



# SESHADRI RAO 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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**Dr. G. V. S. N. R. V. PRASAD**

M.S., M.Tech., Ph.D.,

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

**Principal**

1.2.1: *List of new courses introduced of the total number of courses across all programs offered during the academic year 2018 - 2019.*

S. No	Name of the Course	Course Code	Programme Name
1.	Computer Aided Drafting lab	CE2502	B. Tech-CE
2.	Linear Algebra and Differential Equations	MA2501	B. Tech-CE
3.	Integral Transforms and Multiple integrals	MA2503	B. Tech-CE
4.	Engineering Physics	PH2501	B. Tech-CE
5.	Engineering Physics Lab	PH2503	B. Tech-CE
6.	Engineering Chemistry	CH2501	B. Tech-CE
7.	Engineering Chemistry Lab	CH2502	B. Tech-CE
8.	Engineer and Society	EN2502	B. Tech-CE
9.	Mechanics of Solids	CE2504	B. Tech-CE
10.	Mechanics of Fluids	CE2505	B. Tech-CE
11.	Mechanics of Solids Lab	CE2509	B. Tech-CE
12.	Structural Analysis	CE2511	B. Tech-CE
13.	Engineering Geology and Geomatics	CE2514	B. Tech-CE
14.	Interior Design	CE2519	B. Tech-CE
15.	Building Bye Laws and Scientific Planning	CE2520	B. Tech-CE
16.	Numerical and Statistical Methods	MA2509	B. Tech-CE
17.	Electrical Materials	EE2515	B. Tech-CE
18.	Control Systems Engineering	EE2516	B. Tech-CE
19.	Elements of Manufacturing Processes	ME2520	B. Tech-CE
20.	Automotive Engineering	ME2521	B. Tech-CE
21.	Fundamentals of Communications	EC2532	B. Tech-CE
22.	Computer Graphics	CT2514	B. Tech-CE
23.	Systems Software	CT2515	B. Tech-CE
24.	Web Programming	IT2502	B. Tech-CE
25.	Mathematical Cryptography	MA2516	B. Tech-CE
26.	Semiconductor Physics	PH2508	B. Tech-CE

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
27.	Elements of Electrical Circuits	EE2507	B. Tech-EEE
28.	Elements of Mechanical Engineering	ME2503	B. Tech-EEE
29.	Linear Algebra and Differential Equations	MA2501	B. Tech-EEE
30.	Integral transforms and Vector Calculus	MA2504	B. Tech-EEE
31.	Solid State Physics	PH2504	B. Tech-EEE
32.	Solid State Physics Lab	PH2505	B. Tech-EEE
33.	Applied Chemistry	CH2503	B. Tech-EEE
34.	Engineer and Society	EN2502	B. Tech-EEE
35.	DC Machines and Transformers	EE2508	B. Tech-EEE
36.	Electric Circuit Analysis	EE2509	B. Tech-EEE
37.	Analog Electronics	EC2503	B. Tech-EEE
38.	Mechanical Engineering Lab	ME2504	B. Tech-EEE
39.	Electric Circuits Lab	EE2511	B. Tech-EEE
40.	Analog Electronics Lab	EC2504	B. Tech-EEE
41.	NSS/Fine Arts/Yoga/Self Defence	NS2501	B. Tech-EEE
42.	Digital Circuit Design	EC2505	B. Tech-EEE
43.	Engineering Economics and Project Management	BA2501	B. Tech-EEE
44.	Induction and Synchronous Machines	EE2513	B. Tech-EEE
45.	Digital Circuit Design Lab	EC2506	B. Tech-EEE
46.	Biomedical Engineering	EC2507	B. Tech-EEE
47.	Computer Organisation and Architecture	CT2512	B. Tech-EEE
48.	Introduction to Quantum Mechanics for Engineers	EE2518	B. Tech-EEE
49.	Optional Elective-II MOOCS	EE2519	B. Tech-EEE
50.	Electrical Materials	EE2515	B. Tech-EEE
51.	Control Systems Engineering	EE2516	B. Tech-EEE
52.	Elements of Manufacturing Processes	ME2520	B. Tech-EEE
53.	Automotive Engineering	ME2521	B. Tech-EEE
54.	Fundamentals of Communications	EC2532	B. Tech-EEE
55.	Computer Graphics	CT2514	B. Tech-EEE
56.	Systems Software	CT2515	B. Tech-EEE
57.	Web Programming	IT2502	B. Tech-EEE
58.	Mathematical Cryptography	MA2516	B. Tech-EEE
59.	Semiconductor Physics	PH2508	B. Tech-EEE
60.	Mathematical Cryptography	MA2516	B. Tech-EEE
61.	Engineering Graphics	ME2505	B. Tech-ME
62.	Engineering Mechanics Lab	ME2508	B. Tech-ME

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
63.	Linear Algebra and Differential Equations	MA2501	B. Tech-ME
64.	Integral Transforms and Multiple integrals	MA2503	B. Tech-ME
65.	Engineering Physics Lab	PH2503	B. Tech-ME
66.	Physics for Engineers	PH2502	B. Tech-ME
67.	Industrial Chemistry	CH2505	B. Tech-ME
68.	Industrial Chemistry Lab & Engg. Mechanics Lab	ME2508	B. Tech-ME
69.	Engineer and Society	EN2502	B. Tech-ME
70.	Elements of Electrical and Electronics Engineering	EE2501	B. Tech-ME
71.	Solid Mechanics	ME2512	B. Tech-ME
72.	Engineering Metallurgy	ME2513	B. Tech-ME
73.	Electrical and Electronics Engineering Lab	EE2502	B. Tech-ME
74.	Solid Mechanics and Metallurgy Lab	ME2514	B. Tech-ME
75.	Computer Aided Modelling Lab	ME2515	B. Tech-ME
76.	Applied Thermodynamics	ME2517	B. Tech-ME
77.	Elements of Civil Engineering	CE2515	B. Tech-ME
78.	Building Services	CE2516	B. Tech-ME
79.	Electrical Materials	EE2515	B. Tech-ME
80.	Control Systems Engineering	EE2516	B. Tech-ME
81.	Introduction to Microprocessors and Microcontrollers	EC2531	B. Tech-ME
82.	Fundamentals of Communications	EC2532	B. Tech-ME
83.	Computer Graphics	CT2514	B. Tech-ME
84.	Object Oriented Programming through JAVA	CT2507	B. Tech-ME
85.	Systems Software	CT2515	B. Tech-ME
86.	Web Programming	IT2502	B. Tech-ME
87.	Mathematical Cryptography	MA2516	B. Tech-ME
88.	Semiconductor Physics	PH2508	B. Tech-ME
89.	Thermal Engineering Lab	ME2522	B. Tech-ME
90.	Machine Dynamics Lab	ME2524	B. Tech-ME
91.	Control Systems	EE2512	B. Tech-ME
92.	Nano Technology	ME2525	B. Tech-ME
93.	Digital Logic Design	CT2506	B. Tech-ME
94.	Problem Solving Through Computer Programming	CT2502	B. Tech-ECE
95.	Computer Programming Lab	CT2503	B. Tech-ECE
96.	Linear Electrical Networks	EE2504	B. Tech-ECE
97.	Linear Algebra and Differential Equations	MA2501	B. Tech-ECE

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
98.	Integral transforms and Vector Calculus	MA2504	B. Tech-ECE
99.	Numerical Methods & Complex Analysis	MA2505	B. Tech-ECE
100.	Solid State Physics	PH2504	B. Tech-ECE
101.	Solid State Physics Lab	PH2505	B. Tech-ECE
102.	Applied Chemistry	CH2503	B. Tech-ECE
103.	Engineer and Society	EN2502	B. Tech-ECE
104.	Probability Theory and Stochastic Process	EC2524	B. Tech-ECE
105.	Electronic Devices	EC2525	B. Tech-ECE
106.	Engineering Economics And Project Management	BA2501	B. Tech-ECE
107.	Elements of Electrical Engineering	EE2505	B. Tech-ECE
108.	Electronic Devices Lab	EC2527	B. Tech-ECE
109.	Analog Circuits	EC2529	B. Tech-ECE
110.	Analog Communications	EC2530	B. Tech-ECE
111.	Fundamentals of Communications	EC2532	B. Tech-ECE
112.	Digital Circuit Design	EC2505	B. Tech-ECE
113.	Fundamentals of Data Structures	CS2501	B. Tech-ECE
114.	Analog Circuits Lab	EC2533	B. Tech-ECE
115.	Digital Circuit Design Lab	EC2506	B. Tech-ECE
116.	Electronic Switching Systems	EC2534	B. Tech-ECE
117.	Introduction to Python Programming	CS2502	B. Tech-ECE
118.	Database Management Systems	CT2513	B. Tech-ECE
119.	Electrical Materials	EE2515	B. Tech-ECE
120.	Control Systems Engineering	EE2516	B. Tech-ECE
121.	Elements of Manufacturing Processes	ME2520	B. Tech-ECE
122.	Automotive Engineering	ME2521	B. Tech-ECE
123.	Fundamentals of Communications	EC2532	B. Tech-ECE
124.	Computer Graphics	CT2514	B. Tech-ECE
125.	Systems Software	CT2515	B. Tech-ECE
126.	Web Programming	IT2502	B. Tech-ECE
127.	Mathematical Cryptography	MA2516	B. Tech-ECE
128.	Semiconductor Physics	PH2508	B. Tech-ECE
129.	Mathematical Cryptography	MA2516	B. Tech-ECE
130.	Problem Solving through Computer Programming	CT2502	B. Tech-CSE
131.	Computer Programming Lab	CT2503	B. Tech-CSE
132.	Python Programming	CT2504	B. Tech-CSE
133.	Linear Algebra and Integral Transforms	MA2502	B. Tech-CSE

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
134.	Numerical Methods and Differential Equations	MA2506	B. Tech-CSE
135.	Applied Physics	PH2506	B. Tech-CSE
136.	Applied Physics Lab	PH2507	B. Tech-CSE
137.	Engineer and Society	EN2502	B. Tech-CSE
138.	Data Structures	CT2505	B. Tech-CSE
139.	UNIX Programming Lab	CS2503	B. Tech-CSE
140.	Computer Organization and Architecture	CT2512	B. Tech-CSE
141.	Database Management Systems Lab	CT2516	B. Tech-CSE
142.	Operating Systems Lab	CS2504	B. Tech-CSE
143.	Computer Graphics	CT2514	B. Tech-CSE
144.	Electrical Materials	EE2515	B. Tech-CSE
145.	Control Systems Engineering	EE2516	B. Tech-CSE
146.	Elements of Manufacturing Processes	ME2520	B. Tech-CSE
147.	Automotive Engineering	ME2521	B. Tech-CSE
148.	Fundamentals of Communications	EC2532	B. Tech-CSE
149.	Computer Graphics	CT2514	B. Tech-CSE
150.	Systems Software	CT2515	B. Tech-CSE
151.	Web Programming	IT2502	B. Tech-CSE
152.	Mathematical Cryptography	MA2516	B. Tech-CSE
153.	Semiconductor Physics	PH2508	B. Tech-CSE
154.	Mathematical Cryptography	MA2516	B. Tech-CSE
155.	Problem Solving through Computer Programming	CT2502	B. Tech-IT
156.	Computer Programming Lab	CT2503	B. Tech-IT
157.	Elements of Electronics Engineering	EC2501	B. Tech-IT
158.	Python Programming	CT2504	B. Tech-IT
159.	Elements of Electronics Engineering Lab	EC2502	B. Tech-IT
160.	Linear Algebra and Integral Transforms	MA2502	B. Tech-IT
161.	Numerical Methods and Differential Equations	MA2506	B. Tech-IT
162.	Applied Physics	PH2506	B. Tech-IT
163.	Applied Physics Lab	PH2507	B. Tech-IT
164.	Chemistry	CH2506	B. Tech-IT
165.	Engineer and Society	EN2502	B. Tech-IT
166.	Data Structures	CT2505	B. Tech-IT
167.	UNIX and Shell Programming	IT2501	B. Tech-IT
168.	Object Oriented Programming Lab	CT2509	B. Tech-IT
169.	Computer Organization and Architecture	CT2512	B. Tech-IT

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
170.	Database Management Systems Lab	CT2516	B. Tech-IT
171.	Information and Communication Technology	IT2503	B. Tech-IT
172.	Signals and Systems	EC2508	B. Tech-IT
173.	Basic electrical Engineering	EE2506	B. Tech-IT
174.	Electrical Materials	EE2515	B. Tech-IT
175.	Control Systems Engineering	EE2516	B. Tech-IT
176.	Elements of Manufacturing Processes	ME2520	B. Tech-IT
177.	Automotive Engineering	ME2521	B. Tech-IT
178.	Fundamentals of Communications	EC2532	B. Tech-IT
179.	Computer Graphics	CT2514	B. Tech-IT
180.	Systems Software	CT2515	B. Tech-IT
181.	Web Programming	IT2502	B. Tech-IT
182.	Mathematical Cryptography	MA2516	B. Tech-IT
183.	Semiconductor Physics	PH2508	B. Tech-IT
184.	Mathematical Cryptography	MA2516	B. Tech-IT
185.	Water Resources Engineering -II	CE1520	B. Tech-CE
186.	Concrete Technology Lab	CE1524	B. Tech-CE
187.	Fluid Mechanics and Hydraulic Machines Lab	CE1526	B. Tech-CE
188.	Environmental engineering lab	CE1536	B. Tech-CE
189.	Mini Project/ Survey Camp	CE1538	B. Tech-CE
190.	Managerial Economics and Financial Analysis	BA1502	B. Tech-CE
191.	Structural Engineering lab	CE1549	B. Tech-CE
192.	Transportation Engineering Lab	CE1550	B. Tech-CE
193.	Computer Applications in Civil Engineering Lab	CE1551	B. Tech-CE
194.	Advanced Concrete structures	CE1552	B. Tech-CE
195.	Docks and Harbour Engineering	CE1555	B. Tech-CE
196.	Industrial Waste Management	CE1557	B. Tech-CE
197.	Industrial/Practical Training	CE1562	B. Tech-CE
198.	Remote Sensing and GIS Techniques	CE1522	B. Tech-CE
199.	Elements of civil Engineering	CE1523	B. Tech-CE
200.	Modelling and Simulation of Engineering Systems	EE1522	B. Tech-CE
201.	Renewable Energy Sources	ME1525	B. Tech-CE
202.	Elements of Mechanical Engineering	ME1526	B. Tech-CE
203.	Computer Networks	CS1507	B. Tech-CE
204.	Object Oriented Programming	CT1506	B. Tech-CE
205.	Cyber Laws	CS1508	B. Tech-CE

