	-	-	-	3
10	CS2526	Optional Elective - VIII (MOOCs) Students shall opt from the list of MOOCs given	- by the	- Depar	- tment)	2

IV Year - II Semester

SI. No.	Course Code	Name of the Course / Laboratory		o.of Periods		No.of Credits
1		Professional Elective - V	4	-	-	3
2		Professional Elective - VI	4	-	-	3
3	CS2531	Project	-	-	20	10
		Total	8	-	20	16

L : Lecture

ure T : Tutorial

Computer Science and Engineering

P : Practical

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PRESIDIAL

Seahuda Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

SI.		Title of the Subject	Department Offering the		of Per r weel		No.of
No.			Subject	L	Т	Р	Credits
1	CE2515	Elements of Civil Engineering (Other than CE)	CE	4	-	2	3
2		Building Services	CE	4	-	-	3
3		Electrical Materials	EEE	4		-	3
4		Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	-	200
5	ME2520	Elements of Manufacturing Processes	ME	4	-	-	3
6		Automotive Engineering (Other than ME)	ME	4	-	-	3
7	EC2531	Introduction to MPMC (Other than ECE/EEE/CSE/IT)	ECE	4	-	-	3
8	EC2532	Fundamentals of Communications (Other than ECE)	ECE	4	-	-	3
9	CT2514	Computer Graphics (Other than IT)	CSE	4	-	-	3
10	CT2507	Object Oriented Programming through Java (other than CSE & IT)	CSE	4	-	-	3
11	CT2515	Systems Software	IT	4	-	-	3
12	1T2502	Web Programming(Other than CSE & IT)	IT	4	-	-	3
13	MA2516	Mathematical Cryptography(Other than CSE)	BS&H	4	-	-	333
14	PH2508	Semiconductor Physics (Other than ECE)	BS&H	4	-	-	3

Open Elective - I

SI.		Title of the Subject	Department Offering the		of Per r week		No.of	
No.			Subject	L	Т	Р	Credits	
1	CE2530	Geoinformatics (other than CE)	CE	4	-	-	3	
2	CE2531	Environmental Sanitation	CE	4	-	- 10	3	
3	EE2523	Modeling & Simulation of Engineering Systems	EEE	4	-		3	
4	EE2524	Power Systems Engineering (Other than EEE)	EEE	4	-	-	3	
5	ME2532	Elements of Mechanical Transmission (Other than ME)	ME	4	-	-	3	
6	ME2533	Material Handling Equipment	ME	4	-	-	3	
7	EC2543	Automotive Electronics	ECE	4	-	-	3	
8	EC2544	Introduction to MEMS (other than ECE)	ECE	4	-	r		
9	CS2508	Data Science	CSE	4	-	-	3	
10	CT2524	Virtual and Augmented Reality (other than IT)	CSE	4	-	-	3	
11	IT2505	Open Source Software	IT	4		-	3	
12	IT2506	Cyber Laws	IT	4	-	-	3	
13		Quality, Reliability and Operations Research	BS&H	4	-	-	3	

Open Elective - II

Computer Science and Engineering

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PR Sestion, Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

SI.			Department Offering the	No.e		No.of	
No.			Subject	L	Т	Р	Credits
1	CE2543	Hydrology (Other than CE)	CE	4	-	-	3
2	CE2544	Planning for Sustainable Development	CE	4	-	-	3
3	EE2531	Electrical and Hybrid Vehicles	EEE	4	14	-	3
4	EE2532	Power Plant Instrumentation	EEE	4		-	3
5	ME2541	Material Science (Other than ME)	ME	4	-	12	3 3 3 3
6	ME2542		ME	4	-	-	3
7	EC2523	Assistive Technologies (Other than ECE)	ECE	4	-	-	3
8	EC2507	Bio-Medical Engineering (Other than EEE & ECE)	ECE	4	-	-	3
9	CS2512	Node and Angular JS	CSE	4	3 8 0	-	3
10	CS2513	Cyber Security	CSE	4		-	333
11	CT2529	Scripting Languages (Other than CSE)	IT	4	-	-	3
12	CT2531	Software Project Management (Other than CSE)	IT	4	-	-	3
13	MA2518	Elements of Stochastic Processes	BS&H	4	-		3
14	EG2505	Academic Communication	ENGLISH	4	-		3

