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SAMSKRUTI COLLEGE OF ENGINEERING AND TECHNOLOGY

(Sponsored by St. VINCENT EDUCATIONAL SOCIETY)

Regd. No. 5782/2000

(Approved by AICTE, New Delhi and Affiliated to JNTU, Hyderabad)

Kondapur Village, Ghatkesar Mandal, Medchal District (Old R.R. Dist) - 501 301. T.S

		LIST	of Courses in Experential learning	
			2019-2020	
	Program	Program	Name of the Course that include experiential learning	
S.NO	name	code	through project work/field work/internship	
1			Engineering Graphics	
	1		Engineering Mechanics	
3	1	Ì	Surveying and Geomatics	
4	1		Engineering Geology	
5			Strength of Materials - I	
6	1	6	Fluid Mechanics	
7	1		Surveying Lab	
8	1		Strength of Materials Lab	
9	1		Engineering Geology Lab	
10	1		Building Materials, Construction and Planning	
11	1		Strength of Materials - II	
12	ł		Hydraulics and Hydraulic Machinery	
13			Structural Analysis - I	
14	1		Computer aided Civil Engineering Drawing	
15	1		Hydraulics and Hydraulic Machinery Lab	
16			Concrete Technology	
17	1		Reinforced Concrete Structures Design and Drawing	
18	1		Engineering Geology	
19			Geotechnical Engineering	
20			Water Resources Engineering-I	
21			Disaster Management	
22			Fluid Mechanics & Hydraulic Machinery Lab	
23			Engineering Geology Lab	
24			Steel Structures Design and Drawing	
25			Environmental Engineering	
26	ľ		Transportation Engineering -I	
27			Foundation Engineering	
28			Structural Analysis -II	
29				sold -
30	B.Tech-CE	01	Ground Improvement Techniques	PALCEOF
31			Ground Water Hydrology	OFFE THO!
32			Environmental Impact Assessment	NO TECH Medel
33			Elements of Earthquake Engineering Ground Improvement Techniques Ground Water Hydrology Environmental Impact Assessment Geotechnical Engineering Lab Advanced Communication Skills Lab	Kezal lun
34			Advanced Communication Skills Lab	No.

	7			
35		1	Remote Sensing & GIS	
36			Transportation Engineering -II	
37		1	Estimating & Costing	
38		J	Water Resources Engineering-II	
39			Finite Element Methods	
40			Advanced Foundation Engineering	
41	7		Watershed Management	
42	1		Air Pollution and Control	
43	1	ļ	Advanced Structural Design	
44	1	1	Earth and Rock fill Dams and Slope Stability	
45	1		Water Resources Systems Analysis	
46	1		Industrial Waste Water Treatment	
47	1		Concrete & Highway Materials Lab	
43			Environmental Engineering Lab	
49	1		Rehabilitation and Retrofitting of Structures	
50	1		Geo-Environmental Engineering	
51	1			
52	1		Design and Drawing of Irrigation Structures Solid Waste Management	
53	-		Prestressed Concrete Structures	
54	1	8		
55	-		Construction Management	
	-		Industry Oriented Mini project	
56	-		Seminar	
57	-		Project Work	
58	7-2		Comprehensive viva	
59	-		Basic Electrical Engineering	
60	-		Electrical Circuit Analysis	
61			Electrical Machines - I	
62			Electromagnetic Fields	
63			Electrical Machines Lab - I	
64		i.	Electrical Circuits Lab	
65			Electrical Machines – II	
66			Control Systems	
67		9	Power System - I	
68			Electrical Machines Lab - II	
69	S I		Control Systems Lab	
7.0			Electrical Measurements & Instrumentation	
71			Power Systems - II	
72	L,		Electrical Measurements & Instrumentation Lab	
73	B.Tech-		Basic Electrical simulation Lab	
74	EEE	O2	Power Systems Analysis	
75	255		Power Electronics	
76			Switch Gear and Protection	
77	10		Electrical and Electronics Instrumentation	
78			Power Systems Lab	
79			Power Systems Lab Power Electronics Lab Power System Operation and control HVDC Transmission Modern Power Electronics Industry Oriented Mini project Seminar SAMEERING AND SAME RICHARD SAME SAME AND SAME RICHARD SAME SAME SAME SAME SAME SAME SAME SAME	
80			Power System Operation and control	
81.			Power System Operation and control HVDC Transmission Modern Power Electronics Industry Oriented Mini project Seminar Seminar Seminar Seminar	"Of
82			Modern Power Electronics	den
83			Industry Oriented Minimesiact	•
			Industry Oriented Mini project Seminar SANGER INDUSTRIES	
84			isenulal	