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
206.	Open Source Software	IT1505	B. Tech-CE
207.	Fundamentals of Data Base Management Systems	IT1506	B. Tech-CE
208.	Fuzzy Mathematics	MA1507	B. Tech-CE
209.	Disaster Management	CE1534	B. Tech-CE
210.	Solid Waste Management	CE1535	B. Tech-CE
211.	Material Science	ME1535	B. Tech-CE
212.	Automotive Electronics	EC1540	B. Tech-CE
213.	Introduction to MPMC	EC1541	B. Tech-CE
214.	Cloud Computing	CT1525	B. Tech-CE
215.	Web Technologies	CS1511	B. Tech-CE
216.	Virtual Reality	CS1513	B. Tech-CE
217.	Scripting Languages	IT1510	B. Tech-CE
218.	Big Data	IT1511	B. Tech-CE
219.	Multi-variant analysis and Special Functions	MA1509	B. Tech-CE
220.	Statistical Methods using R Software	MA1510	B. Tech-CE
221.	Remote Sensing and GIS Techniques	CE1522	B. Tech-CE
222.	Elements of civil engineering	CE1523	B. Tech-CE
223.	Solid waste management	CE1535	B. Tech-CE
224.	Building services	CE1548	B. Tech-CE
225.	Pre-stressed Concrete	CE1530	B. Tech-CE
226.	Structural Dynamics	CE1531	B. Tech-CE
227.	Project Management	CE1532	B. Tech-CE
228.	Ground Improvement Techniques	CE1533	B. Tech-CE
229.	Finite Element Method	CE1540	B. Tech-CE
230.	Advanced Structural Analysis	CE1541	B. Tech-CE
231.	Advanced Environmental Engineering	CE1542	B. Tech-CE
232.	Design And Drawing of Irrigation Structures	CE1543	B. Tech-CE
233.	Design of Industrial Structures	CE1544	B. Tech-CE
234.	Air Pollution and its Control	CE1545	B. Tech-CE
235.	Architecture and Town planning	CE1547	B. Tech-CE
236.	Global Positioning Systems	CE1560	B. Tech-CE
237.	Signals and Systems	EC1516	B. Tech-EEE
238.	Pulse and Integrated Circuits	EC1506	B. Tech-EEE
239.	Electrical Measurements & Instrumentation Lab	EE1523	B. Tech-EEE
240.	Mini Project	EE1525	B. Tech-EEE
241.	Sports& Games/ Creative Arts	SG1501	B. Tech-EEE

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
242.	Data Structures using C	CS1501	B. Tech-EEE
243.	Integrated Circuits and PDC Lab	EC1501	B. Tech-EEE
244.	Power Electronics and Drives Lab	EE1532	B. Tech-EEE
245.	HVDC Transmission Systems	EE1537	B. Tech-EEE
246.	Electrical Machine Design	EE1539	B. Tech-EEE
247.	Programmable Logic Controller	EE1540	B. Tech-EEE
248.	Computer Organization & Architecture	CS1505	B. Tech-EEE
249.	Electrical Costing & Estimation	EE1546	B. Tech-EEE
250.	Modelling and Analysis of Electrical Machines	EE1547	B. Tech-EEE
251.	High Voltage Engineering	EE1548	B. Tech-EEE
252.	EHV AC/ DC Transmission Systems	EE1551	B. Tech-EEE
253.	Power Plant Instrumentation	EE1552	B. Tech-EEE
254.	Industrial/ Practical Training	EE1554	B. Tech-EEE
255.	Remote Sensing and GIS Techniques	CE1522	B. Tech-EEE
256.	Elements of civil Engineering	CE1523	B. Tech-EEE
257.	Modelling and Simulation of Engineering Systems	EE1522	B. Tech-EEE
258.	Renewable Energy Sources	ME1525	B. Tech-EEE
259.	Elements of Mechanical Engineering	ME1526	B. Tech-EEE
260.	Computer Networks	CS1507	B. Tech-EEE
261.	Object Oriented Programming	CT1506	B. Tech-EEE
262.	Cyber Laws	CS1508	B. Tech-EEE
263.	Open Source Software	IT1505	B. Tech-EEE
264.	Fundamentals of Data Base Management Systems	IT1506	B. Tech-EEE
265.	Fuzzy Mathematics	MA1507	B. Tech-EEE
266.	Disaster Management	CE1534	B. Tech-EEE
267.	Solid Waste Management	CE1535	B. Tech-EEE
268.	Material Science	ME1535	B. Tech-EEE
269.	Automotive Electronics	EC1540	B. Tech-EEE
270.	Introduction to MPMC	EC1541	B. Tech-EEE
271.	Cloud Computing	CT1525	B. Tech-EEE
272.	Web Technologies	CS1511	B. Tech-EEE
273.	Virtual Reality	CS1513	B. Tech-EEE
274.	Scripting Languages	IT1510	B. Tech-EEE
275.	Big Data	IT1511	B. Tech-EEE
276.	Multi-variant analysis and Special Functions	MA1509	B. Tech-EEE
277.	Statistical Methods using R Software	MA1510	B. Tech-EEE



<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
278.	Electrical Safety Management	EE1553	B. Tech-EEE
279.	Hydraulic Machines and Systems	ME1521	B. Tech-ME
280.	Principles of Machine Design	ME1522	B. Tech-ME
281.	Thermal Engineering Lab	ME1528	B. Tech-ME
282.	Fluid Mechanics and Hydraulic Machines Lab	ME1537	B. Tech-ME
283.	Design of Mechanical Components	ME1530	B. Tech-ME
284.	Metrology and Instrumentation	ME1531	B. Tech-ME
285.	Computer Aided Modelling Lab	ME1538	B. Tech-ME
286.	Mini Project	ME1538	B. Tech-ME
287.	Automobile Engineering	ME1532	B. Tech-ME
288.	Finite Element Methods	ME1533	B. Tech-ME
289.	Unconventional Machining Processes	ME1534	B. Tech-ME
290.	Control Systems	EE1503	B. Tech-ME
291.	Heat Transfer	ME1540	B. Tech-ME
292.	CAD / CAM Lab	ME1549	B. Tech-ME
293.	Heat Transfer Lab	ME1550	B. Tech-ME
294.	Computational Methods for Engineers Lab	ME1551	B. Tech-ME
295.	Computational Fluid Dynamics	ME1541	B. Tech-ME
296.	Interactive Computer Graphics	ME1543	B. Tech-ME
297.	Mechanical Vibrations	ME1544	B. Tech-ME
298.	Production Planning and Control	ME1545	B. Tech-ME
299.	Tribology	ME1546	B. Tech-ME
300.	Refrigeration & Air Conditioning	ME1547	B. Tech-ME
301.	Fracture Mechanics	ME1548	B. Tech-ME
302.	Condition Monitoring	ME1553	B. Tech-ME
303.	Rapid Prototyping	ME1554	B. Tech-ME
304.	Design for Manufacturing & Assembly	ME1555	B. Tech-ME
305.	Supply Chain Management	ME1559	B. Tech-ME
306.	Disaster Management	CE1534	B. Tech-ME
307.	Solid Waste Management	CE1535	B. Tech-ME
308.	Energy Audit, Conservation and Management	EE1531	B. Tech-ME
309.	Material Science	ME1535	B. Tech-ME
310.	Automotive Electronics	EC1540	B. Tech-ME
311.	Introduction to MP&MC	EC1541	B. Tech-ME
312.	Cloud Computing	CT1525	B. Tech-ME
313.	Web Technologies)	CS1511	B. Tech-ME

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
314.	Virtual Reality	CS1513	B. Tech-ME
315.	Scripting Languages	IT1510	B. Tech-ME
316.	Big Data	IT1511	B. Tech-ME
317.	Multi-variant analysis and Special Functions	CS1502	B. Tech-ME
318.	Remote Sensing and GIS Techniques	CE1522	B. Tech-ME
319.	Elements of Civil Engineering	CE1523	B. Tech-ME
320.	Modelling and Simulation of Engineering Systems	EE1522	B. Tech-ME
321.	Renewable Energy Sources	ME1525	B. Tech-ME
322.	Elements of Mechanical Engineering	ME1526	B. Tech-ME
323.	Computer Networks	CS1507	B. Tech-ME
324.	Object Oriented Programming	CT1506	B. Tech-ME
325.	Data Structures Using C	CS1501	B. Tech-ME
326.	Cyber Laws	CS1508	B. Tech-ME
327.	Open Source Software	IT1505	B. Tech-ME
328.	Fundamentals of Data Base Management Systems	IT1506	B. Tech-ME
329.	Fuzzy Mathematics	MA1507	B. Tech-ME
330.	Statistical Methods using R Software	MA1510	B. Tech-ME
331.	Internet of Things	EC1567	B. Tech-ME
332.	Consumer Electronics	EC1568	B. Tech-ME
333.	Linear and Digital ICs	EC1527	B. Tech-ECE
334.	Computer Organization and Microprocessors	EC1528	B. Tech-ECE
335.	Pulse and Digital Circuits Lab	EC1531	B. Tech-ECE
336.	Microprocessors and Interfacing Lab	EC1508	B. Tech-ECE
337.	Digital Signal Processing	EC1533	B. Tech-ECE
338.	VLSI Design	EC1534	B. Tech-ECE
339.	Microwave and Optical Communications	EC1535	B. Tech-ECE
340.	Digital Switching and Multiplexing	EC1536	B. Tech-ECE
341.	Artificial Neural Networks	EC1538	B. Tech-ECE
342.	Electronic System Design	EC1539	B. Tech-ECE
343.	IC Applications Lab	EC1542	B. Tech-ECE
344.	ECAD Lab	EC1543	B. Tech-ECE
345.	Mini Project	EC1544	B. Tech-ECE
346.	Electronic Measurements and Instrumentation	EC1545	B. Tech-ECE
347.	Microcontrollers and Embedded Systems	EC1546	B. Tech-ECE
348.	Sensors and Instrumentation	EC1548	B. Tech-ECE
349.	Advanced Computer Architecture	CS1524	B. Tech-ECE

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
350.	DSP Architecture and Applications	EC1549	B. Tech-ECE
351.	FPGA Design	EC1550	B. Tech-ECE
352.	Digital TV Engineering	EC1551	B. Tech-ECE
353.	Digital Image Processing	EC1552	B. Tech-ECE
354.	Embedded Real Time Operating Systems	EC1553	B. Tech-ECE
355.	Microwave and Optical Communications Lab	EC1557	B. Tech-ECE
356.	VLSI and Embedded Systems Lab	EC1558	B. Tech-ECE
357.	Testing and Verification of VLSI Circuits	EC1559	B. Tech-ECE
358.	Low Power VLSI Design	EC1563	B. Tech-ECE
359.	Software Engineering	EC1565	B. Tech-ECE
360.	Bio-Medical Instrumentation	EC1566	B. Tech-ECE
361.	Industrial/Practical Training	EC1569	B. Tech-ECE
362.	Remote Sensing and GIS Techniques	CE1522	B. Tech-ECE
363.	Elements of civil Engineering	CE1523	B. Tech-ECE
364.	Modelling and Simulation of Engineering Systems	EE1522	B. Tech-ECE
365.	Renewable Energy Sources	ME1525	B. Tech-ECE
366.	Elements of Mechanical Engineering	ME1526	B. Tech-ECE
367.	Computer Networks	CS1507	B. Tech-ECE
368.	Object Oriented Programming	CT1506	B. Tech-ECE
369.	Cyber Laws	CS1508	B. Tech-ECE
370.	Open Source Software	IT1505	B. Tech-ECE
371.	Fundamentals of Data Base Management Systems	IT1506	B. Tech-ECE
372.	Fuzzy Mathematics	MA1507	B. Tech-ECE
373.	Disaster Management	CE1534	B. Tech-ECE
374.	Solid Waste Management	CE1535	B. Tech-ECE
375.	Material Science	ME1535	B. Tech-ECE
376.	Automotive Electronics	EC1540	B. Tech-ECE
377.	Introduction to MPMC	EC1541	B. Tech-ECE
378.	Cloud Computing	CT1525	B. Tech-ECE
379.	Web Technologies	CS1511	B. Tech-ECE
380.	Virtual Reality	CS1513	B. Tech-ECE
381.	Scripting Languages	IT1510	B. Tech-ECE
382.	Big Data	IT1511	B. Tech-ECE
383.	Multi-variant analysis and Special Functions	MA1509	B. Tech-ECE
384.	Assistive Technologies	EC1554	B. Tech-ECE
385.	Introduction to Embedded Systems	EC1555	B. Tech-ECE