Open Elective - III

SI.		Title of the Subject	Department Offering the		of Per r weel	No.of	
No.			Subject	L	Т	Р	Credits
1	CE2562	Disaster Management (Other than CE)	CE	4	-	-	3
2	CE2563	Repair and Retrofitting Techniques	CE	4	-	-	3
3		Modern Optimization Techniques	EEE	4	್ರಾ	-	3
4	EE2543	Electrical Power Utilization (Other than EEE)	EEE	4	-	-	
5	ME2553	Green Engineering	ME	4	-	-	3
6	ME2554	Non Destructive Evaluation (Other than ME)	ME	4	-	7	
7	EC2563	Cyber Physical Systems	ECE	4	-	-	3
8	EC2508	Signals and Systems (Other than EEE & ECE)	ECE	4	-	-	
9	CS2521	Digital Forensics	CSE	4	-	-	3
10	CS2522	Business Intelligence & Decision Support Systems	CSE	4	-	-	3
11	IT2521	Adhoc and Sensor Networks	IT	4		-	3
12	CT2537	Information Retrieval Systems (Other than CSE)	IT	4	-	-	3 3 3
13	MA2514	Fuzzy Logic (Other than EEE, ME & CSE)	BS&H	4	-	-	3

Open Elective - IV

Computer Science and Engineering

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PREMARAL Seshadh Nao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District A.P.

SI. No.	Course Code	Name of the Course / Laboratory		of Per er we T		No.of Credits
	CT2522 CT2523	Professional Elective - I i) C#.NET ii) Advanced Data Structures iii) Software Testing Methodologies iv) Principles of Programming Languages	4	-	-	3
	CT2529	Professional Elective - II i) Artificial Intelligence ii) Scripting Languages iii) Microprocessors and Interfacing iv) Software Project Management	4	-	-	3
	CT2535 CS2519	Professional Elective - III i) Machine Learning ii) Internet of Things iii) NoSQL Databases iv) Software Requirements Engineering and Estimation	4		-	3
	CT2530 CT2537	Professional Elective - IV i) Mobile Computing ii) Image Processing iii) Information Retrieval Systems iv) Optimization Techniques	4	-	-	3
	CT2540	Professional Elective - V i) Web Mining ii) Cloud Computing iii) Agile Software Development Process iv) Blockchain Technologies	4	-	-	3
	Concentration and a concentration	Professional Elective - VI i) Distributed Systems ii) Social Networks iii) Web Services iv) Deep Learning	4	-	-	3

Professional Electives

Computer Science and Engineering

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PRINCEPAL

Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District A.P.

SI.	Course	Name of the Course / Laboratory	No.of Periods			No.of Credits
No.	Code		L	Т	Р	Cituits
1	MA2508	Discrete Mathematical Structures	3	1		3
2	CT2505	Data Structures	3	1	-	3
3	CT2506	Digital Logic Design	3	1	-	3
4	CT2507	Object Oriented Programming through Java	4		-	3
5	IT2501	UNIX and Shell Programming *	4	-	2	4
6	CT2508	Data Structures Lab	-	-	4	2
7	CT2509	Object Oriented Programming Lab	-	-	4	2
		Total	17	3	10	20
8	NS2501	NSS / Fine Arts / Yoga / Self Defense (Mandatory Non-Credit Course)	-	-	2	-

II Year - II Semester

SI. No.	Course Code	Name of the Course / Laboratory	No.of Periods per week L T P			No.of Credits	
1	MA2510	Probability and Statistics	3	1	-	3	
2	EC2521	Microprocessors and Microcontrollers *	4	-	2	4	
3	CT2511	Formal Languages and Automata Theory	3	1	-	3	
4	CT2512	Computer Organization and Architecture	3	1	-	3	
5	CT2513	Database Management Systems	3	1	-	3	
6		Open Elective-I (see list of Open Electives)	4		1.0	3	
7	CT2516	Database Management Systems Lab		-	4	2	
-		Total	20	4	6	21	
8	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)	1	-	2	-	
9	IT2503 EC2508 EE2506	Optional Elective - I i) Information and Communication Technology ii) Signals and Systems iii) Basic Electrical Engineering	-	-	-	3	
10	IT2504	Optional Elective - II (MOOCs) Students shall opt from the list of MOOCs given l	- by the	- Depar	- tment	2	

L: Lecture T: Tutorial P: Practical

Information Technology

PRINCIPAL

Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

SI. No.	Course Code	Name of the Course / Laboratory	No.of Periods per week L T P		No.of Credits	
1	CT2517	Software Engineering	3	1	-	3
2	CT2518	Compiler Design	3	1	L	3
3	CT2510	Operating Systems	3	1	-	3
4	CT2520	Web Technologies	4	-	5	3
5		Professional Elective - I	4	-	¥ (3
6		Open Elective-II (see list of Open Electives)	4	-	-	3
7	IT2507	Operating Systems and Compiler Design Lab	17.5	-	4	2
8	CT2525	Web Technologies Lab		-	4	2
		Total	21	3	8	22
9	IT2508 EC2522 CE2549		-	-	-	3
10	IT2509	Optional Elective - IV (MOOCs) Students shall opt from the list of MOOCs given b	- by the	- Depar	- tment)	2