85			Electrical Workshop
86		1	Electrical Systems Simulation Lab
87			Electrical Distribution Systems
88		1	Major Project
89			Utilization of Electric Power
90	2 192	1	Engineering Graphics
91			Engineering Mechanics
92		1	Engineering Workshop
93	7		Mechanics of Solids
94		ĺ	Material Science and Metallurgy
95	7		Production Technology
96	7		Thermodynamics
97	7		Production Technology Lab
98	7		Machine Drawing Practice
99	7		Material Science and Mechanics of Solids LabME308PC
100	7		Kinematics of Machinery
101	7		Thermal Engineering - I
102	1		Fluid Mechanics and Hydraulic Machines
103			Instrumentation and Control Systems
104	1		Fluid Mechanics and Hydraulic Machines Lab
105			Instrumentation and Control Systems Lab
105			Design of Machine Members - I
107	1		Thermal Engineering-I
108	1		Metrology and Machine Tools
109	1 1	C.	Thermal Engineering Lab
110	1 1		Machine Tools Lab
111	1 . 1		Engineering Metrology Lab
112	1		Thermal Engineering –II
113	1 1		
114	1 1		Design of Machine Members-II Heat Transfer
115			Finite Element Methods
116	B.Tech-		
117	ME	О3	Refrigeration and Air Conditioning
118] ""]		Machine Tool Design
119	1 1		IC Engines and Gas Turbines
120	{		Heat Transfer Lab
121			CADD and MATLAB
			CAD/CAM
122	1		Instrumentation and Control System
23			Composite materials
124			Power Plant Engineering
125			Computational Fluid Dynamics
126			Robotics
127			CNC Technology
128			Mechanical Vibrations
29			Turbo Machines
130			Additive Manufacturing Technology
131			CAD/CAM Lab
L32			Instrumentation and Control Systems Lab
.33			CNC Technology Mechanical Vibrations Turbo Machines Additive Manufacturing Technology CAD/CAM Lab Instrumentation and Control Systems Lab Industry Oriented Mini Project Seminar Kontrol Machines Kontrol Machine
34			Seminar 46th 11th

425	1	1		
135	-		Automation in Manufacturing	
136	-	ţ	Fluid Power System	
137	_		Renewable Energy Sources	
138	_		Production Planning and Control	
139			Automobile Engineering	
140	1		Advanced Mechanics of Solids	
141			Unconventional Machining Processes	
1/2			Advanced Materials Technology	
143			Major Project	
144			Electronic Devices and Circuits	
145			Network Analysis and Transmission Lines	
146		l	Digital System Design	
147]		Signals and Systems	
148	1		Probability Theory and Stochastic Processes	
149	1		Electronic Devices and Circuits Lab	
150	1		Digital System Design Lab	
151	1		Basic Simulation Lab	
152	1	ļ	Electromagnetic Fields and Waves	
153	1		Analog and Digital Communications	
154	1		Linear IC Applications	
155			Electronic Circuit Analysis	
156	1		Analog and Digital Communications Lab	
157			IC Applications Lab	
158			Electronic Circuit Analysis Lab	
159			Electromagnetic Theory and Transmission Lines	
160	B.Tech-	04		
161	ECE	04	Linear and Digital IC Applications	
162			Digital Communications	
163			Linear IC Applications Lab	
164			Digital IC Applications Lab	
165			Digital Communications Lab	
			Antennas and Wave Propagation	
166			Microprocessors and Microcontrollers	
167			Digital Signal Processing	
168			Digital Signal Processing Lab	
169			Microprocessors and Microcontrollers Lab	
170			Microwave Engineering	
171			VLSI Design	
172			VLSI and E-CAD Lab	
173]		Microwave Engineering Lab	
174			Industry Oriented Mini Project	
175			Seminar	
176			Major Project	
177		3.5	Programming for Problem Solving	
178			Programming for Problem Solving Lab	
179			Data Structures	3
180			Computer Organization and Architecture	16
181			Object Oriented Programming using C++	V -
182	1		Data Structures Lab	
183			C++ Programming Lab	
184			Operating Systems SAFE AND STATE OF THE PROPERTY OF THE PROPER	
	,		(N) the Pie.	
6			Programming for Problem Solving Programming for Problem Solving Lab Data Structures Computer Organization and Architecture Object Oriented Programming using C++ Data Structures Lab C++ Programming Lab Operating Systems PALECE OF OR COLLECTING AND TECHNIC AN	

	1	1	
185			Database Management Systems
186	1		Java Programming
187	1		Operating Systems Lab
188	_		Database Management Systems Lab
189	4		Java Programming Lab
190	1		Design and Analysis of Algorithms
191	_		Data Communication and Computer Networks
192		1	Software Engineering
193			Design and Analysis of Algorithms Lab
194			Computer Networks Lab
195			Software Engineering Lab
196	J		Compiler Design
197			Web Technologies
198			Cryptography and Network Security
199			Mobile Computing
200]		Design Patterns
201]	ĺ	Artificial Intelligence
202]		Information Security Management (Security Analyst - I)
203	1		Introduction to Analytics (Associate Analytics - I)
204	1	İ	Web Technologies Lab
205	0.7		Advanced English Communication Skills Lab
206	B.Tech-	05	Data Mining
207	CSE		Principles of Programming Languages
208			Python Programming
209			Mobile Application Development
210			Web Scripting Languages
211		ļ	Internet of Things
212		ĺ	Graph Theory
213			Distributed Systems
214			Machine Learning
215			Software Process and Project Management
216			Computational Complexity
217			Cloud Computing
218			Blockchain Technology
219			Social Network Analysis
220			Data Mining Lab
221		1	Python Programming Lab
222			Mobile Application Development Lab
223			Web Scripting Languages Lab
224			Internet of Things Lab
225			Industry Oriented Mini Project
226			Seminar
227			Information Theory P. Coding
228			Information Theory & Coding
229			Real-Time Systems
230			Data Analytics
231			Modern Software Engineering
232			Advanced Algorithms Rah COLECT Meden
233			Web Services and Service Oriented Architecture
233			Computer Forensics ANS ANS TOTAL TOT
234	!		Information Theory & Coding Real-Time Systems Data Analytics Modern Software Engineering Advanced Algorithms Web Services and Service Oriented Architecture Computer Forensics Neural Networks and Deep Learning Real-Time Systems Real-Time Sy
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			tous