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
386.	Statistical Methods using R Software	MA1510	B. Tech-ECE
387.	Internet of Things	EC1567	B. Tech-ECE
388.	Consumer Electronics	EC1568	B. Tech-ECE
389.	Database Management System	CT1512	B. Tech-CSE
390.	Object Oriented Analysis and design	CT1514	B. Tech-CSE
391.	Computer Network - 1	CS1510	B. Tech-CSE
392.	Computer Network - 2	CS1514	B. Tech-CSE
393.	Computer Network Lab	CS1512	B. Tech-CSE
394.	Web Technologies	CS1511	B. Tech-CSE
395.	Database Management Systems Lab	CT1513	B. Tech-CSE
396.	Web Technologies Lab	CS1512	B. Tech-CSE
397.	Software Engineering	CT1516	B. Tech-CSE
398.	Data Warehousing and Data Mining	CT1517	B. Tech-CSE
399.	Human Computer Interface	EC1511	B. Tech-CSE
400.	Case Tools Lab	CS1509	B. Tech-CSE
401.	Information Security	CS1522	B. Tech-CSE
402.	Embedded Systems	CS1525	B. Tech-CSE
403.	Bio-Informatics	CS1526	B. Tech-CSE
404.	Distributed Systems	CS1527	B. Tech-CSE
405.	Digital Image Processing	CT1521	B. Tech-CSE
406.	Parallel Computing	CS1528	B. Tech-CSE
407.	Software Testing Methodologies	CT1522	B. Tech-CSE
408.	Web Services	CS1529	B. Tech-CSE
409.	Information Security Lab	CS1523	B. Tech-CSE
410.	Multi Media Application Development lab	CT1523	B. Tech-CSE
411.	Distributed Data Bases	CT1524	B. Tech-CSE
412.	Software Project Management	CT1525	B. Tech-CSE
413.	Semantic Web	CS1533	B. Tech-CSE
414.	Machine Learning	CS1534	B. Tech-CSE
415.	Cloud Computing	CT1520	B. Tech-CSE
416.	Wireless Networks	CS1535	B. Tech-CSE
417.	Big Data	CT1519	B. Tech-CSE
418.	e- Waste Management	CS1531	B. Tech-CSE
419.	Management Information Systems	CS1532	B. Tech-CSE
420.	Advanced Computer Architecture	CS1524	B. Tech-CSE
421.	Remote Sensing and GIS Techniques	CE1522	B. Tech-CSE

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
422.	Elements of civil Engineering	CE1523	B. Tech-CSE
423.	Modelling and Simulation of Engineering Systems	EE1522	B. Tech-CSE
424.	Renewable Energy Sources	ME1525	B. Tech-CSE
425.	Elements of Mechanical Engineering	ME1526	B. Tech-CSE
426.	Computer Networks	CS1507	B. Tech-CSE
427.	Object Oriented Programming	CT1506	B. Tech-CSE
428.	Cyber Laws	CS1508	B. Tech-CSE
429.	Open Source Software	IT1505	B. Tech-CSE
430.	Fundamentals of Data Base Management Systems	IT1506	B. Tech-CSE
431.	Fuzzy Mathematics	MA1507	B. Tech-CSE
432.	Disaster Management	CE1534	B. Tech-CSE
433.	Solid Waste Management	CE1535	B. Tech-CSE
434.	Material Science	ME1535	B. Tech-CSE
435.	Automotive Electronics	EC1540	B. Tech-CSE
436.	Introduction to MPMC	EC1541	B. Tech-CSE
437.	Cloud Computing	CT1525	B. Tech-CSE
438.	Web Technologies	CS1511	B. Tech-CSE
439.	Virtual Reality	CS1513	B. Tech-CSE
440.	Scripting Languages	IT1510	B. Tech-CSE
441.	Big Data	IT1511	B. Tech-CSE
442.	Multi-variant analysis and Special Functions	MA1509	B. Tech-CSE
443.	Mobile Application Development	CS1520	B. Tech-CSE
444.	Real Time Systems	CS1521	B. Tech-CSE
445.	Social Networks	CS1519	B. Tech-CSE
446.	Statistical Methods using R Software	MA1510	B. Tech-CSE
447.	Micro Processors and Interfacing	EC1507	B. Tech-IT
448.	Object Oriented Analysis & Design	CT1514	B. Tech-IT
449.	Operating Systems	CT1511	B. Tech-IT
450.	Micro Processors and Interfacing Lab	EC1508	B. Tech-IT
451.	Computer Networks and Case Tools Lab	IT1508	B. Tech-IT
452.	Operating Systems Lab	IT1509	B. Tech-IT
453.	Compiler Design	CT1509	B. Tech-IT
454.	.Net Technologies	IT1512	B. Tech-IT
455.	Advanced Java and Web Technologies	IT1513	B. Tech-IT
456.	Computer Graphics	CT1510	B. Tech-IT
457.	Computer Architecture	IT1516	B. Tech-IT

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
458.	.Net Technologies Lab	IT1517	B. Tech-IT
459.	Advanced Java and Web Technologies Lab	IT1518	B. Tech-IT
460.	Data Warehousing and Data Mining	CT1517	B. Tech-IT
461.	Multimedia Application Development	IT1522	B. Tech-IT
462.	Distributed Databases	CT1524	B. Tech-IT
463.	Human Computer Interaction	CT1518	B. Tech-IT
464.	Bio-Metrics	IT1523	B. Tech-IT
465.	Software Testing Methodologies	CT1522	B. Tech-IT
466.	Information Retrieval Systems	IT1524	B. Tech-IT
467.	Digital Image Processing	CT1521	B. Tech-IT
468.	Mobile Computing	IT1525	B. Tech-IT
469.	Software Project Management	CT1525	B. Tech-IT
470.	Mobile Application Lab	IT1527	B. Tech-IT
471.	Multimedia Application Development Lab	CT1523	B. Tech-IT
472.	Free and Open Source Software Lab	IT1526	B. Tech-IT
473.	E-Commerce	IT1529	B. Tech-IT
474.	Cloud Computing	CT1520	B. Tech-IT
475.	Business Intelligence	IT1530	B. Tech-IT
476.	Big Data	CT1519	B. Tech-IT
477.	Soft Computing	IT1531	B. Tech-IT
478.	Computer Forensics	IT1532	B. Tech-IT
479.	Software Quality Assurance	IT1533	B. Tech-IT
480.	Industrial / Practical Training	IT1534	B. Tech-IT
481.	Remote Sensing and GIS Techniques	CE1522	B. Tech-IT
482.	Elements of civil Engineering	CE1523	B. Tech-IT
483.	Modelling and Simulation of Engineering Systems	EE1522	B. Tech-IT
484.	Renewable Energy Sources	ME1525	B. Tech-IT
485.	Elements of Mechanical Engineering	ME1526	B. Tech-IT
486.	Computer Networks	CS1507	B. Tech-IT
487.	Object Oriented Programming	CT1506	B. Tech-IT
488.	Cyber Laws	CS1508	B. Tech-IT
489.	Open Source Software	IT1505	B. Tech-IT
490.	Fundamentals of Data Base Management Systems	IT1506	B. Tech-IT
491.	Fuzzy Mathematics	MA1507	B. Tech-IT
492.	Disaster Management	CE1534	B. Tech-IT
493.	Solid Waste Management	CE1535	B. Tech-IT

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
494.	Material Science	ME1535	B. Tech-IT
495.	Automotive Electronics	EC1540	B. Tech-IT
496.	Introduction to MPMC	EC1541	B. Tech-IT
497.	Cloud Computing	CT1525	B. Tech-IT
498.	Web Technologies	CS1511	B. Tech-IT
499.	Virtual Reality	CS1513	B. Tech-IT
500.	Scripting Languages	IT1510	B. Tech-IT
501.	Big Data	IT1511	B. Tech-IT
502.	Multi-variant analysis and Special Functions	MA1509	B. Tech-IT
503.	Network Management Systems	IT1519	B. Tech-IT
504.	Fundamentals of E-Commerce	IT1520	B. Tech-IT
505.	Statistical Methods using R Software	MA1510	B. Tech-IT
506.	Ground Improvement Techniques	CE2906	M. Tech-SE
507.	Advanced Concrete Technology and Structural Engineering lab	CE2908	M. Tech-SE
508.	Research Methodologies	BA2901	M. Tech-SE
509.	Advanced Design of Steel Structures	CE2912	M. Tech-SE
510.	Fracture Mechanics of Concrete	CE2914	M. Tech-SE
511.	Design of Sub-structures	CE2915	M. Tech-SE
512.	High Rise Buildings	CE2917	M. Tech-SE
513.	Linear and Non-Linear Optimization technique	MA2902	M. Tech-PEED
514.	Advanced Electric Drives	EE2912	M. Tech-PEED
515.	Research Methodology	EE2910	M. Tech-PEED
516.	Application of Power Electronics to Power Systems	EE2915	M. Tech-PEED
517.	Advanced Digital Control Systems	EE3915	M. Tech-PEED
518.	Computational Methods in Engineering	MA2901	M. Tech-MD
519.	Advanced Mechanics of Solids	ME2901	M. Tech-MD
520.	Analysis and Synthesis of Mechanisms	ME2902	M. Tech-MD
521.	Mechanical Vibrations	ME2903	M. Tech-MD
522.	Gear Engineering	ME2904	M. Tech-MD
523.	Rotor Dynamics	ME2905	M. Tech-MD
524.	Experimental Stress Analysis	ME2906	M. Tech-MD
525.	Product Design	ME2907	M. Tech-MD
526.	Machine Dynamics Lab	ME2908	M. Tech-MD
527.	Research Methodologies	ME2905	M. Tech-MD
528.	Finite Element Methods	ME2909	M. Tech-MD

<b>S. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>Programme Name</b>
529.	Design with Advanced Materials	ME2910	M. Tech-MD
530.	Design for Manufacturing and Assembly	ME2911	M. Tech-MD
531.	Fracture Mechanics	ME2912	M. Tech-MD
532.	Condition Monitoring	ME2913	M. Tech-MD
533.	Rapid Tooling and Prototyping	ME2914	M. Tech-MD
534.	Theory of Elasticity	ME2915	M. Tech-MD
535.	Geometric Modelling	ME2916	M. Tech-MD
536.	Tribology	ME2917	M. Tech-MD
537.	Modelling and Analysis Lab	ME2918	M. Tech-MD
538.	Linear and Non-Linear Optimization Techniques	MA2902	M. Tech-MD
539.	Research Methodologies	HS2901	M. Tech-MD
540.	Principles of Digital Design Using FPGA	EC2903	M. Tech-ES
541.	Advanced Digital Signal Processing	EC2904	M. Tech-ES
542.	Advanced Microcontrollers	EC2905	M. Tech-ES
543.	Embedded Networking	EC2907	M. Tech-ES
544.	Advanced Digital Design Lab	EC2910	M. Tech-ES
545.	Embedded Real Time Operating Systems	EC2915	M. Tech-ES
546.	Embedded System Design	EC2916	M. Tech-ES
547.	Advanced Embedded Systems	EC2911	M. Tech-ES
548.	Term Paper	EC2922	M. Tech-ES
549.	Principles of CMOS Analog Design	EC2912	M. Tech-ES
550.	Internet of Things	EC2913	M. Tech-ES
551.	Advanced Digital Design Lab	EC2910	M. Tech-ES
552.	Low Power CMOS Digital Design	EC2909	M. Tech-ES
553.	Advanced Computer Networks	EC2917	M. Tech-ES
554.	Statistics with R Programming	MA2903	M. Tech-ES
555.	Advanced Data Structures & Algorithm Analysis	CS2901	M. Tech-CSE
556.	Object Oriented Software Engineering	CS2903	M. Tech-CSE
557.	Business Intelligence	CS2904	M. Tech-CSE
558.	Embedded Networking	CS2905	M. Tech-CSE
559.	Sensors and Actuators	CS2906	M. Tech-CSE
560.	Low Power CMOS Digital Design	CS2907	M. Tech-CSE
561.	Advanced Data Structures & Algorithm and R Programming Lab	CS2908	M. Tech-CSE
562.	Research Methodology	BA2901	M. Tech-CSE
563.	Information Security	CS2909	M. Tech-CSE



S. No	Name of the Course	Course Code	Programme Name
564.	Scripting Languages	CS2910	M. Tech-CSE
565.	Data Analytics	CS2911	M. Tech-CSE
566.	Advanced Operating Systems	CS2912	M. Tech-CSE
567.	Machine Learning	CS2913	M. Tech-CSE
568.	Software Testing Methodologies	CS2914	M. Tech-CSE
569.	Soft Computing	CS2915	M. Tech-CSE
570.	Internet of Things	CS2916	M. Tech-CSE
571.	Information Security & Scripting Languages Lab	CS2917	M. Tech-CSE
572.	Business Environment and Legislation	BA2904	MBA
573.	Business Law	BA2905	MBA
574.	E-Business	BA2915	MBA
575.	Training & Development	BA2921	MBA
576.	Industrial Relations and Labour Laws	BA2922	MBA
577.	Sales & Distribution Management	BA2925	MBA
578.	Compensation Management	BA2928	MBA

  
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**Gudlavalleru - 521 356, Krishna District, A.P.**

## COURSE STRUCTURE

### I Year - I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EG2501	Functional English	4	-	-	3
2	MA2501	Linear Algebra & Differential Equations	4	1	-	4
3	EN2502	Engineer and Society	3	-	-	2
4	CH2501	Engineering Chemistry	3	-	-	2
5	CT2501	Problem Solving Using C *	4	-	2	4
6	ME2501	Engineering Drawing	1	-	4	3
7	EG2502	Functional English Lab	-	-	2	1
8	CH2502	Engineering Chemistry Lab	-	-	2	1
<b>Total</b>			<b>19</b>	<b>1</b>	<b>10</b>	<b>20</b>

\* Integrated Course with Theory and Laboratory

### I Year - II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EG2503	Professional Communication	3	-	-	2
2	MA2503	Integral Transforms and Multiple Integrals	3	1	-	3
3	EN2501	Environmental Studies	3	-	-	2
4	PH2501	Engineering Physics	3	1	-	3
5	CE2501	Engineering Mechanics	4	1	-	4
6	EG2504	Professional Communication Lab	-	-	4	2
7	CE2502	Computer Aided Drafting Lab	-	-	4	2
8	PH2503	Engineering Physics Lab	-	-	2	1
9	CE2503	Applied Mechanics Lab and Building Trade Practice	-	-	2	1
<b>Total</b>			<b>16</b>	<b>3</b>	<b>12</b>	<b>20</b>