III Year - II Semester

SI.	Course	e Name of the Course / Laboratory	No.of Periods per week			No.of	
No.	Code		L	Т	Р	Credits	
1	CT2527	Design and Analysis of Algorithms	3	I	-	3	
2	CT2528	Data Warehousing and Data Maining	4	-	-	3	
3	IT2510	Object Oriented Analysis and Design *	4	-	2	4	
4	CT2519	Computer Nerworks	3	1	-	3	
5		Professional Elective - II	4	-	-	3	
6		Open Elective-III(see list of Open Electives)	4	-	-	3	
7	IT2513	Computer Networks and Data Mining Lab	-	-	4	2	
		Total	22	2	6	21	
8	IT2514 IT2515 ME2544	Optional Elective - V i) Secure Web Technologies ii) Management Information Systems iii) Robotics	•	÷	-	3	
9	IT2516	Optional Elective - VI (MOOCs) Students shall opt from the list of MOOCs given b	- by the	- Depar	- tment)	2	

L : Lecture T : Tutorial P : Practical

Information Technology

PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

IV Year - I Semester

SI.	Course Code	Name of the Course / Laboratory		of Per		No.of	
No.		Hante of the Course? Euroratory	L	Т	P	Credits	
1	BA2502	Managerial Economics and Financial Analysis	3	-	-	2	
2	CT2534	Big Data Analytics	4	-	-	3	
3		Professional Elective - III	4	-	-	3	
4		Professional Elective - IV	4	-	-	3	
5		Open Elective-IV(see list of Open Electives)	4	-	-	3	
6	CT2538	Big Data Analytics Lab	-	-	4	2	
7	IT2522	Mini Project	-	-	4	2	
8	IT2523	Internship / Industrial Training / Practical Training	-	-	-	2	
		Total	19	-	8	20	
9	CT2539	Optional Elective - VII i) Social Networks	-	-	-	3	
		ii) Assistive Technologies					
	ME2542	iii) Renewable Energy Sources					
10	IT2524	Optional Elective - VIII (MOOCs) Students shall opt from the list of MOOCs given	- by the	- Depar	- tment)	2	

IV Year - II Semester

SI.	Course	Name of the Course / Laboratory		of Pei er we		No.of
No.	Code		L	Т	P	Credits
1		Professional Elective - V	4	~	-	3
2		Professional Elective - VI	4	-	-	3
3	IT2529	Project	-	-	20	10
	1	Total	8	-	20	16

L : Lecture

P : Practical

Information Technology

T : Tutorial

PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District. A.P.

SI.		Title of the Subject	Department Offering the				No.of	
No.			Subject	L	Т	Р	Credits	
1	CE2515	Elements of Civil Engineering (Other than CE)	CE	4	-	-	3	
2	CE2516	Building Services	CE	4	-		3	
3	EE2515	Electrical Materials	EEE	4	-	1923	330	
4	EE2516	Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	17.0		
5	ME2520	Elements of Manufacturing Processes (Other than ME)	ME	4	-	-	3	
6	ME2521	Automotive Engineering (Other than ME)	ME	4	-	-	3	
7	EC2531	Introduction to MPMC (Other than ECE/EEE/CSE/IT)	ECE	4	-	-	3	
8	EC2532	Fundamentals of Communications (Other than ECE)	ECE	4	-	-	3	
9	CT2514	Computer Graphics (Other than IT)	CSE	4	-	-	3	
10		Object Oriented Programming through Java (other than CSE & IT)	CSE	4	-	-	3	
11	CT2515	Systems Software	IT	4	-	-	3	
12	IT2502	Web Programming(Other than CSE & IT)	IT	4	-	-	3	
13	MA2516	Mathematical Cryptography(Other than CSE)	BS&H	4	-	-	333	
14		Semiconductor Physics (Other than ECE)	BS&H	4		-	3	

Open Elective - I

SI.			Department Offering the		of Per r week	No.of	
No.			Subject	L	Т	Р	Credits
1	CE2530	Geoinformatics (other than CE)	CE	4	-	-	3
2	CE2531	Environmental Sanitation	CE	4	-	-	3 3 3
3	EE2523	Modeling & Simulation of Engineering Systems	EEE	4	-	-	3
4	EE2524	Power Systems Engineering (Other than EEE)	EEE	4	-	-	
5	ME2532	Elements of Mechanical Transmission (Other than ME)	ME	4	-	-	3
6	ME2533	Material Handling Equipment	ME	4	-	-	3
7	EC2543	Automotive Electronics	ECE	4		-	3
8	EC2544	Introduction to MEMS (other than ECE)	ECE	4	-	-	3
9	CS2508	Data Science	CSE	4	-	-	3
10	CT2524	Virtual and Augmented Reality (other than IT)	CSE	4	-	-	
11	IT2505	Open Source Software	IT	4	-	-	3
12	IT2506	Cyber Laws	IT	4	-	-	3
13	MA2517	Quality, Reliability and Operations Research	BS&H	4	-	-	3