235			Major Project
236			Management and Organizational Behaviour
237]		Business Economics
238			Financial Accounting & Analysis
239]		Research Methodology and Statistical Analysis
240]		Legal and Business Environment
241)		Business Ethics and Corporate Governance
242	i I		Project Management
243	1		Technology Management
244	1		Cross Cultural Management
245			Human Resource Management
246			Marketing Management
247			Financial Management
248			Quantitative Analysis for Business Decisions
249			Entrepreneurship
250			Logistics & Supply Chain Management
251			Total Quality Management
252			Marketing Research
253			International Business
254			Rural Marketing
255			Production & Operations Management
256			Management Information Systems
257			Data Analytics
258			Strategic Management
259			Pre-submission project work
260			Comprehensive Viva-Voce
261	MBA	EO	Main Project Viva-Voce
262			Digital Marketing
263			
264			Advertising and Sales Management Consumer Behaviour
265			
266	5		Customer Relationship Management
267	4		International Marketing
268			Marketing of Services
	Ť		Security Analysis and Portfolio Management
269			Financial Institutions, Markets & Services
270			Strategic Management Accounting
271			International Financial Management
272			Strategic Investment and Financing Decisions
273			Risk Management
274			Performance Management Systems
275	3		Learning and Development
276			Management of Industrial Relations
277			International Human Resource Management
278			Leadership and Change Management
279			Talent and Knowledge Management
280			Leadership and Change Management Talent and Knowledge Management Start up Management MSME Management Family Business Management Entrepreneurial Finance Entrepreneurial Marketing Start up Management Family Business Management Entrepreneurial Finance Entrepreneurial Marketing
281			MSME Management
282			Family Business Management
283			Entrepreneurial Finance
284			Entrepreneurial Marketing Share

SAMSKRUTI COLLECTIVOLOGY SAMSKRUTI COLLECTIVOLOGY PONDARUTIVI GRAND FECTION, Medicinal (D) Kondarutivi Grantesat (M), Medicinal (D)

R18 B.Tech. Civil Engg. Syllabus

JNTU HYDERABAD

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech. in CIVIL ENGINEERING COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

	Course					(50)
S. No.	Code	Course Title	L	Т	Р	Credits
1	MA101BS	Mathematics - I	3	1		4
2	PH102BS	Engineering Physics	3	1	0	4
3	CS103ES	Programming for Problem Solving	3	1	0	7
4	ME104ES	Engineering Graphics	1	0	4	3
5	PH105BS	Engineering Physics Lab	0	0	3	1.5
6	CS106ES	Programming for Problem Solving Lab		0	3	1.5
7	*MC109ES	Environmental Science	3	-	0	1.5
		Induction Programme		Ů	-	U
		Total Credits	13	3	10	18

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA201BS	Mathematics - II	3	1	0	1
2	CH202BS	Chemistry	3	1	0	4
3	ME203ES	Engineering Mechanics	3	1	0	4
4	ME205ES	Engineering Workshop	1	0	3	2.5
5	EN205HS	English	2	0	0	2
6	CH206BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN207HS	English Language and Communication Skills Lab	0	0	2	1.5
		Total Credits	12	3	8	19.0

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	CE301PC	Surveying and Geomatics	3	0	-	
2	CE302PC	Engineering Geology	2	0	0	3
3	CE303PC	Strength of Materials - I	3	1	0	2
4	MA304BS	Probability and Statistics	3	1	0	4
5	CE305PC	Fluid Mechanics	3	1	0	4
6	CE306PC	Surveying Lab	0	0	3	1.5
7	CE307PC	Strength of Materials Lab	0	0	3	1.5
8	CE308PC	Engineering Geology Lab	9	0	2	1.0
9	*MC309	Constitution of India	3	6	19	0
		Total Credits	17	3	8	24

II YEAR II SEMESTER

S. N	Course Cede	Course Title	L	Т	Р	Credits
1	EE401ES	Basic Electrical and Electronics Engineering	3	0	0	3
503 55	27 M 162 - 172 - 172 - 172	· · · · · · · · · · · · · · · · · · ·		וטו	, ,) J

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Principal

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech. in CIVIL ENGINEERING COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course		1	_		1
3. 140.	Loge	Course Title	L	T	Р	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	PH102BS	Engineering Physics	3	1	0	1 4
3	CS103ES	Programming for Problem Solving	3	1	0	4
4	ME104ES	Engineering Graphics	1	0	4	3
5	PH105BS	Engineering Physics Lab	+ ;	1	3	1.5
6	CS106ES	Programming for Problem Solving Lab	10	0	3	1.5
7	*MC109ES	Environmental Science	3	0	0	() 1.0 0
		Induction Programme	┼∸	1	0	U
		Total Credits	13	3	10	18