L : Lecture

T : Tutorial

P : Practical

II Year - I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
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 Mechanical 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
<b>Total</b>			<b>17</b>	<b>4</b>	<b>11</b>	<b>21</b>
9	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)	-	-	2	-

II Year - II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
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	-	-	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
<b>Total</b>			<b>18</b>	<b>3</b>	<b>10</b>	<b>20</b>
9	NS2501	NSS / Fine Arts / Yoga / Self Defense (Mandatory Non-Credit Course)	-	-	2	-
10		<b>Optional Elective - I</b>	-	-	-	3
	CE2519	i) Interior Design				
	CE2520	ii) Building Bye Laws and Scientific Planning				
	CT2505	iii) Data Structures				
11	CE2521	<b>Optional Elective - II (MOOCs)</b> Student shall opt from the list of MOOCs given by the Department)	-	-	-	2

\* Integrated Course with Theory and Laboratory

## Open Elective - I

Sl. No.	Title of the Subject	Department Offering the Subject	No. of Periods per week			No. of Credits
			L	T	P	
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	-	-	3
4	EE2516 Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	-	3
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	-	-	3
13	MA2516 Mathematical Cryptography (Other than CSE)	BS&H	4	-	-	3
14	PH2508 Semiconductor Physics (Other than ECE)	BS&H	4	-	-	3

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### I Year - I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EG2501	Functional English	4	-	-	3
2	MA2501	Linear Algebra & Differential Equations	4	1	-	4
3	EN2502	Engineer and Society	3	-	-	2
4	CH2503	Applied Chemistry	3	-	-	2
5	CT2501	Problem Solving Using C *	4	-	2	4
6	ME2501	Engineering Drawing	1	-	4	3
7	EG2502	Functional English Lab	-	-	2	1
8	CH2504	Applied Chemistry Lab	-	-	2	1
<b>Total</b>			<b>19</b>	<b>1</b>	<b>10</b>	<b>20</b>

\* Integrated Course with Theory and Laboratory

### I Year - II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EG2503	Professional Communication	3	-	-	2
2	MA2504	Integral Transforms and Vector Calculus	4	1	-	4
3	EE2507	Elements of Electrical Circuits	3	1	-	3
4	PH2504	Solid State Physics	4	-	-	3
5	EN2501	Environmental Studies	3	-	-	2
6	ME2503	Elements of Mechanical Engineering	3	1	-	3
7	EG2504	Professional Communication Lab	-	-	4	2
8	PH2505	Solid State Physics Lab	-	-	2	1
<b>Total</b>			<b>20</b>	<b>3</b>	<b>6</b>	<b>20</b>

L : Lecture

T : Tutorial

P : Practical



  
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II Year - I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
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
<b>Total</b>			<b>15</b>	<b>4</b>	<b>14</b>	<b>21</b>
9	NS2501	NSS / Fine Arts / Yoga / Self Defense (Mandatory Non-Credit Course)	-	-	2	-

\* Integrated Course with Theory and Laboratory

II Year - II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
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	Digital Circuit Design Lab	-	-	4	2
8	EE2517	Electrical Machines - I Lab	-	-	4	2
<b>Total</b>			<b>19</b>	<b>4</b>	<b>8</b>	<b>21</b>
9	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)	-	-	2	-
10		<b>Optional Elective - I</b>	-	-	-	3
	EC2507	i) Biomedical Engineering				
	CT2512	ii) Computer Organisation and Architecture				
	EE2518	iii) Introduction to Quantum Mechanics for Engineers				
11	EE2519	<b>Optional Elective - II (MOOCs)</b> Student shall opt from the list of MOOCs given by the Department)	-	-	-	2

L : Lecture      T : Tutorial      P : Practical

## Open Elective - I

Sl. No.	Title of the Subject	Department Offering the Subject	No. of Periods per week			No. of Credits
			L	T	P	
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	-	-	3
4	EE2516 Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	-	3
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	-	-	3
13	MA2516 Mathematical Cryptography (Other than CSE)	BS&H	4	-	-	3
14	PH2508 Semiconductor Physics (Other than ECE)	BS&H	4	-	-	3

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### I Year - I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EG2501	Functional English	4	-	-	3
2	MA2501	Linear Algebra & Differential Equations	4	1	-	4
3	PH2502	Physics for Engineers	3	1	-	3
4	EN2501	Environmental Studies	3	-	-	2
5	CT2501	Problem Solving Using C *	4	-	2	4
6	ME2505	Engineering Graphics	1	-	4	3
7	EG2502	Functional English Lab	-	-	2	1
8	PH2503	Engineering Physics Lab	-	-	2	1
<b>Total</b>			<b>19</b>	<b>2</b>	<b>10</b>	<b>21</b>

\* Integrated Course with Theory and Laboratory

### I Year - II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EG2503	Professional Communication	3	-	-	2
2	MA2503	Integral Transforms and Multiple Integrals	3	1	-	3
3	EN2502	Engineer & Society	3	-	-	2
4	CH2505	Industrial Chemistry	3	1	-	3
5	CE2501	Engineering Mechanics	4	1	-	4
6	ME2506	Computer Aided Engineering Drawing	-	-	2	1
7	ME2507	Engineering Workshop	-	-	2	1
8	EG2504	Professional Communication Lab	-	-	4	2
9	ME2508	Industrial Chemistry Lab & Engg. Mechanics Lab	-	-	2	1
<b>Total</b>			<b>16</b>	<b>3</b>	<b>10</b>	<b>19</b>

L : Lecture

T : Tutorial

P : Practical



II Year - I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
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
<b>Total</b>			<b>16</b>	<b>4</b>	<b>8</b>	<b>19</b>
9	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)	-	-	2	-

II Year - II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
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		<b>Open Elective-I</b> (see list of Open Electives)	4	-	-	3
6	ME2522	Thermal Engineering Lab	-	-	4	2
7	ME2523	Manufacturing Processes Lab	-	-	4	2
8	ME2524	Machine Dynamics Lab	-	-	2	1
<b>Total</b>			<b>17</b>	<b>3</b>	<b>10</b>	<b>20</b>
9	NS2501	NSS / Fine Arts / Yoga / Self Defense (Mandatory Non-Credit Course)	-	-	2	-
10		<b>Optional Elective - I</b>	-	-	-	3
	EE2512	i) Control Systems				
	ME2525	ii) Nano Technology				
	CT2506	iii) Digital Logic Design				
11	ME2526	<b>Optional Elective - II (MOOCs)</b> Student shall opt from the list of MOOCs given by the Department)	-	-	-	2

## Open Elective - I

Sl. No.	Title of the Subject	Department Offering the Subject	No. of Periods per week			No. of Credits
			L	T	P	
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	-	-	3
4	EE2516 Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	-	3
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	-	-	3
13	MA2516 Mathematical Cryptography (Other than CSE)	BS&H	4	-	-	3
14	PH2508 Semiconductor Physics (Other than ECE)	BS&H	4	-	-	3

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**I Year - I Semester**

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EG2501	Functional English	4	-	-	3
2	MA2501	Linear Algebra & Differential Equations	4	1	-	4
3	EN2502	Engineer & Society	3	-	-	2
4	PH2504	Solid State Physics	4	-	-	3
5	CT2502	Problem Solving through Computer Programming	4	-	-	3
6	EG2502	Functional English Lab	-	-	2	1
7	PH2505	Solid State Physics Lab	-	-	2	1
8	CT2503	Computer Programming Lab	-	-	4	2
<b>Total</b>			<b>19</b>	<b>1</b>	<b>8</b>	<b>19</b>

**I Year - II Semester**

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EG2503	Professional Communication	3	-	-	2
2	MA2504	Integral Transforms and Vector Calculus	4	1	-	4
3	CH2503	Applied Chemistry	3	-	-	2
4	EN2501	Environmental Studies	3	-	-	2
5	EE2504	Linear Electrical Networks	3	-	-	2
6	MA2505	Numerical Methods & Complex Analys	3	1	-	3
7	ME2501	Engineering Drawing	1	-	4	3
8	EG2504	Professional Communication Lab	-	-	4	2
9	CH2504	Applied Chemistry Lab	-	-	2	1
<b>Total</b>			<b>20</b>	<b>2</b>	<b>10</b>	<b>21</b>

L : Lecture      T : Tutorial      P : Practical

II Year - I Semester

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

II Year - II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
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
<b>Total</b>			<b>21</b>	<b>1</b>	<b>8</b>	<b>20</b>
9	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)	-	-	2	-
10		<b>Optional Elective - I</b>	-	-	-	3
	CS2502	i) Introduction to Python Programming				
	CT2513	ii) Database Management Systems				
	EC2534	iii) Electronic Switching Systems				
11	EC2535	<b>Optional Elective - II (MOOCs)</b> Student shall opt from teh list of MOOCs given by the Department)	-	-	-	2

L : Lecture                      T : Tutorial                      P : Practical

## Open Elective - I

Sl. No.	Title of the Subject	Department Offering the Subject	No. of Periods per week			No. of Credits
			L	T	P	
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	-	-	3
4	EE2516 Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	-	3
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	-	-	3
13	MA2516 Mathematical Cryptography (Other than CSE)	BS&H	4	-	-	3
14	PH2508 Semiconductor Physics (Other than ECE)	BS&H	4	-	-	3

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**I Year - I Semester**

Sl. No.	Course Code	Name of the Course / Laboratory	No.of Periods per week			No.of Credits
			L	T	P	
1	EG2501	Functional English	4	-	-	3
2	MA2502	Linear Algebra and Integral Transforms	4	1	-	4
3	CH2506	Chemistry	4	-	-	3
4	EN2501	Environmental Studies	3	-	-	2
5	EE2506	Basic Electrical Engineering	3	-	-	2
6	CT2502	Problem Solving through Computer Programming	4	-	-	3
7	EG2502	Functional English Lab	-	-	2	1
8	CT2503	Computer Programming Lab	-	-	4	2
<b>Total</b>			<b>22</b>	<b>1</b>	<b>6</b>	<b>20</b>

**I Year - II Semester**

Sl. No.	Course Code	Name of the Course / Laboratory	No.of Periods per week			No.of Credits
			L	T	P	
1	EG2503	Professional Communication	3	-	-	2
2	MA2506	Numerical Methods and Differential Equations	4	1	-	4
3	PH2506	Applied Physics	4	-	-	3
4	EN2502	Engineer and Society	3	-	-	2
5	EC2501	Elements of Electronics Engineering	3	1	-	3
6	CT2504	Python Programming *	3	-	2	3
7	EG2504	Professional Communication Lab	-	-	4	2
8	PH2507	Applied Physics Lab	-	-	2	1
<b>Total</b>			<b>20</b>	<b>2</b>	<b>8</b>	<b>20</b>

\* Integrated Course with Theory and Laboratory

L : Lecture      T : Tutorial      P : Practical

II Year - I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
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
<b>Total</b>			<b>16</b>	<b>3</b>	<b>12</b>	<b>20</b>
9	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)	-	-	2	-

II Year - II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
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	CT2513	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
<b>Total</b>			<b>19</b>	<b>5</b>	<b>8</b>	<b>22</b>
9	NS2501	NSS / Fine Arts / Yoga / Self Defense (Mandatory Non-Credit Course)	-	-	2	-
10		<b>Optional Elective - I</b>	-	-	-	3
	CE2575	i) Environmental Impact Assessment				
	EC2508	ii) Signals and Systems				
	MA2514	iii) Fuzzy Logic				
11	CS2505	<b>Optional Elective - II (MOOCs)</b> Students shall opt from the list of MOOCs given by the Department)	-	-	-	2

L : Lecture      T : Tutorial      P : Practical

## Open Elective - I

Sl. No.	Title of the Subject	Department Offering the Subject	No. of Periods per week			No. of Credits
			L	T	P	
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	-	-	3
4	EE2516 Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	-	3
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	-	-	3
13	MA2516 Mathematical Cryptography (Other than CSE)	BS&H	4	-	-	3
14	PH2508 Semiconductor Physics (Other than ECE)	BS&H	4	-	-	3



**I Year - I Semester**

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EG2501	Functional English	4	-	-	3
2	MA2502	Linear Algebra & Integral Transforms	4	1	-	4
3	PH2506	Applied Physics	4	-	-	3
4	EN2501	Environmental Studies	3	-	-	2
5	CT2502	Problem Solving through Computer Programming	4	-	-	3
6	EG2502	Functional English Lab	-	-	2	1
7	PH2507	Applied Physics Lab	-	-	2	1
8	CT2503	Computer Programming Lab	-	-	4	2
<b>Total</b>			<b>19</b>	<b>1</b>	<b>8</b>	<b>19</b>

**I Year - II Semester**

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EG2503	Professional Communication	3	-	-	2
2	MA2506	Numerical Methods and Differential Equations	4	1	-	4
3	CH2506	Chemistry	4	-	-	3
4	EN2502	Engineer & Society	3	-	-	2
5	EC2501	Elements of Electronics Engineering	3	1	-	3
6	CT2504	Python Programming *	3	-	2	3
7	EG2504	Professional Communication Lab	-	-	4	2
8	EC2502	Elements of Electronics Engineering Lab	-	-	4	2
<b>Total</b>			<b>20</b>	<b>2</b>	<b>10</b>	<b>21</b>

\* Integrated Course with Theory and Laboratory

L : Lecture      T : Tutorial      P : Practical

II Year - I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
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
<b>Total</b>			<b>17</b>	<b>3</b>	<b>10</b>	<b>20</b>
8	NS2501	NSS / Fine Arts / Yoga / Self Defense (Mandatory Non-Credit Course)	-	-	2	-