Open Elective - II

Information Technology

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SI.		Title of the Subject O	Department Offering the	No.0 pe	No.of		
No.			Subject	L	Т	Р	Credits
1	CE2543	Hydrology (Other than CE)	CE	4		-	3
2	CE2544	Planning for Sustainable Development	CE	4	-	-	3
3	EE2531	Electrical and Hybrid Vehicles	EEE	4	1947	-	3
4	EE2532	Power Plant Instrumentation	EEE	4	-	-	3 3 3 3
5	ME2541	Material Science (Other than ME)	ME	4	-	2	3
	ME2542		ME	4	-		3
7	EC2523	Assistive Technologies (Other than ECE)	ECE	4	-	2	3
8	EC2507	Bio-Medical Engineering (Other than EEE & ECE)	ECE	4	-	-	3
9	CS2512	Node and Angular JS	CSE	4	100	-	3
10	CS2513	Cyber Security	CSE	4	•	-	3
	CT2529		IT	4	1	-	3
12	CT2531	Software Project Management (Other than CSE)	IT	4	-	-	3
13	MA2518	Elements of Stochastic Processes	BS&H	4	-	-	3
		Academic Communication	ENGLISH	4	-	-	3

Open Elective - III

SI.		Department Offering the	No.of Periods per week			No.of	
No.			Subject	L	Т	Р	Credits
1	CE2562	Disaster Management (Other than CE)	CE	4	-	-	3
2	CE2563	Repair and Retrofitting Techniques	CE	4	-		3
3	EE2542	Modern Optimization Techniques		4	-		333
4	EE2543	Electrical Power Utilization (Other than EEE)	EEE	4	-	-	
5	ME2553	Green Engineering	ME	4	-	-	3
6		Non Destructive Evaluation (Other than ME)	ME	4	-	-	
7	EC2563	Cyber Physical Systems	ECE	4	-	-	3
8	EC2508	Signals and Systems (Other than EEE & ECE)	ECE	4	-	-	3
9	CS2521	Digital Forensics	CSE	4	-	-	3
10	CS2522	Business Intelligence & Decision Support Systems	CSE	4	-	-	3
	IT2521	Adhoc and Sensor Networks	IT	4	-	-	3333
12	CT2537	Information Retrieval Systems (Other than CSE)	IT	4	-	-	
13	MA2514	Fuzzy Logic (Other than EEE, ME & CSE)	BS&H	4	-	-	3

Open Elective - IV

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SI. No.	Course Code	Name of the Course / Laboratory		of Periods er week T P		No.of Credit	
	CT2514	Professional Elective - I i) Artificial Intelligence ii) Embedded System Design iii) Computer Graphics iv) Advanced Data Structures	4	-	-	3	
	IT2511 IT2512 CT2530 CT2532	Professional Elective - II i) Soft Computing Techniques ii) Real Time Systems iii) Image Processing iv) Agile Software Development Process	4		4	3	
	IT2517 IT2518 CT2526 CT2523	 Professional Elective - III i) Machine Learning and Pattern Recognition ii) Distributed Operating Systems iii) Human Computer Interaction iv) Software Testing Methodologies 	4	-		3	
	IT2519 CT2536 IT2520 CT2533	Professional Elective - IV i) Business Intelligence ii) Mobile Computing iii) Multimedia Tools iv) Cryptography and Network Security	4	1		3	
	IT2525 IT2526 CT2524 IT2527	Professional Elective - V i) Steganography and Biometrics ii) Parallel Computing iii) Virtual and Augmented Reality iv) E-Commerce	4		-	3	
		Professional Elective - VI i) Internet of Things ii) Cloud Computing iii) Blockchain Technologies iv) Design Patterns	4	-	-	3	

Professional Electives

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SI.	Course	Name of the Course / Laboratory		No.of Periods per week			
No.	Code		L	Т	Р	Credits	
1	CE3901	Advanced Structural Analysis **	3	-	-	3	
2	CE3902	Theory of Elasticity	3		-	3	
3		Professional Elective - I	3	-	-	3	
4		Professional Elective - II	3		-	3	
5	BA3901	Research Methodology & IPR	3	-		3	
6	CE3908	Advanced Structural Engineering Lab	-	-	4	2	
7	CE3909	Advanced Concrete Technology Lab	-	-	4	2	
		Total	15	-	8	19	
8	BA3902	Constitution of India (Audit Course)	2	-	-		