I YEAR II SEMESTER

S. No.	Course	Course Title	L	Т	Р	Credits
1	MA201BS	Mathematics - II	3	1	1	1
2	CH202BS	Chemistry	3	1	0	4
3	ME203ES	Engineering Mechanics	3	1	0	4
4	ME205ES	Engineering Workshop	1	0	3	2.5
5	EN205HS	English	1	0	0	2.5
6	CH206BS	Engineering Chemistry Lab	15	0	3	
7	EN207HS	English Language and Communication Skills Lab	0	0	3	1.5 1
		Total Credits	12	3	8	19.8~

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	CE301PC	Surveying and Geomatics	3	0	0	3
2	CE302PC	Engineering Geology	2	0		
3	CE303PC	Strength of Materials - I	$-\frac{2}{3}$	1	0	2
4	MA304BS	Probability and Statistics	3	1	0	4
5	CE305PC	Fluid Mechanics	3		0	4
6	CE306PC	Surveying Lab	0	<u> </u>	0	4
7	CE307PC	Strength of Materials Lab	0	0	3	1.5
8	CE308PC	Engineering Geology Lab	0	U	3	1.5
9	*MC309	Constitution of India		0	2	1
		Total Credits	3	U	0	0
		Total ordata	17_	_3	8	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	EE401ES	Basic Electrical and Electronics Engineering	3	0	ΟN	3
100					V _I	3

2	CE402ES	Basic Mechanical Engineering for Civil Engineers	2	0	0	2
3	CE403PC	Building Materials, Construction and Planning	3	0	0	3
4	CE404PC	Strength of Materials - II	3	0	0	3
5	CE405PC	Hydraulics and Hydraulic Machinery	3	0	0	3
6	CE406PC	Structural Analysis - I	3	0	0	3
7	CE407PC	Computer aided Civil Engineering Drawing	0	0	3	1.5
8	CE409PC	Hydraulics and Hydraulic Machinery Lab	0	0	3	1.5
9	EE409ES	Basic Electrical and Electronics Engineering Lab	0	0	2	-5-1
10	*MC409	Gender Sensitization Lab	0	0	2	0
		Total Credits	17	0	10	21

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
4	CE591	Structural Analysis-II	3	0	0	3
2	CE502PC	Geotechnical Engineering	3	0	0	3
3	CE503PC	Structural Engineering -I (RCC)	3	1	0	4
4	CE504PC	Transportation Engineering	3	0	0	3
5		Professional Elective-I	3	0	0	3
6	SM505MS	Engineering Economics and Accountancy	2	0	0	2
7	CE506PC	Highway Engineering and Concrete Technology Lab	0	0	3	1.5
8	CE507PC	Geotechnical Engineering Lab	0	0	3	1.5
9	EN508HS	Advanced Communication Skills Lab	0	0	2	yey: 1
10	*MC509	Intellectual Property Rights	3	0	0	0
		Total Credits	20	1	8	22

III YEAR II SEMESTER

5. Ne	Course Code	Course Title	L	Т	Р	Credits
1	CE60TPC	Hydrology & Water Resources Engineering	3	1	0	4
1	CE602PC	Environmental Engineering	3	0	0	3
2	CE603PC	Foundation Engineering	3	0	0	3
3	CE604PC	Structural Engineering II (Steel)	3	1	0	4
5		Professional Elective –II	3	0	0	3
6		Open Elective –I	3	0	0	3
7	CE605PC	Environmental Engineering Lab	0	0	2	1
8	CE606PC	Computer Aided Design Lab	70	0	2	1
9	*MC609	Environmental Science	3	0	<u></u>	0
		Total Credits	21	2	4	22

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	CE701PC	Estimation, Costing and Project Management	3	1	0	4
2		Professional Elective -III	3	0	0	3
3		Professional Elective –IV	3	0	0	- 3
4		Open Elective –II	3	0	0	3
5	SM702MS	Professional Practice law & Ethics	2	0	70	2

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9	CIVIL	. ENGINEERING	2013-14
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II YEAR II SEMESTER

			T/P/D	C
Code	Subject		HEID	۳-
A40009	Probability & Statistics	4	•	4
A40000	Strength of Materials - II	4	•	4
A40444	Hydraulics & Hydraulic Machinery	4	-	T4_
A40111	Environmental Studies	4	-	4
A40009	Structural Analysis -I	4		4
A40310	Building Materials, Construction & Planning			4
A40109	Computer Aided Drafting of Buildings	- 1-	3	2
A40186	Computer Aided Diating of Bolidings	 -	3	7
A40190	Surveying Lab- II	24	6	28
	Total			

III YEAR I SEMESTER

Code	Subject		TIPID	С
		4	-	4
A50116	Concrete Technology	4	-	4
A50121	Reinforced Concrete Structures Design and Drawing	14		4
A50118	Engineering Geology	4		4
A50120	Geotechnical Engineering			17
A50122	Water Resources Engineering-I	4		 -
	Open Elective	4	١ .	1 4
A50117	Disaster Management		l	
A50017	Intellectual Property Rights	1		1
A50018	Human Values and Professional Ethics			
A50181	Fluid Mechanics & Hydraulic Machinery Lab	-	3_	2
AC0101	Engineering Geology Lab	-	3	72
A50191		24	6	28
	Total			