II Year - II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
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		<b>Open Elective-I</b> (see list of Open Electives)	4	-	-	3
7	CT2516	Database Management Systems Lab	-	-	4	2
<b>Total</b>			<b>20</b>	<b>4</b>	<b>6</b>	<b>21</b>
8	SG2501	Sports and Games / Cultural (Mandatory Non-Credit Course)	-	-	2	-
9		<b>Optional Elective - I</b>	-	-	-	3
	IT2503	i) Information and Communication Technology				
	EC2508	ii) Signals and Systems				
	EE2506	iii) Basic Electrical Engineering				
10	IT2504	<b>Optional Elective - II (MOOCs)</b> Students shall opt from the list of MOOCs given by the Department)	-	-	-	2

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L : Lecture      T : Tutorial      P : Practical

## Open Elective - I

Sl. No.	Title of the Subject	Department Offering the Subject	No. of Periods per week			No. of Credits
			L	T	P	
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	-	-	3
4	EE2516 Control Systems Engineering (Other than EEE & ECE)	EEE	4	-	-	3
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	-	-	3
13	MA2516 Mathematical Cryptography (Other than CSE)	BS&H	4	-	-	3
14	PH2508 Semiconductor Physics (Other than ECE)	BS&H	4	-	-	3

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### III Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	CE1527	Environmental Engineering	3+1*	-	3
2	CE1528	Transportation Engineering	3+1*	-	3
3	CE1529	Design & Drawing of steel structures	3+1*	-	3
4	CE1530	<b>Elective – I</b> Prestressed Concrete	3+1*	-	3
5	CE1531	Structural Dynamics			
6	CE1532	Project Management			
7	CE1533	Ground Improvement Techniques			
8		<b>Open Elective – II</b> (see the list of Open Electives)	3+1*	-	3
9	CE1536	Environmental Engineering Lab	-	3	2
10	CE1537	Computer Aided Drawing (CAD) Practice Lab	-	3	2
11	CE1538	Mini Project / Survey Camp	-	-	2
		<b>Total</b>	<b>20</b>	<b>8</b>	<b>21</b>
12		Sports & Games / Creative Arts (Mandatory Non-Credit Course)	-	2	-

### III Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	CE1518	Structural Analysis - II	3+1*	-	3
2	CE1519	Geotechnical Engineering - II	3+1*	-	3
3	CE1520	Water Resources Engineering - II	3+1*	-	3
4	CE1521	Design & Drawing of R.C Structures	3+1*	-	3
5		<b>Open Elective - I</b> (see the list of Open Electives)	3+1*	-	3
6	CE1524	Concrete Technology Lab	-	3	2
7	CE1525	Geotechnical Engineering Lab	-	3	2
8	CE1526	Fluid Mechanics & Hydraulic Machines Lab	-	3	2
		<b>Total</b>	<b>20</b>	<b>9</b>	<b>21</b>
9	SG1501	Sports & Games / Creative Arts (Mandatory Non-Credit Course)	-	2	-

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#### IV Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	BA1502	Managerial Economics and Financial Analysis	3+1*	-	3
2	CE1539	Estimating, Costing and Valuation	3+1*	-	3
3	CE1540	<b>Elective – II</b> Finite Element Method	3+1*	-	3
4	CE1541	Advanced Structural Analysis			
5	CE1542	Advanced Environmental Engineering			
6	CE1543	Design & Drawing of Irrigation Structures			
7	CE1544	<b>Elective – III</b> Design of Industrial Structures	3+1*	-	3
8	CE1545	Air Pollution & Its Control			
9	CE1546	Earthquake Resistant Design			
10	CE1547	Architecture & Town Planning			
11		<b>Open Elective – III</b> (see the list of Open Electives)	3+1*	-	3
12	CE1549	Structural Engineering Lab	-	3	2
13	CE1550	Transportation Engineering Lab	-	3	2
14	CE1551	Computer Applications in Civil Engineering Lab	-	3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>

#### IV Year - II Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	CE1552	<b>Elective – IV</b> Advanced Concrete Structures	3+1*	-	3
2	CE1553	Environmental Impact, Assessment & Management			
3	CE1554	Soil Dynamics & Machine Foundations			
4	CE1555	Docks & Harbour Engineering			
5	CE1556	<b>Elective – V</b> Pavement Analysis & Design	3+1*	-	3
6	CE1557	Industrial Waste Management			
7	CE1558	Ground Water Development & Management			
8	CE1559	Repair and Rehabilitation of Structures	3+1*	-	2
9		<b>Self Study Course</b> (see the list of Self Study Courses)			2
10	CE1562	Industrial / Practical Training	-	-	4
11	CE1563	Project Work	-	9	9
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>

## Open Elective - I

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1522	Remote Sensing and GIS Techniques	CE	3+1*	-	3
2	CE1523	Elements of Civil Engineering (other than CE)	CE	3+1*	-	3
3	EE1522	Modeling and Simulation of Engineering Systems	EEE	3+1*	-	3
4	ME1525	Renewable Energy Sources	ME	3+1*	-	3
5	ME1526	Elements of Mechanical Engineering (other than ME)	ME	3+1*	-	3
6	CS1507	Computer Networks (other than CSE & IT)	CSE	3+1*	-	3
7	CT1506	Object Oriented Programming (other than CSE & IT)	CSE	2+1*	-	3
8	CS1501	Data Structures Using C (other than EEE,ECE,CSE&IT)	CSE	2+1*	-	3
9	CS1508	Cyber Laws	CSE	3+1*	-	3
10	IT1505	Open Source Software	IT	3+1*	-	3
11	IT1506	Fundamentals of Data Base Management Systems (other than CSE & IT)	IT	3+1*	-	3
12	MA1507	Fuzzy Mathematics	Maths	3+1*	-	3



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## Open Elective - II

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1534	Disaster Management	CE	3+1*	-	3
2	CE1535	Solid Waste Management (other than CE)	CE	3+1*	-	3
3	EE1531	Energy Audit, Conservation and Management	EEE	3+1*	-	3
4	ME1535	Material Science (other than ME)	ME	3+1*	-	3
5	EC1540	Automotive Electronics	ECE	3+1*	-	3
6	EC1541	Introduction to MP&MC (other than EEE, ECE, CSE & IT)	ECE	3+1*	-	3
7	CT1525	Cloud Computing (other than CSE & IT)	CSE	3+1*	-	3
8	CS1511	Web Technologies (other than CSE & IT)	CSE	2+1*	-	3
9	CS1513	Virtual Reality	CSE	3+1*	-	3
10	IT1510	Scripting Languages	IT	3+1*	-	3
11	IT1511	Big Data (other than CSE & IT)	IT	3+1*	-	3
12	MA1509	Multi-variate analysis and Special Functions	Maths	3+1*	-	3

  
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### Open Elective - III

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1548	Building Services (other than CE)	CE	3+1*	-	3
2	EE1542	Modern Optimization Techniques	EEE	3+1*	-	3
3	EE1543	Electrical Power Utilization (other than EEE)	EEE	3+1*	-	3
4	ME1542	Robotics (other than ME)	ME	3+1*	-	3
5	EC1554	Assistive Technologies	ECE	3+1*	-	3
6	EC1555	Introduction to Embedded Systems (other than ECE, CSE & IT)	ECE	3+1*	-	3
7	CS1519	Social Networks	CSE	3+1*	-	3
8	CS1520	Mobile Application Development (other than CSE & IT)	CSE	3+1*	-	3
9	CS1521	Real-Time Systems	CSE	3+1*	-	3
10	IT1520	Network Management Systems	IT	3+1*	-	3
11	IT1521	Fundamentals of E-Commerce (other than CSE & IT)	IT	3+1*	-	3
12	MA1510	Statistical Methods using R Software	Maths	3+1*	-	3

  
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## Self Study Courses

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of. Credits
1	CE1560	Global Positioning Systems	CE	2
2	CE1561	Interior Design	CE	2
3	EE1553	Electrical Safety Management	EEE	2
4	ME1560	Green Engineering	ME	2
5	ME1561	Managing Innovation & Entrepreneurship	ME	2
6	EC1566	Internet of Things	ECE	2
7	EC1567	Consumer Electronics	ECE	2
8	CS1531	e-Waste Management	CSE	2
9	CS1532	Management Information Systems	CSE	2
10	IT1528	Information & Communication Technology	IT	2
11	BA1503	Organizational Behaviour	MBA	2
12		MOOCs	--	2

  
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### III Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	EC1516	Signals and Systems	3+1*	-	3
2	EC1506	Pulse and Integrated Circuits	3+1*	-	3
3	EE1520	Electrical Machines – III	3+1*	-	3
4	EE1521	Power Electronics	3+1*	-	3
5		<b>Open Elective - I</b> (see the list of Open Electives)	3+1*	-	3
6	EE1523	Electrical Measurements & Instrumentation Lab	-	3	2
7	EE1524	Control Systems Lab	-	3	2
8	EE1525	Mini Project	-	3	2
		<b>Total</b>	<b>20</b>	<b>9</b>	<b>21</b>
9	SG1501	Sports & Games / Creative Arts (Mandatory Non-Credit Course)	-	2	-

### III Year - II Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	EE1526	Power Semiconductor Drives	3+1*	-	3
2	EC1509	Microprocessors and Microcontrollers	3+1*	-	3
3	EE1527	Switchgear and Protection	3+1*	-	3
4	EE1528	Optimization Techniques	3+1*	-	3
6	EE1529	Advanced Control Systems			
7	EE1530	Power Systems Operation Control			
8	CS1501	Data Structures Using C			
9		<b>Open Elective – II</b> (see the list of Open Electives)	3+1*	-	3
10	EC1501	Integrated Circuits & PDC Lab	-	3	2
11	EE1532	Power Electronics and Drives Lab	-	3	2
12	EE1533	Electrical Machines Lab – II	-	3	2
		<b>Total</b>	<b>20</b>	<b>9</b>	<b>21</b>

  
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IV Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	EE1534	Power System Analysis	3+1*	-	3
2	EE1535	Utilization of Electrical Energy	3+1*	-	3
3	EE1536	Core Elective – II Electrical Distribution Systems	3+1*	-	3
4	EE1537	HVDC Transmission Systems			
5	EE1534	VLSI Design			
6	EE1538	Special Electrical Machines			
7	EE1539	Core Elective – III Electrical Machine Design	3+1*	-	3
8	EE1540	Programmable Logic Controller			
9	CS1505	Computer Organization & Architecture			
10	EE1541	Flexible AC Transmission System			
11		Open Elective - III (see the list of Open Electives)	3+1*	-	3
12	EC1512	Microprocessors and Microcontrollers Lab	-	3	2
13	EE1544	Electrical Systems Simulation Lab	-	3	2
14	EE1545	Power Systems Lab	-	3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>

IV Year - II Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	EE1546	Elective – IV Electrical Costing & Estimation	3+1*	-	3
2	EE1547	Modeling and Analysis of Electrical Machines			
3	EE1548	High Voltage Engineering			
4	EC1533	Digital Signal Processing			
5	EE1549	Elective – V Digital Control Systems	3+1*	-	3
6	EE1550	AI Techniques			
7	EE1551	EHV AC/DC Transmission Systems			
8	EE1552	Power Plant Instrumentation	3+1*	-	3
9		Self Study Course (see the list of Self Study Courses)			
10	EE1554	Industrial / Practical Training	-	-	2
11	EE1555	Project Work	-	9	4
<b>Total</b>			<b>8</b>	<b>9</b>	<b>21</b>

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### Open Elective - I

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1522	Remote Sensing and GIS Techniques	CE	3+1*	-	3
2	CE1523	Elements of Civil Engineering (other than CE)	CE	3+1*	-	3
3	EE1522	Modeling and Simulation of Engineering Systems	EEE	3+1*	-	3
4	ME1525	Renewable Energy Sources	ME	3+1*	-	3
5	ME1526	Elements of Mechanical Engineering (other than ME)	ME	3+1*	-	3
6	CS1507	Computer Networks (other than CSE & IT)	CSE	3+1*	-	3
7	CT1506	Object Oriented Programming (other than CSE & IT)	CSE	2+1*	-	3
8	CS1501	Data Structures Using C (other than EEE,ECE,CSE&IT)	CSE	2+1*	-	3
9	CS1508	Cyber Laws	CSE	3+1*	-	3
10	IT1505	Open Source Software	IT	3+1*	-	3
11	IT1506	Fundamentals of Data Base Management Systems (other than CSE & IT)	IT	3+1*	-	3
12	MA1507	Fuzzy Mathematics	Maths	3+1*	-	3

  
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## Open Elective - II

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1534	Disaster Management	CE	3+1*	-	3
2	CE1535	Solid Waste Management (other than CE)	CE	3+1*	-	3
3	EE1531	Energy Audit, Conservation and Management	EEE	3+1*	-	3
4	ME1535	Material Science (other than ME)	ME	3+1*	-	3
5	EC1540	Automotive Electronics	ECE	3+1*	-	3
6	EC1541	Introduction to MP&MC (other than EEE, ECE, CSE & IT)	ECE	3+1*	-	3
7	CT1525	Cloud Computing (other than CSE & IT)	CSE	3+1*	-	3
8	CS1511	Web Technologies (other than CSE & IT)	CSE	2+1*	-	3
9	CS1513	Virtual Reality	CSE	3+1*	-	3
10	IT1510	Scripting Languages	IT	3+1*	-	3
11	IT1511	Big Data (other than CSE & IT)	IT	3+1*	-	3
12	MA1509	Multi-variate analysis and Special Functions	Maths	3+1*	-	3