П	Semester	
-		

SI.	Course Code	Name of the Course / Laboratory	No.of Periods per week			No.of Credits
No.			L	Т	P	Creatts
1	CE3910	Finite Element Methods in Structural Engineering **	3	- 4	-	3
2	CE3911	Structural Dynamics	3	-	-	3
3		Professional Elective - III	3	-	-	3
4		Professional Elective - IV	3	-	-	3
5	CE3918	Computer Applications in Structural Engineering Lab	-	-	4	2
6	CE3919	Structural Design Lab	+	-	4	2
7	CE3920	Mini Project with Seminar	-	-	6	3
		Total	12	-	14	19
8	EG3901	English for Research Paper Writing (Audit Course)	2	-	-	-

III Semester

SI.	Course	Name of the Course / Laboratory		of Per		No.of
No.	Code		L	Т	Р	Credits
1		Professional Elective - V	3	-		3
2		Open Elective	3	-	-	3
3		Dissertation Phase - I		-	20	10
		Total	6	-	20	16

** Project Based Course

L: Lecture T: Tutorial P: Practical

M.Tech - Structural Engineering (CE) - R20

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IV Semeste	r
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	Course	Name of the Course / Laboratory		of Pei er we	1	No.of
No.	Code		L	Т	Р	Credits
1		Dissertation Phase - II		-	32	16
		Total	-	-	32	16

Professional Electives:

Professional Elective - I

MA3901 Computational Methods in Structural Engineering

CE3903 Advanced R.C. Design

CE3904 Experimental Stress Analysis

Professional Elective - II

- CE3905 Theory of Plates and Shells
- CE3906 Advancements in Concrete Technology
- CE3907 Design of Pre-stressed Concrete Structures

Professional Elective - III

- CE3912 Advanced Design of Steel Structures
- CE3913 Stability of Structures
- CE3914 Design of High-rise Structures

Professional Elective - IV

- CE3915 Design of Bridge Structures
- CE3916 Repairs and Retrofitting of Structures
- CE3917 Ground Improvement Methods

Professional Elective - V

- CE3921 Earthquake Resistant Design of Structures
- CE3922 Design of Sub-structures
- CE3923 MOOCs

Open Electives:

CE3924 Sustainable Development

EE3924 Energy Audit, Conservation & Management

- ME3924 Rapid Prototyping
- EC4924 Automotive Electronics (Otther than VLSID&ES)
- CS3924 Soft Computing Techniques

M.Tech - Structural Engineering (CE) - R20

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Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

SI.	Course	Course Name of the Course / Laboratory	No.of Periods per week			No.of
No.	Code		L	T P		Credits
1	EE3901	Electrical Machine Modeling and Analysis	3	-	-	3
2	EE3902	Analysis of Power Electronic Converters**	3	-		3
3		Professional Elective - I	3	4		3
4		Professional Elective - II	3	-	- 2	3
5		Research Methodology & IPR	3	-	-	3
4 5 6	EE3909	Power Electronics Simulation Laboratory	-	-	4	2
7	EE3910	Power Converters Laboratory	-	-	4	2
		Total	15	-	8	19
8	BA3902	Constitution of India (Audit Course)	2		-	

II Semester

SI.	Course	Name of the Course / Laboratory	No.of Periods per week			No.of Credits
No.	Code	· · · · · · · · · · · · · · · · · · ·	L	Т	Р	Creatts
1	EE3911	Switched Mode Power Conversion	3	(±	-	3
2	EE3912	Power Electronic Control of Electrical Drives **	3	-		3
3		Professional Elective - III	3	-	-	3
		Professional Elective - IV	3	-	-	3
4	EE3919	Electric Drives Simulation Laboratory	-	-	4	2
6	EE3920	Electric Drives Laboratory	-	-	4	2
7	EE3921	Mini Project with Seminar	-	-	6	3
		Total	12	-	14	19
8	EG3901	English for Research Paper Writing (Audit Course)	2		-	-

III Semester

SI.	Course	Name of the Course / Laboratory		of Pei er we		No.of
No.	Code	•	L	Т	Р	Credits
1		Professional Elective - V	3	-	-	3
2		Open Elective	3	-	-	3
3		Dissertation Phase - I	-	-	20	10
		Total	6	-	20	16

** Project Based Course

L:Lecture T:Tutorial P:Practical

M.Tech - Power Electronics and Electric Drives (EEE) - R20

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IV Semester

SI.	Course	Name of the Course / Laboratory		of Pei er we	100	No.of
No.	Code		L	Т	Р	Credits
1		Dissertation Phase - II		-	32	16
		Total		-	32	16

Professional Electives:

Professional Elective - I

EE3903 Modern Control Theory

EE3904 Power Quality and Custom Power Devices EE3905 Programmable Logic Controllers and Applications

Professional Elective - II

- EE3906 Artificial Intelligence Techniques
- EE3907 Renewable Energy Technologies
- EE3908 Flexible AC Transmission Systems

Professional Elective - III

EE3913 Control and Integration of Renewable Energy Systems EE3914 Hybrid Electric Vehicles EE3915 Advanced Digital Control Systems

Professional Elective - IV

EE3916 Advanced Digital Signal Processing EE3917 Applications of Power Converters EE3918 Microcontrollers

Professional Elective - V

EE3922Digital Signal Processing Controlled DrivesEE3923Smat Grid TechnologiesEE39....MOOCs

Open Electives:

CE3924 Sustainable Development
EE3924 Energy Audit, Conservation & Management
ME3924 Rapid Prototyping
EC4924 Automotive Electronics (Otther than VLSID&ES)
CS3924 Soft Computing Techniques

M.Tech - Power Electronics and Electric Drives (EEE) - R20

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Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

I Semester	Ι	Sem	es	ter
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SI.	Course Name of the Course / Laboratory	No.of Periods per week			No.of	
No.	Code		L	Т	Р	Credits
1	ME3901	Mechanical Vibrations and Acoustics **	3		-	3
2	ME3902	Advanced mechancis of Solids	3	-	-	3
3		Professional Elective - I	3	-	-	3
4		Professional Elective - II	3	-	-	3
5	BA3901	Research Methodology & IPR	3	194	-	3
6	ME3909	Machine Dynamics Lab	-	-	4	2
7	ME3910	Advanced Material Testing Lab	-	-	4	2
		Total	15		8	19
8	BA3902	Constitution of India (Audit Course)	2	- 140 -	1.4	

II Semester

SI.	Course Name of the Course / Laboratory		No.of Periods per week			No.of Credits
No.	Code		L	Т	P	Credits
1	MA3902	Computational Methods in Engineering	3	1.00	140	3
2	ME3911	Advanced Finite Element Methods **	3	-	-	3
3		Professional Elective - III	3		-	3
4		Professional Elective - IV	3	-	-	3
5	ME3918	Modeling and Simulation Lab	-	-	4	2
6	ME3919	Computational Methods Lab	-	-	4	2
7	ME3920	Mini Project with Seminar	-	-	6	3
		Total	12	-	14	19
8	EG3901	English for Research Paper Writing (Audit Course)	2	-	-	-

III Semester

SI.	Course Name of the Course / Laborato	Name of the Course / Laboratory		of Per er we		No.of
No.	Code		L	Т	Р	Credits
1		Professional Elective - V	3	-	-	3
2		Open Elective	3	-	-	3
3	ME3926	Dissertation Phase - I	-	L	20	10
		Total	6	-	20	16

** Project Based Course

T : Tutorial P: Practical L : Lecture

M.Tech - Machine Design (ME) - R20

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IV Semester

SI.	Course	Name of the Course / Laboratory		of Pei er we		No.of
No.	Code		L	Т	Р	Credits
1	ME3927	Dissertation Phase - II		-	32	16
		Total	-	-	32	16

Professional Electives:

Professional	Elective - I
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ME3903	Analysis and	Synthesis of	Mechanisms
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- ME3904 Advanced Materials
- ME3905 Industrial Robotics

Professional Elective - H

- ME3906 Gear Engineering
- ME3907 Advanced Optimization Techniques
- ME3908 Rotor Dynamics

Professional Elective - III

- ME3912 Design for Manufacturing and Assembly
- ME3913 Mechatronics
- ME3914 Vehicle Dynamics

Professional Elective - IV

- ME3915 Signal Analysis and Condition Monitoring
- ME3916 Fracture Mechanics
- ME3917 Experimental Stress Analysis

Professional Elective - V

- ME3921 Tribology ME3922 Composite Materials
- ME3923 MOOCs

Open Electives:

CE3924 Sustainable Development

EE3924 Energy Audit, Conservation & Management ME3924 Rapid Prototyping

- EC4924 Automotive Electronics (Otther than VLSID&ES)
- CS3924 Soft Computing Techniques

M.Tech - Machine Design (ME) - R20

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Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P.