III YEAR II SEMESTER

Code	Subject	L	TIPID	C
		3	2	4
A60130	Steel Structures Design and Drawing	- 4		4
A60119	Environmental Engineering			4
A60132	Transportation Engineering -I	4		4
A60126	Foundation Engineering	4		1-7-
A60131	Structural Analysis -II	4		1 4
A60123 A60127 A60128 A60124	Elective -I Elements of Earthquake Engineering Ground Improvement Techniques Ground Water Hydrology Environmental Impact Assessment	4		4
A60129			3	2
A60194		3-0	3	2
A60086	I Otal	23	8	28

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Kondapur (V), Ghetteser (M), R.R. Dist

IV YEAR I SEMESTER

		L	T/P/D	C
Code	Subject	4		4
A70140	Remote Sensing & GIS			4
A70143	Transportation Engineering -II	4		4
A70138	Estimating & Costing	4	<u> </u>	<u> </u>
A70133	Water Resources Engineering-II	4	<u> </u>	4
A70330	Elective-II Finite Element Methods	4		4
A70134 A70145 A70136	Watershed Management			4
A70135 A70137 A70144	Earth and Rock fill Dams and Slope Stability Water Resources Systems Analysis	4		
A70139	A control of the testing of the		3	2
A70195			3	2
A70192	Total	24	6	28

IV YEAR II SEMESTER

0 - 4-	Subject	<u> </u>	TIPID	<u> </u>
A80151 A80148 A80147 A80141	Elective-IV Rehabilitation and Retrolitting of Structures Geo-Environmental Engineering Design and Drawing of Irrigation Structures Solid Waste Management	4	•	4
A80150	Prestressed Concrete Structures	4	Ŀ	4
A80146	Construction Management	4	<u> </u>	4
A80087	Industry Oriented Mini project	<u> </u>	-	2
A80089	Seminar	<u> </u> -	6	2
A80088	Project Work	<u> </u>	15	10
A80090	Comprehensive viva		1	2
	Total	12	21	28

Note: All End Examinations (Theory and Practical) are of three hours duration. T-Tutorial L - Theory P - Practical D-Drawing C - Credits

> Samskruti College of Engg. & Technol. Kondapur (V), Ghatkesar (M), R.R. Dist

2-019-20

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech. in ELECTRICAL AND ELECTRONICS ENGINEERING COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	CH102BS	Chemistry	3	1	0	4
_ 3	EE103ES	Basic Electrical Engineering	3	0	0	3
4	ME105ES	Engineering Workshop	1	0	3	2.5
5	EN105HS	English	2	0	0	2
6	CH106BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN107HS	English Language and Communication Skills Lab	0	0	2	1
8	EE108ES	Basic Electrical Engineering Lab	0	0	2	1
		Induction Programme				
		Total Credits	12	2	10	19

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA201BS	Mathematics - II	3	1	0	4
2	AP202BS	Applied Physics	3	1	0	4
3	CS203ES	Programming for Problem Solving	3	- 1	0	4
4	ME204ES	Engineering Graphics	1	0	4	3
5	AP205BS	Applied Physics Lab	0	0	3	1.5
6	CS206ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC209ES	Environmental Science	3	0	- 0	0
		Total Credits	13	3	10	18

II YEAR I SEMESTER

S. No.	Course	Course Title		Ť	Р	Credits
	Code	004100 1160	-	'	-	Oreans
1_	EE301ES	Engineering Mechanics	3	1	0	4
2	EE302PC	Electrical Circuit Analysis	3	1	0	4
3	EE303PG	Analog Electronics	3	0	0	3 .
4	EE304PC	Electrical Machines - I	3	1	0	4
5	EE305PC	Electromagnetic Fields	3	0	0	3
6	EE306PC	Electrical Machines Lab - I	0	0	2	1
7	EE307PC	Analog Electronics Lab	0	0	2	. 1
8	EE308PC	Electrical Circuits Lab	0	0	2	- 1
9	*MC309	Gender Sensitization Lab	0	0	2	0
		Total Credits	15	3	8	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L)Ţ.	Р	Credits
1	MA401BS	Laplace Transforms, Numerical Methods & Complex variables	3	1	(8)	4

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech. in ELECTRICAL AND ELECTRONICS ENGINEERING COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course					
J. 110.	Code	Course Title		T	Р	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	CH102BS	Chemistry	3	1	0	4
3	EE103ES	Basic Electrical Engineering	3	0	0	3
4	ME105ES	Engineering Workshop	1	0	3	2.5
5	EN105HS	English	2	0	0	2
6	CH106BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN107HS	English Language and Communication Skills Lab	0	0	2	1
8	EE108ES	Basic Electrical Engineering Lab	0	0	2	1
		Induction Programme	-		_	<u> </u>
		Total Credits	12	2	10	19

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA201BS	Mathematics - II	3	1	0	1
2	AP202BS	Applied Physics	3	1	0	4
3	CS203ES	Programming for Problem Solving	 3	1	0	4
4	ME204ES	Engineering Graphics	 1	-0	4	3
5	AP205BS	Applied Physics Lab	 	-0	3	1.5
6	CS206ES	Programming for Problem Solving Lab	 0	0	3	1.5
7	*MC209ES	Environmental Science	 3	0	0	0
		Total Credits	 13	3	10	18