  
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### Open Elective - III

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1548	Building Services (other than CE)	CE	3+1*	-	3
2	EE1542	Modern Optimization Techniques	EEE	3+1*	-	3
3	EE1543	Electrical Power Utilization (other than EEE)	EEE	3+1*	-	3
4	ME1542	Robotics (other than ME)	ME	3+1*	-	3
5	EC1554	Assistive Technologies	ECE	3+1*	-	3
6	EC1555	Introduction to Embedded Systems (other than ECE, CSE & IT)	ECE	3+1*	-	3
7	CS1519	Social Networks	CSE	3+1*	-	3
8	CS1520	Mobile Application Development (other than CSE & IT)	CSE	3+1*	-	3
9	CS1521	Real-Time Systems	CSE	3+1*	-	3
10	IT1520	Network Management Systems	IT	3+1*	-	3
11	IT1521	Fundamentals of E-Commerce (other than CSE & IT)	IT	3+1*	-	3
12	MA1510	Statistical Methods using R Software	Maths	3+1*	-	3

  
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### Self Study Courses

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of. Credits
1	CE1560	Global Positioning Systems	CE	2
2	CE1561	Interior Design	CE	2
3	EE1553	Electrical Safety Management	EEE	2
4	ME1560	Green Engineering	ME	2
5	ME1561	Managing Innovation & Entrepreneurship	ME	2
6	EC1566	Internet of Things	ECE	2
7	EC1567	Consumer Electronics	ECE	2
8	CS1531	e-Waste Management	CSE	2
9	CS1532	Management Information Systems	CSE	2
10	IT1528	Information & Communication Technology	IT	2
11	BA1503	Organizational Behaviour	MBA	2
12		MOOCs	--	2

  
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### III Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	ME1521	Hydraulic Machines and Systems	3+1*	-	3
2	ME1522	Principles of Machine Design	3+1*	-	3
3	ME1523	Metal Cutting & Machine Tools	3+1*	-	3
4	ME1524	Thermal Engineering - II	3+1*	-	3
5	ME1527	Open Elective – I (see the list of Open Electives)	3+1*	-	2
6	ME1521	Machine Tools Lab		3	
7	ME1528	Thermal Engineering Lab	-	3	2
8	ME1537	Fluid Mechanics and Hydraulic Machines Lab	-	3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>
9	SG1501	Sports & Games / Creative Arts (Mandatory Non-Credit Course)	-	2	-

### III Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	MA1508	Operation Research	3+1*	-	3
2	ME1530	Design of Mechanical Components	3+1*	-	3
3	ME1531	Metrology and Instrumentation	3+1*	-	3
4		Design & Drawing of R.C Structures	3+1*	-	3
5	ME1532 ME1533 ME1534 EE1503	Elective – I Automobile Engineering Finite Element Methods Unconventional Machining Processes Control Systems	3+1*	-	3
6		Open Elective – II (see the list of Open Electives)		-	
7	ME1536	Metrology and Instrumentation Lab	-	3	2
8		Computer Aided Modeling Lab	-	3	2
9	ME1538	Mini Project			
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>
10	SG1501	Sports & Games / Creative Arts (Mandatory Non-Credit Course)	-	2	-



  
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**IV Year - I Semester**

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	ME1539	CAD / CAM	3+1*	-	3
2	ME1540	Heat Transfer	3+1*	-	3
3	ME1541	<b>Elective – II</b> Computational Fluid Dynamics	3+1*	-	3
4	ME1542	Robotics			
5	ME1543	Interactive Computer Graphics			
6	ME1544	Mechanical Vibrations			
7	ME1545	<b>Elective – III</b> Production Planning and Control	3+1*	-	3
8	ME1546	Tribology			
9	ME1547	Refrigeration & Air Conditioning			
10	ME1548	Fracture Mechanics			
11		Open Elective – III (see the list of Open Electives)	3+1*	-	3
12	ME1549	CAD / CAM Lab	-	3	2
13	ME1550	Heat Transfer Lab	-	3	2
14	ME1551	Computational Methods for Engineers Lab	-	3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>

**IV Year - II Semester**

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	ME1552	<b>Elective – IV</b> Condition Monitoring	3+1*	-	3
2	ME1553	Rapid Prototyping			
3	ME1554	Power Plant Engineering			
4	ME1555	Design for Manufacturing & Assembly			
5	ME1556	<b>Elective – V</b> Nanotechnology	3+1*	-	3
6	ME1557	Gas Dynamics & Jet Propulsion			
7	ME1558	Automation in Manufacturing			
8	ME1559	Supply Chain Management			
9		<b>Self Study Course</b> (see the list of Self Study Courses)			2
10	ME1562	Industrial / Practical Training	-	-	4
11	ME1563	Project Work	-	9	9
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>

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## Open Elective - I

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1522	Remote Sensing and GIS Techniques	CE	3+1*	-	3
2	CE1523	Elements of Civil Engineering (other than CE)	CE	3+1*	-	3
3	EE1522	Modeling and Simulation of Engineering Systems	EEE	3+1*	-	3
4	ME1525	Renewable Energy Sources	ME	3+1*	-	3
5	ME1526	Elements of Mechanical Engineering (other than ME)	ME	3+1*	-	3
6	CS1507	Computer Networks (other than CSE & IT)	CSE	3+1*	-	3
7	CT1506	Object Oriented Programming (other than CSE & IT)	CSE	2+1*	-	3
8	CS1501	Data Structures Using C (other than EEE,ECE,CSE&IT)	CSE	2+1*	-	3
9	CS1508	Cyber Laws	CSE	3+1*	-	3
10	IT1505	Open Source Software	IT	3+1*	-	3
11	IT1506	Fundamentals of Data Base Management Systems (other than CSE & IT)	IT	3+1*	-	3
12	MA1507	Fuzzy Mathematics	Maths	3+1*	-	3

  
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## Open Elective - II

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1534	Disaster Management	CE	3+1*	-	3
2	CE1535	Solid Waste Management (other than CE)	CE	3+1*	-	3
3	EE1531	Energy Audit, Conservation and Management	EEE	3+1*	-	3
4	ME1535	Material Science (other than ME)	ME	3+1*	-	3
5	EC1540	Automotive Electronics	ECE	3+1*	-	3
6	EC1541	Introduction to MP&MC (other than EEE, ECE, CSE & IT)	ECE	3+1*	-	3
7	CT1525	Cloud Computing (other than CSE & IT)	CSE	3+1*	-	3
8	CS1511	Web Technologies (other than CSE & IT)	CSE	2+1*	-	3
9	CS1513	Virtual Reality	CSE	3+1*	-	3
10	IT1510	Scripting Languages	IT	3+1*	-	3
11	IT1511	Big Data (other than CSE & IT)	IT	3+1*	-	3
12	MA1509	Multi-variate analysis and Special Functions	Maths	3+1*	-	3

  
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### Open Elective - III

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No. of Periods per week		No. of Credits
				L	P	
1	CE1548	Building Services (other than CE)	CE	3+1*	-	3
2	EE1542	Modern Optimization Techniques	EEE	3+1*	-	3
3	EE1543	Electrical Power Utilization (other than EEE)	EEE	3+1*	-	3
4	ME1542	Robotics (other than ME)	ME	3+1*	-	3
5	EC1554	Assistive Technologies	ECE	3+1*	-	3
6	EC1555	Introduction to Embedded Systems (other than ECE, CSE & IT)	ECE	3+1*	-	3
7	CS1519	Social Networks	CSE	3+1*	-	3
8	CS1520	Mobile Application Development (other than CSE & IT)	CSE	3+1*	-	3
9	CS1521	Real-Time Systems	CSE	3+1*	-	3
10	IT1520	Network Management Systems	IT	3+1*	-	3
11	IT1521	Fundamentals of E-Commerce (other than CSE & IT)	IT	3+1*	-	3
12	MA1510	Statistical Methods using R Software	Maths	3+1*	-	3

  
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## Self Study Courses

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of. Credits
1	CE1560	Global Positioning Systems	CE	2
2	CE1561	Interior Design	CE	2
3	EE1553	Electrical Safety Management	EEE	2
4	ME1560	Green Engineering	ME	2
5	ME1561	Managing Innovation & Entrepreneurship	ME	2
6	EC1566	Internet of Things	ECE	2
7	EC1567	Consumer Electronics	ECE	2
8	CS1531	e-Waste Management	CSE	2
9	CS1532	Management Information Systems	CSE	2
10	IT1528	Information & Communication Technology	IT	2
11	BA1503	Organizational Behaviour	MBA	2
12		MOOCs	--	2

  
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### III Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	EC1527	Linear and Digital ICs	3+1*	-	3
2	EC1528	Computer Organization and Microprocessors	3+1*	-	3
3	EC1529	Antennas and Wave Propagation	3+1*	-	3
4	EC1530	Digital Communications	3+1*	-	3
5		<b>Open Elective - I</b> (see the list of Open Electives)	3+1*	-	3
6	EC1531	Pulse and Digital Circuits Lab	-	3	2
7	EC1532	Digital Communications Lab	-	3	2
8	EC1508	Microprocessors and Interfacing Lab	-	3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>

### III Year - II Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	EC1533	Digital Signal Processing	3+1*	-	3
2	EC1534	VLSI Design	3+1*	-	3
3	EC1535	Microwave and Optical Communications	3+1*	-	3
4		<b>Elective - I</b>			
5	EC1536	Digital Switching and Multiplexing	3+1*	-	3
6	EC1537	Computer Networks			
7	EC1538	Artificial Neural Networks			
	EC1539	Electronic System Design			
8		<b>Open Elective - II</b> (see the list of Open Electives)	3+1*	-	3
9		IC Applications Lab	-	3	2
10	EC1543	ECAD Lab	-	3	2
11	EC1544	Mini Project	-	3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>
12	NS1501	NSS (Mandatory Non-Credit Course)	-	2	-

  
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IV Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	EC1545	Electronic Measurements and Instrumentation	3+1*	-	3
2	EC1546	Microcontrollers and Embedded Systems	3+1*	-	3
<b>Core Elective – II</b>					
3	EC1547	Cellular and Mobile Communications	3+1*	-	3
4	EC1548	Sensors and Instrumentation			
5	CS1524	Advanced Computer Architecture			
6	EC1549	DSP Architecture and Applications			
<b>Core Elective – III</b>					
7	EC1550	FPGA Design	3+1*	-	3
8	EC1551	Digital TV Engineering			
9	EC1552	Digital Image Processing			
10	EC1553	Embedded Real Time Operating Systems			
11		<b>Open Elective - III</b> (see the list of Open Electives)	3+1*	-	3
12	EC1556	Digital Signal Processing Lab	-	3	2
13	EC1557	Microwave and Optical Communications Lab	-	3	2
14	EC1558	VLSI and Embedded Systems Lab	-	3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>

IV Year - II Semester

Sl.No	Subject	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
<b>Elective – IV</b>					
1	EC1559	Testing and Verification of VLSI Circuits	3+1*	-	3
2	EC1560	Speech Processing			
3	EC1561	Satellite Communications			
4	EC1562	Wireless Sensor Networks			
<b>Elective – V</b>					
5	EC1563	Lower Power VLSI Design	3+1*	-	3
6	EC1564	Radar Engineering			
7	EC1565	Software Engineering			
8	EC1566	Biomedical Instrumentation			
9		Self Study Course (see the list of Self Study Courses)	-	-	2
10	EC1568	Industrial / Practical Training	-	-	4
11	EC1569	Project Work	-	9	9
<b>Total</b>			<b>8</b>	<b>9</b>	<b>21</b>

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### Open Elective - I

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1522	Remote Sensing and GIS Techniques	CE	3+1*	-	3
2	CE1523	Elements of Civil Engineering (other than CE)	CE	3+1*	-	3
3	EE1522	Modeling and Simulation of Engineering Systems	EEE	3+1*	-	3
4	ME1525	Renewable Energy Sources	ME	3+1*	-	3
5	ME1526	Elements of Mechanical Engineering (other than ME)	ME	3+1*	-	3
6	CS1507	Computer Networks (other than CSE & IT)	CSE	3+1*	-	3
7	CT1506	Object Oriented Programming (other than CSE & IT)	CSE	2+1*	-	3
8	CS1501	Data Structures Using C (other than EEE,ECE,CSE&IT)	CSE	2+1*	-	3
9	CS1508	Cyber Laws	CSE	3+1*	-	3
10	IT1505	Open Source Software	IT	3+1*	-	3
11	IT1506	Fundamentals of Data Base Management Systems (other than CSE & IT)	IT	3+1*	-	3
12	MA1507	Fuzzy Mathematics	Maths	3+1*	-	3

  
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## Open Elective - II

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1534	Disaster Management	CE	3+1*	-	3
2	CE1535	Solid Waste Management (other than CE)	CE	3+1*	-	3
3	EE1531	Energy Audit, Conservation and Management	EEE	3+1*	-	3
4	ME1535	Material Science (other than ME)	ME	3+1*	-	3
5	EC1540	Automotive Electronics	ECE	3+1*	-	3
6	EC1541	Introduction to MP&MC (other than EEE, ECE, CSE & IT)	ECE	3+1*	-	3
7	CT1525	Cloud Computing (other than CSE & IT)	CSE	3+1*	-	3
8	CS1511	Web Technologies (other than CSE & IT)	CSE	2+1*	-	3
9	CS1513	Virtual Reality	CSE	3+1*	-	3
10	IT1510	Scripting Languages	IT	3+1*	-	3
11	IT1511	Big Data (other than CSE & IT)	IT	3+1*	-	3
12	MA1509	Multi-variate analysis and Special Functions	Maths	3+1*	-	3