SI.	Course	Name of the Course / Laboratory	No.of Periods per week			No.of
No.	Code		L	Т	Р	Credits
1	EC4901	CMOS VLSI Design	3	-	-	3
2	EC4902	Advanced Microcontrollers *	3		-	3
3		Professional Elective - I	3	-	-	3
4		Professional Elective - II	3	-	-	3
5	BA3901	Research Methodology & IPR	3	-	-	3
6	EC4909	CMOS VLSI Design Lab	-	-	4	2
7	EC4910	Advanced Microcontrollers Lab	-	-	4	2
		Total	15	-	8	19
8	BA3902	Constitution of India (Audit Course)	2	-	-	

II Semester

SI.	Course	Name of the Course / Laboratory	No.of Periods per week			No.of	
No.	Code		L	Т	Р	Credits	
1	EC4911	VLSI System Design *	3	-	-	3	
	EC4912	Embedded System Based IoT	3	-	-	3	
3		Professional Elective - III	3	-	-	3	
4		Professional Elective - IV	3	-	-	3	
5	EC4919	VLSI System Design Lab	-	-	4	2	
6	EC4920	Embedded System and IoT Lab	-	-	4	2	
7	EC4921	Mini Project with Seminar	-	-	6	3	
		Total	12	-	14	19	
8	EG3901	English for Research Paper Writing (Audit Course)	2	-	-	-	

III Semester

SI.	Course	Name of the Course / Laboratory	No.	No.of		
No.	Code		L	Т	Р	Credits
1		Professional Elective - V	3	-	-	3
2		Open Elective	3	-	-	3
3	EC4925	Dissertation Phase - I	14	-	20	10
		Total	6	-	20	16

* Project Based Theory Course

T : Tutorial P : Practical L : Lecture

M.Tech - VLSI Design and Embedded System (ECE) - R20

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PRINCIPAL Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District. A.P.

IV Semester

SI.	Course	Name of the Course / Laboratory	1.1120	of Per er we	1	No.of
No.	Code		L	Т	Р	Credits
1	EC4925	Dissertation Phase - II	-	-	32	16
		Total	-	-	32	16

Professional Electives:

Professional Elective - I

- EC4903 Testing and Testability of VLSI Circuits
- EC4904 Advanced Digital Design
- EC4905 Digital Signal and Image Processing

Professional Elective - II

- EC4906 VLSI Signal Proessing
- EC4907 System Design with Embedded Linux
- EC4908 Parallel Processing

Professional Elective - III

EC4913	Advances in VLSI Design
EC4914	Embedded Computer Architecture

EC4915 System on Chip Design

Professional Elective - IV

- EC4916 VLSI Interconnects
- EC4917 Communication Buses and Interfaces
- EC4918 Advanced Digital Signal Processing

Professional Elective - V

- EC4922 Lower Power VLSI Design
- EC4923 Network Security and Crypthography
- ME49... MOOCs

Open Electives:

- CE3924 Sustainable Development
- EE3924 Energy Audit, Conservation & Management
- ME3924 Rapid Prototyping
- EC4924 Automotive Electronics (Otther than VLSID&ES)
- CS3924 Soft Computing Techniques

M.Tech - VLSI Design and Embedded System (ECE) - R20

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SESHADRI RAO GUDLAVALLERU ENGINEERING COLLEGE SeshadriRao Knowledge Village, Gudlavalleru

Department of Computer Science and Engineering

R20 PG - M.Tech CSE (AI&ML)

Course Structure

SI.	Course	Course Name of the Course / Laboratory					Total
No.	Code			L	Т	P	Credits
1		Research Methodologies and IPR	HSS	3	-	-	3
2	CS3901	Advanced Data Structures and Algorithm Analysis	PC	3	-	-	3
3	CS3902	Data Science	ES	3	-	-	3
4	CS3903 CS3904 CS3905	 Professional Elective – I 1. Digital Image Processing 2. Ad hoc and Sensor Networks 3. Intelligent Systems 	PE	3	-	-	3
5	CS3906 CS3907 CS3908	 Professional Elective – II 1. Internet of Things 2. Principles of Computer Security 3. Distributed Systems 	PE	3	i,	-	3
6	CS3909	Advanced Data Structures and Algorithm Analysis Lab	PC			4	2
7	CS3910	Data Science Lab	ES	-	-	4	2
8		Constitution of India	AC	2	-	-	-
	Internet State		Total :	17	-	8	19

SI.	Course	Name of the Course / Laboratory No. of hou per wee					No. of	
No.	code	Hame of the Course / Euroran		L	Т	P	Credits	
1	CS3911	MEAN Stack Technologies	PC	3	-	-	3	
2	CS3912	Machine Learning	PC	3	-	-	3	
3	CS3912Machine LearningProfessional Elective – IIICS39131. Blockchain TechnologyCS39142. Data Preparation and AnalysisCS39153. Natural Language Processing		PE	3	-	-	3	
4	CS3916 CS3917 CS3918	 Professional Elective – IV 1. Cloud Computing 2. Quantum Computing 3. Digital Forensics 	PE	3	-	-	3	
5	CS3919	MEAN Stack Technologies Lab	PC		-	4	2	
6	CS3920	Machine Learning using Python Lab	PC	-	-	4	2	
7	CS3921	Mini Project with Seminar	PROJ	-	-	6	3	
8		English for Research Paper Writing	AC	2	-	-	-	
	VINE OF THE REAL		Total:	14	- 10	14	19	