II YEAR I SEMESTER

11 1	IL I SCINICS I CL					
S. No.	Course	Cause Tide				
	Code	Course Title	-	T	P	Credits
1	EE301ES	Engineering Mechanics	3	1	0	4
2	EE302PC	Electrical Circuit Analysis	3	1	0	4
3	EE303PC	Analog Electronics	3	0	0	3
4	EE304PC	Electrical Machines - I	3	1	0	4
5	EE305PC	Electromagnetic Fields	3	0	0	3
6	EE306PC	Electrical Machines Lab - I	0	0	2	1
7	EE307PC	Analog Electronics Lab	0	0	2	1
8	EE308PC	Electrical Circuits Lab	0	0	2	1
9	*MC309	Gender Sensitization Lab	- 0	0	2	0
		Total Credits	15	3	8	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1	MA401BS	Laplace Transforms, Numerical Methods & Complex variables	3	1	all	4

Samskruti College of Engg. & Technology Kondapur (V), Ghatkeser (M), R.R. Dist

		Total Credits	18	3	6	21
	*MC409	Constitution of India	3	0	0	0
9	The second secon	Control Systems Lab	0	0	2	1
8	EE408PC		0	0	2 ,	1
7	EE407PC	Electrical Machines Lab - II	0	U	-	
6	EE406PC	Digital Electronics Lab	0	0	2	1
5	EE405PC	Power System - !	3	0	0	3
4	EE404PC	Control Systems	3	1	0	4
3	EE403PC	Digital Electronics	3	0	0	3
2	EE402PC	Electrical Machines II	3	1	0	4

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	EE501PE	Power Electronics	3	1	0	- 4
2	EE502PE	Power System-II	3	1	0	4
3	FE503PE	Measurements and Instrumentation	3	1	0	4
4		Professional Elective-I	3	0	0	3
5	SM504MS	Business Economics and Financial Analysis	3	0	0	3
6	EE505PC	Power System Simulation Lab	0	0	2	1
7	EE506PC	Power Electronics Lab	0	0	2	1
8	EE507PC	Measurements and Instrumentation Lab	0	0	2	1
9	EN508HS	Advanced Communication Skills Lab	0	0	2	1
10	*MC510	Intellectual Property Rights	3	0	-	. 0
		Total Credits	18	3	8	22

III YEAR II SEMESTER

S. No	Course Code	Course Title	L	Т	Р	Credits
1		Open Elective-I	3	0	0	3
2		Professional Elective-II	3	0	0	3
3	EE601PC	Signals and Systems	2	1	0	3
4	EE602PC	Microprocessors & Microcontrollers	3	<u> </u>	0	3
5	EE603PC	Power System Protection	3	1	0	<u> </u>
6	EE604PC	Power System Operation and Control	3	0	0	3
7	EE605PC	Power System Lab	0	0	2	1
8	EE606PC	Microprocessors & Microcontrollers Lab	0	0	2	1
9	EE607PC	Signals and Systems Lab	0	0	2	- 1
10	*MC609	Environmental Science	3	0	0	0
		Total Credits	20	2	6	22

*MC609 - Environmental Science - Should be Registered by Lateral Entry Students Only.

IV YEAR I SEMESTER

Course Code	Course Title	L	T	Р	Credits
	Open Elective-II	3		<u>\0</u>	3
	Professional Elective-III	3	0	0	3
	Professional Elective-IV	3	0	0	3
SM701MS	Fundamentals of Management for Engineers	3	0	- 0	3
EE701PC	Electrical & Electronics Design Lab	1	0	4	/h3
	Code SM701MS	Code Open Elective-II Professional Elective-IV SM701MS Fundamentals of Management for Engineers	Code Course Title L Open Elective-II 3 Professional Elective-IV 3 SM701MS Fundamentals of Management for Engineers 3	Code Course Title L T Open Elective-II 3 0 Professional Elective-III 3 0 Professional Elective-IV 3 0 SM701MS Fundamentals of Management for Engineers 3 0	Code Course Title L T P Open Elective-II 3 0 0 Professional Elective-IV 3 0 0 SM701MS Fundamentals of Management for Engineers 3 0 0

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III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1	EE501PC	Electrical Measurements & Instrumentation	4	1	0	4
2	EE502PC	Power Systems - II	4	1	0	4
3	EI503PC	Microprocessors and Microcontrollers	4	1	0	4
4	SM504MS	Fundamentals of Management	3	0	0	3
5		Open Elective - I	3	0	0	3
6	EE505PC	Electrical Measurements & Instrumentation	0	0	3	2
		Lab				
7	EE50GPC	Basic Electrical simulation Lab	0	0	3	2
8	EI507PC	Microprocessors and Microcontrollers Lab	0	0	3	2
9	*MC500HS	Professional Ethics	3	0	0	0
		Total Credits	21	3	9	24