  
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### Open Elective - III

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No. of Periods per week		No. of Credits
				L	P	
1	CE1548	Building Services (other than CE)	CE	3+1*	-	3
2	EE1542	Modern Optimization Techniques	EEE	3+1*	-	3
3	EE1543	Electrical Power Utilization (other than EEE)	EEE	3+1*	-	3
4	ME1542	Robotics (other than ME)	ME	3+1*	-	3
5	EC1554	Assistive Technologies	ECE	3+1*	-	3
6	EC1555	Introduction to Embedded Systems (other than ECE, CSE & IT)	ECE	3+1*	-	3
7	CS1519	Social Networks	CSE	3+1*	-	3
8	CS1520	Mobile Application Development (other than CSE & IT)	CSE	3+1*	-	3
9	CS1521	Real-Time Systems	CSE	3+1*	-	3
10	IT1520	Network Management Systems	IT	3+1*	-	3
11	IT1521	Fundamentals of E-Commerce (other than CSE & IT)	IT	3+1*	-	3
12	MA1510	Statistical Methods using R Software	Maths	3+1*	-	3



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## Self Study Courses

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of. Credits
1	CE1560	Global Positioning Systems	CE	2
2	CE1561	Interior Design	CE	2
3	EE1553	Electrical Safety Management	EEE	2
4	ME1560	Green Engineering	ME	2
5	ME1561	Managing Innovation & Entrepreneurship	ME	2
6	EC1566	Internet of Things	ECE	2
7	EC1567	Consumer Electronics	ECE	2
8	CS1531	e-Waste Management	CSE	2
9	CS1532	Management Information Systems	CSE	2
10	IT1528	Information & Communication Technology	IT	2
11	BA1503	Organizational Behaviour	MBA	2
12		MOOCs	--	2

  
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### III Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	CT1512	Database Management Systems	3+1*	-	3
2	CS1510	Computer Networks - I	3+1*	-	3
3	CS1511	Web Technologies	3+1*	-	3
4	CT1514	Object Oriented Analysis and Design	3+1*	-	3
5		<b>Open Elective - I</b> (see the list of Open Electives)	3+1*	-	3
6	CT1513	Database Management Systems Lab	-	3	2
7	CS1509	Case Tools Lab	-	3	2
8	CS1512	Web Technologies Lab	-	3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>

### III Year - II Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	CT1515	Design and Analysis of Algorithms	3+1*	-	3
2	CT1516	Software Engineering	3+1*	-	3
3	CS1514	Computer Networks - II	3+1*	-	3
4	CT1517	Elective - I Data Warehousing and Data Mining	3+1*	-	3
5	EC1511	Micro Processors and Multi Core Systems			
6	CT1518	Human Computer Interface Artificial Intelligence			
7	CT1521	(or) Any other elective depending on industry needs			
8		<b>Open Elective - II</b> (see the list of Open Electives)	3+1*	-	3
9	CS1515	Computer Networks Lab	-	3	2
10	CS1516	Software Engineering Lab	-	3	2
11	CS1518	Mini Project	-	3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>
12	NS1501	NSS (Mandatory Non-Credit Course)	-	2	-

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#### IV Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	CS1522	Information Security	3+1*	-	3
2	CS1520	Mobile Application Development	3+1*	-	3
3	CT1519	<b>Core Elective – II</b> Digital Image Processing	3+1*	-	3
4	CS1524	Advanced Computer Architecture			
5	CS1525	Embedded Systems			
6	CS1526	Bio-Informatics			
7	CS1527	<b>Core Elective – III</b> Distributed Systems	3+1*	-	3
8	CS1528	Parallel Computing			
9	CT1520	Software Testing Methodologies			
10	CS1529	Web Services			
11		<b>Open Elective - III</b> (see the list of Open Electives)	3+1*	-	3
12	CS1523	Information Security Lab	-	3	2
13	CT1521	Mobile Application Development Lab	-	3	2
14	CT1522	Multi Media Application Development Lab		3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>

#### IV Year - II Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	CT1524	<b>Elective – IV</b> Distributed Data Bases	3+1*	-	3
2	CT1525	Software Project Management			
3	CS1533	Semantic Web			
4	CT1519	Big Data			
1	CS1534	<b>Elective – V</b> Machine Learning	3+1*	-	3
2	CT1520	Cloud Computing			
3	CT1526	Pattern Recognition			
4	CS1535	Wireless Networks			
5		<b>Self Study Course</b> (see the list of Self Study Courses)	-	-	2
6	CS1536	Industrial / Practical Training	-	-	4
7	CS1537	Project Work	-	9	9
<b>Total</b>			<b>8</b>	<b>9</b>	<b>21</b>

  
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### Open Elective - I

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1522	Remote Sensing and GIS Techniques	CE	3+1*	-	3
2	CE1523	Elements of Civil Engineering (other than CE)	CE	3+1*	-	3
3	EE1522	Modeling and Simulation of Engineering Systems	EEE	3+1*	-	3
4	ME1525	Renewable Energy Sources	ME	3+1*	-	3
5	ME1526	Elements of Mechanical Engineering (other than ME)	ME	3+1*	-	3
6	CS1507	Computer Networks (other than CSE & IT)	CSE	3+1*	-	3
7	CT1506	Object Oriented Programming (other than CSE & IT)	CSE	2+1*	-	3
8	CS1501	Data Structures Using C (other than EEE, ECE, CSE & IT)	CSE	2+1*	-	3
9	CS1508	Cyber Laws	CSE	3+1*	-	3
10	IT1505	Open Source Software	IT	3+1*	-	3
11	IT1506	Fundamentals of Data Base Management Systems (other than CSE & IT)	IT	3+1*	-	3
12	MA1507	Fuzzy Mathematics	Maths	3+1*	-	3

  
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## Open Elective - II

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1534	Disaster Management	CE	3+1*	-	3
2	CE1535	Solid Waste Management (other than CE)	CE	3+1*	-	3
3	EE1531	Energy Audit, Conservation and Management	EEE	3+1*	-	3
4	ME1535	Material Science (other than ME)	ME	3+1*	-	3
5	EC1540	Automotive Electronics	ECE	3+1*	-	3
6	EC1541	Introduction to MP&MC (other than EEE, ECE, CSE & IT)	ECE	3+1*	-	3
7	CT1525	Cloud Computing (other than CSE & IT)	CSE	3+1*	-	3
8	CS1511	Web Technologies (other than CSE & IT)	CSE	2+1*	-	3
9	CS1513	Virtual Reality	CSE	3+1*	-	3
10	IT1510	Scripting Languages	IT	3+1*	-	3
11	IT1511	Big Data (other than CSE & IT)	IT	3+1*	-	3
12	MA1509	Multi-variate analysis and Special Functions	Maths	3+1*	-	3

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### Open Elective - III

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1548	Building Services (other than CE)	CE	3+1*	-	3
2	EE1542	Modern Optimization Techniques	EEE	3+1*	-	3
3	EE1543	Electrical Power Utilization (other than EEE)	EEE	3+1*	-	3
4	ME1542	Robotics (other than ME)	ME	3+1*	-	3
5	EC1554	Assistive Technologies	ECE	3+1*	-	3
6	EC1555	Introduction to Embedded Systems (other than ECE, CSE & IT)	ECE	3+1*	-	3
7	CS1519	Social Networks	CSE	3+1*	-	3
8	CS1520	Mobile Application Development (other than CSE & IT)	CSE	3+1*	-	3
9	CS1521	Real-Time Systems	CSE	3+1*	-	3
10	IT1520	Network Management Systems	IT	3+1*	-	3
11	IT1521	Fundamentals of E-Commerce (other than CSE & IT)	IT	3+1*	-	3
12	MA1510	Statistical Methods using R Software	Maths	3+1*	-	3

  
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## Self Study Courses

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of. Credits
1	CE1560	Global Positioning Systems	CE	2
2	CE1561	Interior Design	CE	2
3	EE1553	Electrical Safety Management	EEE	2
4	ME1560	Green Engineering	ME	2
5	ME1561	Managing Innovation & Entrepreneurship	ME	2
6	EC1566	Internet of Things	ECE	2
7	EC1567	Consumer Electronics	ECE	2
8	CS1531	e-Waste Management	CSE	2
9	CS1532	Management Information Systems	CSE	2
10	IT1528	Information & Communication Technology	IT	2
11	BA1503	Organizational Behaviour	MBA	2
12		MOOCs	--	2

  
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### III Year - I Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	EC1507	Micro Processors and Interfacing	3+1*	-	3
2	IT1507	Computer Networks	3+1*	-	3
3	CT1514	Object Oriented Analysis & Design	3+1*	-	3
4	CT1511	Operating Systems	3+1*	-	3
5		<b>Open Elective - I</b> (see the list of Open Electives)	3+1*	-	3
6	EC1508	Micro Processors and Interfacing Lab	-	3	2
7	IT1508	Computer Networks and Case Tools Lab	-	3	2
8	IT1509	Operating Systems Lab	-	3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>

### III Year - II Semester

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	CT1509	Compiler Design	3+1*	-	3
2	IT1512	Net Technologies	3+1*	-	3
3	IT1513	Advanced Java and Web Technologies	3+1*	-	3
4	IT1514	Advanced Operating Ssystem			
5	CT1510	Computer Graphics		-	
6	IT1515	Cryptography and Network Security			
7	IT1516	Computer Architecture	3+1*		3
8		<b>Open Elective - II</b> (see the list of Open Electives)	3+1*	-	3
9	IT1517	Net Technologies Lab	-	3	2
10	IT1518	Advanced Java and Web Technologies Lab	-	3	2
11	IT1519	Mini Project	-	3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>
12	NS1501	NSS (Mandatory Non-Credit Course)	-	2	-

  
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**IV Year - I Semester**

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
1	CT1517	Data Warehousing and Data Mining	3+1*	-	3
2	IT1522	Multimedia Application Development	3+1*	-	3
		<b>Core Elective – II</b>			
3	CT1523	Distributed Databases	3+1*	-	3
4	CT1518	Human Computer Interaction			
5	IT1523	Bio-Metrics			
6	CT1520	Software Testing Methodologies			
		<b>Core Elective – III</b>			
7	IT1524	Information Retrieval Systems	3+1*	-	3
8	CT1519	Digital Image Processing			
9	IT1525	Mobile Computing			
10	CT1524	Software Project Management			
11		<b>Open Elective - III</b> (see the list of Open Electives)	3+1*	-	3
12	CT1521	Mobile Application Lab	-	3	2
13	CT1522	Multimedia Application Development Lab	-	3	2
14	IT1526	Free and Open Source Software Lab		3	2
<b>Total</b>			<b>20</b>	<b>9</b>	<b>21</b>

**IV Year - II Semester**

Sl.No	Subject Cods	Name of the Course / Laboratory	No.of Periods per week		No.of Credits
			L	P	
		<b>Elective – IV</b>			
1	IT1529	E-Commerce	3+1*	-	3
2	CT1526	Pattern Recognition			
3	CT1520	Cloud Computing			
4	IT1530	Business Intelligence			
		<b>Elective – V</b>			
1	CT1519	Big Data	3+1*	-	3
2	IT1531	Soft Computing			
3	IT1532	Computer Forensics			
4	IT1533	Software Quality Assurance			
5		<b>Self Study Course</b> (see the list of Self Study Courses)	-	-	2
6	IT1534	Industrial / Practical Training	-	-	4
7	IT1535	Project Work	-	9	9
<b>Total</b>			<b>8</b>	<b>9</b>	<b>21</b>

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## Open Elective - I

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1522	Remote Sensing and GIS Techniques	CE	3+1*	-	3
2	CE1523	Elements of Civil Engineering (other than CE)	CE	3+1*	-	3
3	EE1522	Modeling and Simulation of Engineering Systems	EEE	3+1*	-	3
4	ME1525	Renewable Energy Sources	ME	3+1*	-	3
5	ME1526	Elements of Mechanical Engineering (other than ME)	ME	3+1*	-	3
6	CS1507	Computer Networks (other than CSE & IT)	CSE	3+1*	-	3
7	CT1506	Object Oriented Programming (other than CSE & IT)	CSE	2+1*	-	3
8	CS1501	Data Structures Using C (other than EEE,ECE,CSE&IT)	CSE	2+1*	-	3
9	CS1508	Cyber Laws	CSE	3+1*	-	3
10	IT1505	Open Source Software	IT	3+1*	-	3
11	IT1506	Fundamentals of Data Base Management Systems (other than CSE & IT)	IT	3+1*	-	3
12	MA1507	Fuzzy Mathematics	Maths	3+1*	-	3

  
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## Open Elective - II

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1534	Disaster Management	CE	3+1*	-	3
2	CE1535	Solid Waste Management (other than CE)	CE	3+1*	-	3
3	EE1531	Energy Audit, Conservation and Management	EEE	3+1*	-	3
4	ME1535	Material Science (other than ME)	ME	3+1*	-	3
5	EC1540	Automotive Electronics	ECE	3+1*	-	3
6	EC1541	Introduction to MP&MC (other than EEE, ECE, CSE & IT)	ECE	3+1*	-	3
7	CT1525	Cloud Computing (other than CSE & IT)	CSE	3+1*	-	3
8	CS1511	Web Technologies (other than CSE & IT)	CSE	2+1*	-	3
9	CS1513	Virtual Reality	CSE	3+1*	-	3
10	IT1510	Scripting Languages	IT	3+1*	-	3
11	IT1511	Big Data (other than CSE & IT)	IT	3+1*	-	3
12	MA1509	Multi-variate analysis and Special Functions	Maths	3+1*	-	3

  
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### Open Elective - III

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of Periods per week		No.of. Credits
				L	P	
1	CE1548	Building Services (other than CE)	CE	3+1*	-	3
2	EE1542	Modern Optimization Techniques	EEE	3+1*	-	3
3	EE1543	Electrical Power Utilization (other than EEE)	EEE	3+1*	-	3
4	ME1542	Robotics (other than ME)	ME	3+1*	-	3
5	EC1554	Assistive Technologies	ECE	3+1*	-	3
6	EC1555	Introduction to Embedded Systems (other than ECE, CSE & IT)	ECE	3+1*	-	3
7	CS1519	Social Networks	CSE	3+1*	-	3
8	CS1520	Mobile Application Development (other than CSE & IT)	CSE	3+1*	-	3
9	CS1521	Real-Time Systems	CSE	3+1*	-	3
10	IT1520	Network Management Systems	IT	3+1*	-	3
11	IT1521	Fundamentals of E-Commerce (other than CSE & IT)	IT	3+1*	-	3
12	MA1510	Statistical Methods using R Software	Maths	3+1*	-	3