PRINCIPAL Seshadri Rao Gudlavalleru Engineering College

SI.			No	No. of			
No.	Code			L	Т	Р	Credits
1	CS3922 CS3923	 Professional Elective – V Deep Learning Recommender Systems MOOCs-1 (NPTEL/SWAYAM) 12 Week Program related to the program which is not listed in the course structure 	PE	3	-	-	3
2		 Open Elective- I 1. Courses Offered by Other Departments 2. MOOCs-2 (NPTEL/SWAYAM)-Any 12 Week Course on Engineering/ Management/ Mathematics offered by other than parent department 	OE	3	-	-	3
3	CS3925	Dissertation (Initiated in third Semester)	PROJ	4	-	20	10
	Section of the	Total :		6		20	16

SI.	Course Name of the Course / Laboratory					No.of hours per week			
No.	Code			L	Т	Р	Credits		
1	CS3926	Dissertation (Carried out in third & fourth Semesters)	PROJ	-	-	32	16		
		Total :		-	-1	32	16		

Open Elective-I	CS3924	Soft Computing Techniques
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Seshadri Rao Gudlavalleru Engineering College Seshadri Rao Knowledge Village Gudlavalleru - 521 356, Krishna District, A.P. 2

SI. No.	Course Code		No.of Periods per week			No.of
			L	т	Р	Credits
1	BA3902	Perspectives of Management	4	-	-	4
2	BA3903	Managerial Economics	4	2	-	4
3	BA3904	Accounting for Managers	3	-	1	4
4	BA3905	Business Communication & Skill Development	4	-	-	4
5	BA3906	Business Environment and Legislation	4	-	-	4
6	BA3907	Quantitative Analysis for Business Decisions	3	-	1	4
7	BA3908	Business Law	4	-	-	4
8	BA3909	Information Technology Lab for Business Management	-	2	4	2
	1	Total	26	-	6	30

COURSE STRUCTURE

II Semester

I Semester

SI. No.	Course Code	Name of the Course / Laboratory	No.of Periods per week			No.of
			L	Т	Р	Credits
1	BA3910	Financial Management	3	-	1	4
2	BA3911	Marketing Management	4	-	12	4
3	BA3912	Human Resource Management	4	-	-	4
4	BA3913	Production & Operations Management	4	- 1	-	4
5	BA3914	Business Research Methods	3	-	1	4
6	BA3915	International Business	4	-	-	4
7	BA3916	Organizational Behaviour	4	-	-	4
Total			26	-	-	28

L : Lecture

T: Tutorial

P : Practical

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III Semester

SI. No.	Course Code	Name of the Course / Laboratory		No.of Periods per week			No.of
					Т	Р	Credits
1	BA3917	Business Policy & Strategic Management		4	-	-	4
2	BA3918	Logistics & Supply Chain Management		4	7/	-	3
3	BA3919	Retail Management		4	-	-	3
4	BA3920	Business Ethics & Corporate Governance		4	-	-	3
5		Specialisation - I	Marketing subjects	4	-	14	3
6		Specialisation - II	common to all	4	-	-	3
7		Specialisation - III		4	-	-	3
8	18	Specialisation - IV	Finance (or) HR	4	-		3
			Total	32	-	-	25

IV Semester

SI. No.		Name of the Course / Laboratory		No.of Periods per week			No.of
					т	Ρ	Credits
1	BA3927	Entrepreneurship & Project Management		4	-	-	4
2	BA3928	Management of Ret	Management of Retail Operations		-	-	3
3		Specialisation - V	Marketing subjects	4	-	-	3
4		Specialisation - VI	common to all	4	-	-	3
5		Specialisation - VII	Einenne (er) UD	4	-	-	3
6		Specialisation - VIII	Finance (or) HR	4	-	- 1	3
7		Project Report			-		5
8		Comprehensive Viva-Voce		-	-	-	1
Total				20	0	0	25

Specialisations:

III Semester	IV Semester				
Marketing	Marketing				
BA3921 Advertising & Brand Management	BA3929 Marketing of Services				
BA3922 Consumer Behaviour	BA3930 Sales & Distribution Managemer				
Finance	Finance				
BA3923 Security Analysis & Portfolio Mgt.	BA3931 Financial Derivatives				
BA3924 International Financial Management	BA3932 Financial Institutions and Services				
HR	HR				
BA3925 Human Resources Analytics	BA3933 Compensation Management				
BA3926 Industrial Relations and Labour Laws	BA3934 Management of Change and Development				

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