HI YEAR II SEMESTER

S. No.	Course	Course Title	L	Т	P	Credits
	Code					
1	EE601PC	Power Systems Analysis	4	1	0	4
2	EE602PC	Power Electronics	4	1	0	4
3	EE603PC	Switch Gear and Protection	4	1	0	4
4		Open Elective - II	3	0	0	3
5		Professional Elective - I	3	0	0	3
6	EE604PC	Power Systems Lab	0	0_	3	2
7	EE605PC	Power Electronics Lab	0	0	3	2
8	EN606HS	Advanced English Communication Skills Lab	0	0	3	2
		Total Credits	18	3	9	24

During Summer Vacation between III and IV Years: Industry Oriented Mini Project

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1	EE701PC	Power Semiconductor Drives	4	1	0	4
2	EE702PC	Power System Operation and control	4	1	0	4
3		Professional Elective - II	3	0	0	3 -
4		Professional Elective - III	3	0	0	3
5		Professional Elective - IV	3	0	0	3
6	EE703PC	Electrical Systems Simulation Lab	0	0	3	1/2

Samskruti College of Engg. & Techno: Kondapur (V), Ghetteser (M), R.R. Dis.

7	EE704PC	Electrical Workshop	0	0	2	2
8		Industry Oriented Mini Project	0	0	3	2
9	EE706PC	Seminar	0	0	3	2
		Total Credits	17	2	11	24

IV YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1		Open Elective - III	3	0	0	3
2		Professional Elective-V	3	0	0	3
3		Professional Elective-VI	3	0	0	3
4	EE801PC	Major Project	0	0	30	15
		Total Credits	9	0	30	24

Professional Elective - I (PE - I):

EM611PE	Computer Organization
EE612PE	Linear Systems Analysis
EE613PE	Linear and Digital IC Applications
	Electrical and Electronics Instrumentation

Professional Elective - II (PE - II):

EE721PE	Digital Signal Processing	
EE722PE	HVDC Transmission	
ET721PE	Switch Mode Power Supplies	
EE724PE	Reliability Engineering	

Professional Elective - III (PE - III):

EE731PE	Digital Control Systems
EE732PE	Power Quality
EE733PE	Modern Power Electronics
EE734PE	Optimization Techniques

Professional Elective - IV (PE-IV):

	Programmable Logic Controllers	
EE/42PE E	EHV AC Transmission Systems	
EE743PE F	lexible A.C. Transmission Systems	1
	pecial Machines	

Professional Elective - V (PE-V):

EE851PE	Artificial Neural Networks and Fuzzy Systems
EE852PE	Electrical Distribution Systems

Principal

EE853PE	Wind, Solar and Hybrid Energy Systems
EE854PE	High Voltage Engineering

Professional Elective - VI (PE-VI):

EE861PE	VLSI Design
EE862PE	Smart Electric Grid
EE863PE	Utilization of Electric Power
EE864PE	Electric and Hybrid Vehicles

^{*}Open Elective subjects' syllabus is provided in a separate document.

Ex: - A Student of Mechanical Engineering can take Open Electives from all other departments/branches except Open Electives offered by Mechanical Engineering Dept.

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^{*}Open Elective – Students should take Open Electives from the List of Open Electives Offered by Other Departments/Branches Only.

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1	EE501PC	Electrical Measurements & Instrumentation	4	1	0	4
2	EE502PC	Power Systems - II	4	1	0	4
3	EI503PC	Microprocessors and Microcontrollers	4	1	0	4
~4_	SM504MS	Fundamentals of Management	3	0	0	3
5	-	Open Elective - I	3	0	0	3
6	EE505PC	Electrical Measurements & Instrumentation Lab	0	0	3	2
7	EE506PC	Basic Electrical simulation Lab	0	0	3	2
8	EI507PC	Microprocessors and Microcontrollers Lab	0	0	3	2
9	*MC500HS	Professional Ethics	3	0	0	0
		Total Credits	21	3	9	24

III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EE601PC	Power Systems Analysis	4	1	0	4
2	EE602PC	Power Electronics	4	1	0	4
3	EE603PC	Switch Gear and Protection	4	1	0	4
4		Open Elective - II	3	0	0	3
5	>>	Professional Elective - I	3	0	0	3
6	EE604PC	Power Systems Lab	0	0.	3	2
7	EE605PC	Power Electronics Lab	0	0	`3.	2
8	EN606HS	Advanced English Communication Skills Lab	0	0	3	2
		Total Credits	18	3	9	24

During Summer Vacation between III and IV Years: Industry Oriented Mini Project

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1	EE701PC	Power Semiconductor Drives	4	1	0	4
2	EE702PC	Power System Operation and control	4	1	0	4
3		Professional Elective - II	3	0	0	3
4		Professional Elective - III	3	0	0	3
5		Professional Elective - IV	3	0	0	3
6	EE703PC	Electrical Systems Simulation Lab	0	0	ß	2

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7	EE704PC	Electrical Workshop	0	0	3	2
8	EE705PC	Industry Oriented Mini Project	0	0	3	2
9	EE706PC	Seminar	0	0	2	1
		Total Credits	17	2	11	24

IV YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1		Open Elective - III	3	0	0	3
2		Professional Elective-V	3	0	0	3
3		Professional Elective-VI	3	0	0	3
4	EE801PC	Major Project	0	0	30	15
		Total Credits	9	0	30	24

Professional Elective - I (PE - I):

EM61LPE	Computer Organization
EE612PE	Linear Systems Analysis
EE613PE	Linear and Digital IC Applications
EE614PE	Electrical and Electronics Instrumentation