  
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## Self Study Courses

Sl. No.	Subject Cods	Title of the Subject	Department Offering the Subject	No.of. Credits
1	CE1560	Global Positioning Systems	CE	2
2	CE1561	Interior Design	CE	2
3	EE1553	Electrical Safety Management	EEE	2
4	ME1560	Green Engineering	ME	2
5	ME1561	Managing Innovation & Entrepreneurship	ME	2
6	EC1566	Internet of Things	ECE	2
7	EC1567	Consumer Electronics	ECE	2
8	CS1531	e-Waste Management	CSE	2
9	CS1532	Management Information Systems	CSE	2
10	IT1528	Information & Communication Technology	IT	2
11	BA1503	Organizational Behaviour	MBA	2
12		MOOCs	--	2

  
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## COURSE STRUCTURE

### I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	MA2901	Computational Methods in Engineering	4	-	-	3
2	CE2901	Theory of Elasticity	4	-	-	3
3	CE2902	Structural Dynamics	4	-	-	3
4	CE2903	Advanced Design of Concrete Structures	4	-	-	3
5	CE2904	Stability of Structures	4	-	-	3
6		Professional Elective - I	4	-	-	3
7	CE2908	Advanced Concrete Technology and Structural Engineering Lab	-	-	4	2
<b>Total</b>			<b>24</b>	<b>-</b>	<b>4</b>	<b>20</b>

### II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	CE2909	Earthquake Resistant Design	4	-	-	3
2	CE2910	Finite Element Analysis	4	-	-	3
3	CE2911	Theory of Plates and Shells	4	-	-	3
4	HS2901	Research Methodologies	4	-	-	3
5		Professional Elective - II	4	-	-	3
6		Professional Elective - III	4	-	-	3
7	CE2918	Computer Applications in Structural Engineering Lab	-	-	4	2
8		Seminar	-	-	-	2
<b>Total</b>			<b>24</b>	<b>-</b>	<b>4</b>	<b>22</b>

L : Lecture      T : Tutorial      P : Practical



### III Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1		Term Paper	-	-	4	2
2		Dissertation (Initiated in third semester)	-	-	-	-
Total			-	-	4	2

### IV Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1		Dissertation (Carried out in third & Fourth Semester)	-	-	52	34
Total			-	-	52	34

### Professional Electives:

#### Professional Elective - I

- CE2905 Advanced Concrete Technology
- CE2906 Ground Improvement Techniques
- CE2907 Structural Optimization

#### Professional Elective - II

- CE2912 Advanced Design of Steel Structures
- CE2913 Pre-Stressed Concrete
- CE2914 Fracture Mechanics of Concrete

#### Professional Elective - III

- CE2915 Design of Sub-Structures
- CE2916 Design of Bridge Structures
- CE2917 High Rise Buildings

## COURSE STRUCTURE

### I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	MA2902	Linear and Non-Linear Optimization	4	-	-	3
2	EC2901	ARM Architecture and Programming**	3	-	2	3
3	EE2902	Analysis of Power Electronic Converters	4	-	-	3
4	EE2903	Electrical Machine Modeling and Analysis	4	-	-	3
5	EE2904	Modern Control Theory	4	-	-	3
6		Professional Elective - I	4	-	-	3
7	EE2908	Power Electronic System Simulation Lab	-	-	4	2
<b>Total</b>			<b>23</b>	<b>-</b>	<b>6</b>	<b>20</b>

### II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	HS2901	Research Methodology	4	-	-	3
2	EE2911	Advanced Digital Control Systems	4	-	-	3
3	EE2912	Switched Mode Power Converters **	3	-	2	3
4	EE2913	Advanced Electric Drives	4	-	-	3
5		Professional Elective - II	4	-	-	3
6		Professional Elective - III	4	-	-	3
7	EE2919	Power Electronics and Electric Drives Lab	-	-	4	2
8		Seminar	-	-	-	2
<b>Total</b>			<b>23</b>	<b>-</b>	<b>6</b>	<b>22</b>

\*\* Project Based Theory Course

L : Lecture      T : Tutorial      P : Practical

### III Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1		Term Paper	-	-	4	2
2		Dissertation (Initiated in third semester)	-	-	-	-
Total			-	-	4	2

### IV Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1		Dissertation (Carried out in third & Fourth Semester)	-	-	52	34
Total			-	-	52	34

### Professional Electives:

#### Professional Elective - I

- EE2905 Power Semiconductor Devices & Protection
- EE2906 Special Machines and Control
- EE2907 HVDC Transmission Systems

#### Professional Elective - II

- EE2914 Renewable Energy Storage Systems
- EE2915 Application of power Electronics to Power Systems
- EE2916 Custom Power Devices

#### Professional Elective - III

- EC2902 Digital Signal Processing and Applications
- EE2917 AI Techniques
- EE2918 Smart Grids

## COURSE STRUCTURE

### I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	MA2901	Computational Methods in Egnineering	4	-	-	3
2	ME2901	Advanced Mechanics of Solids	4	-	-	3
3	ME2902	Analysis and Synthesis of Mechanisms	4	-	-	3
4	ME2903	Mechancial Vibrations **	3	-	2	3
5	ME2904	Gear Engineering	4	-	-	3
6		Professional Elective - I	4	-	-	3
7	ME2908	Machine Dynaics Lab	-	-	4	2
<b>Total</b>			<b>23</b>	<b>-</b>	<b>6</b>	<b>20</b>

### II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	HS2901	Research Methodologies	4	-	-	3
2	ME2909	Finite Element Methods **	3	-	2	3
3	ME2910	Design with Advacned Materials	4	-	-	3
4	ME2911	Design for Manufacturing and Assembly	4	-	-	3
5		Professional Elective - II	4	-	-	3
6		Professional Elective - III	4	-	-	3
7	ME2918	Modeling and Analysis Lab	-	-	4	2
8		Seminar	-	-	-	2
<b>Total</b>			<b>23</b>	<b>-</b>	<b>6</b>	<b>22</b>

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### III Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1		Term Paper	-	-	4	2
2		Dissertation (Initiated in third semester)	-	-	-	-
Total			-	-	4	2

### IV Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1		Dissertation (Carried out in third & Fourth Semester)	-	-	52	34
Total			-	-	52	34

### Professional Electives:

#### Professional Elective - I

- ME2905 Rotor Dynamics
- ME2906 Experimental Stress Analysis
- ME2907 Product Design

#### Professional Elective - II

- ME2912 Fracture Mechanics
- ME2913 Condition Monitoring
- ME2914 Rapid Tooling and Prototyping

#### Professional Elective - III

- ME2915 Theory of Elasticity
- ME2916 Geometric Modeling
- ME2917 Tribology

  
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## COURSE STRUCTURE

### I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	MA2902	Linear and Non-Linear Optimization Techniques	4	-	-	3
2	EC2903	Principles of Digital Design Using FPGA**	3	-	2	3
3	EC2904	Advanced Digital Signal Processing	4	-	-	3
4	EC2905	Advanced Microcontrollers	4	-	-	3
5	EC2906	Embedded C	4	-	-	3
6		Professional Elective - I	4	-	-	3
7	EC2910	Advanced Digital Design Lab	-	-	4	2
<b>Total</b>			<b>23</b>	<b>-</b>	<b>6</b>	<b>20</b>

### II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	HS2901	Research Methodology	4	-	-	3
2	EC2911	Advanced Embedded Systems **	3	-	2	3
3	EC2912	Principles of CMOS Analog Design	4	-	-	3
4	EC2913	Internet of Things	4	-	-	3
5		Professional Elective - II	4	-	-	3
6		Professional Elective - III	4	-	-	3
7	EC2920	Embedded Systems Lab	-	-	4	2
8		Seminar	-	-	-	2
<b>Total</b>			<b>23</b>	<b>-</b>	<b>6</b>	<b>22</b>

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### III Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1		Term Paper	-	-	4	2
2		Dissertation (Initiated in third semester)	-	-	-	-
<b>Total</b>			-	-	<b>4</b>	<b>2</b>

### IV Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1		Dissertation (Carried out in third & Fourth Semester)	-	-	52	34
<b>Total</b>			-	-	<b>52</b>	<b>34</b>

#### Professional Electives:

##### Professional Elective - I

- EC2907 Embedded Networking
- EV2908 Sensors and Actuators
- EE2909 Low Power CMOS Digital Design

##### Professional Elective - II

- EC2914 SoC Design
- EC2915 Embedded Real Time Operating Systems
- EC2916 Embedded System Design

##### Professional Elective - III

- EC2917 Advanced Computer Networks
- EC2918 Hardware Software Co-Design
- EC2919 Wireless Sensor Networks



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## COURSE STRUCTURE

### I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	MA2903	Statistics with R Programming	4	-	-	3
2	CS2901	Advanced Data Structures & Algorithm Analysis	4	-	-	3
3	CS2902	Wireless Networks	4	-	-	3
4	CS2903	Object Oriented Software Engineering	4	-	-	3
5	CS2904	Business Intelligence **	3	-	2	3
6		Professional Elective - I	4	-	-	3
7	CS2908	Advanced Data Structures & Algorithm and R Programming Lab	-	-	4	2
<b>Total</b>			<b>23</b>	<b>-</b>	<b>6</b>	<b>20</b>

### II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	HS2901	Research Methodology	4	-	-	3
2	CS2909	Information Security	3	-	2	3
3	CS2910	Scripting Languages	4	-	-	3
4	CS2911	Data Analytics **	3	-	2	3
5		Professional Elective - II	4	-	-	3
6		Professional Elective - III	4	-	-	3
7	CS2917	Information Security & Scripting Languages Lab	-	-	4	2
8		Seminar	-	-	-	2
<b>Total</b>			<b>23</b>	<b>-</b>	<b>6</b>	<b>22</b>

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### III Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods			No. of Credits
			per week			
			L	T	P	
1		Term Paper	-	-	4	2
2		Dissertation (Initiated in third semester)	-	-	-	-
<b>Total</b>			-	-	4	2

### IV Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods			No. of Credits
			per week			
			L	T	P	
1		Dissertation (Carried out in third & Fourth Semester)	-	-	52	34
<b>Total</b>			-	-	52	34

### Professional Electives:

#### Professional Elective - I

CS2905	Advanced Computer Architecture
CS2906	Digital Image Processing
CS2907	E-Commerce

#### Professional Elective - II

CS2912	Advanced Operating Systems
CS2913	Machine Learning
CS2914	Software Testing Methodologies

#### Professional Elective - III

CT2901	Cloud Computing
CS2915	Soft Computing
CS2916	Internet of Things

## COURSE STRUCTURE

### I Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	EG2901	Business Communication	4	-	-	3
2	MA2901	Quantitative Analysis for Business Decisions	3	1	-	3
3	BA2901	Perspectives of Management	4	-	-	3
4	BA2902	Managerial Economics	4	-	-	3
5	BA2903	Accounting for Managers	4	-	-	3
6	BA2904	Business Environment and Legislation	4	-	-	3
7	BA2905	Business Law	4	-	-	3
8	BA2906	Information Technology Lab for Business Management	-	-	4	2
<b>Total</b>			<b>27</b>	<b>1</b>	<b>4</b>	<b>23</b>

### II Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits
			L	T	P	
1	MA2903	Business Research Methods	3	1	-	3
2	BA2907	Financial Management	4	-	-	3
3	BA2908	Marketing Management	4	-	-	3
4	BA2909	Human Resource Management	4	-	-	3
5	BA2910	Production & Operations Management	4	-	-	3
6	BA2911	International Business	4	-	-	3
7	BA2912	Organizational Behaviour	4	-	-	3
<b>Total</b>			<b>27</b>	<b>1</b>	<b>-</b>	<b>21</b>

L : Lecture      T : Tutorial      P : Practical

### III Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits	
			L	T	P		
1	BA2913	Business Policy & Strategic Management	4	-	-	3	
2	BA2914	Logistics & Supply Chain Management	4	-	-	3	
3	BA2915	E-Business	4	-	-	3	
4	BA2916	Business Ethics & Corporate Governance	4	-	-	3	
5		Specialisation - I	Marketing subjects common to all	4	-	-	3
6		Specialisation - II		4	-	-	3
7		Specialisation - III	Finance (or) HR	4	-	-	3
8		Specialisation - IV		4	-	-	3
<b>Total</b>			<b>32</b>	<b>0</b>	<b>0</b>	<b>24</b>	

### IV Semester

Sl. No.	Course Code	Name of the Course / Laboratory	No. of Periods per week			No. of Credits	
			L	T	P		
1	BA2923	Entrepreneurship & Project Management	4	-	-	3	
2		Specialisation - V	Marketing subjects common to all	4	-	-	3
3		Specialisation - VI		4	-	-	3
4		Specialisation - VII	Finance (or) HR	4	-	-	3
5		Specialisation - VIII		4	-	-	3
6		Project Report	-	-	-	6	
7		Comprehensive Viva-Voce	-	-	-	1	
<b>Total</b>			<b>20</b>	<b>0</b>	<b>0</b>	<b>22</b>	

#### Specialisations:

III Semester	IV Semester
<b>Marketing</b> BA2917 Advertising & Brand Management BA2918 Consumer Behaviour <b>Finance</b> BA2919 Security Analysis & Portfolio Mgt. BA2920 International Financial Management <b>HR</b> BA2921 Training and Development BA2922 Industrial Relations and Labour Laws	<b>Marketing</b> BA2924 Marketing of Services BA2925 Sales & Distribution Management <b>Finance</b> BA2926 Financial Derivatives BA2927 Financial Institutions and Services <b>HR</b> BA2928 Compensation Management BA2929 Management of Change and Development