Professional Elective - II (PE - II):

EE721PE	Digital Signal Processing
EE722PE	HVDC Transmission
ET721PE	Switch Mode Power Supplies
EE724PE	Reliability Engineering

Professional Elective - III (PE - III):

EE731PE	Digital Control Systems
EE732PE	Power Quality
EE733PE	Modern Power Electronics
EE734PE	Optimization Techniques

Professional Elective - IV (PE-IV):

EE741PE	Programmable Logic Controllers
EE742PE	EHV AC Transmission Systems
EE743PE	Flexible A.C. Transmission Systems
EE744PE	Special Machines

Professional Elective - V (PE-V):

EE851PE	Artificial Neural Networks and Fuzzy Systems	
EE852PE	Electrical Distribution Systems	Λ

EE853PE	Wind, Solar and Hybrid Energy Systems
	High Voltage Engineering

Professional Elective - VI (PE-VI):

EE861PE	VLSI Design
EE862PE	Smart Electric Grid
EE863PE	Utilization of Electric Power
EE864PE	Electric and Hybrid Vehicles

^{*}Open Elective subjects' syllabus is provided in a separate document.

Ex: - A Student of Mechanical Engineering can take Open Electives from all other departments/branches except Open Electives offered by Mechanical Engineering Dept.

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^{*}Open Elective – Students should take Open Electives from the List of Open Electives Offered by Other Departments/Branches Only.

R18 B.Tech. Mechanical Engg. Syllabus

JNTU HYDERABAD

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech. in MECHANICAL ENGINEERING COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	PH102BS	Engineering Physics	3	1	0	4
3	CS103ES	Programming for Problem Solving	. 3	1	0	4
4	ME104ES	Engineering Graphics	1	0	4	3
5	PH105BS	Engineering Physics Lab	0	0	3	1.5
6	CS106ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC109ES	Environmental Science	3	0	0	0
	,	Induction Programme				
	-	Total Credits	13	3	10	18

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA201BS	Mathematics - II	3	1	0	4
2	CH202BS	Chemistry	3	1	0	4
3	ME203ES	Engineering Mechanics	3	1	0	4
4	ME205ES	Engineering Workshop	1	0	3	2.5
5	EN205HS	English	2	0	0	2
6	CH206BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN207HS	English Language and Communication Skills Lab	0	0	2	1
		Total Credits	12	3	8	19.0

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	Р	Credits
1	MA301BS	Probability and Statistics & Complex Variables	3	1	0	4
2	ME302PC	Mechanics of Solids	3	1	0	4
3	ME303PC	Material Science and Metallurgy	3	0	0	3
4	ME304PC	Production Technology	3	0	0	3
5	ME305PC	Thermodynamics	3	1	0	4
6	ME306PC	Production Technology Lab	0	0	2	1
7	ME307PC	Machine Drawing Practice	0	0	2	1
8	ME308PC	Material Science and Mechanics of Solids Lab	0	0	2	1
9	*MC309	Constitution of India	3	0	0	0
		Total Credits	18	3	6	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1	EE401ES	Basic Electrical and Electronics Engineering	3	0	Ø	3

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech. in MECHANICAL ENGINEERING COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA101BS	Mathematics - I		-		
2	PH102BS	Engineering Physics	3	1	0	4
3	CS103ES	Programming for Problem Solving	3	1	0	4
4	ME104ES	Engineering Graphics	3	1	0	4
5	PH105BS	Engineering Physics Lab	1	0	4	3
6	CS106ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC109ES	Environmental Science	0	0	3	1.5
		Induction Programme	3	0	0	0
		Total Credits				
		Total Credits	13	3	10	18

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA201BS	Mathematics - II	 _			
2	CH202BS	Chemistry	3	1 1	0	4
3	ME203ES	Engineering Mechanics	3	1	0	4
4	ME205ES	Engineering Workshop	3	1	0	4
5	EN205HS	English	1	0	3	2.5
6	CH206BS	Engineering Chemistry Lab	2	0	0	2
7	EN207HS		0	0	3	1.5
	LIVZU/NS	English Language and Communication Skills Lab	0	0	2	1
		Total Credits	12	3	8	19.0

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1	MA301BS	Probability and Statistics & Complex Variables			<u> </u>	
2	ME302PC	Mechanics of Solids	3	1	0	4
3	ME303PO		3	1	0	4
4	ME304PO	Material Science and Metallurgy	3	0	0	3
5		Production Technology	3	0	0	3
	ME305PC	Thermodynamics	3	1	0	4
6	ME306PC	Production Technology Lab	0	0	2	7
7	ME307PC	Machine Drawing Practice	-			1
8	ME308PC	Material Science and Mechanics of Solids Lab	0	. 0	2	1
9	*MC309	Constitution of India	0	0	_ 2	<u> </u>
			3	0	0	0
		Total Credits	18	3	6	21

II YEAR II SEMESTER

1	e Na	Course	5.27		_			
	S. No.	Code	Course Title	L	т	Р	Credits	
1	1	EE401ES	Basic Electrical and Electronics Engineering	. 2	0		1	
				_ ა	ַט	U	L 3	

Principal

2	ME402PC	Kinematics of Machinery	3	1	0	4
3	ME403PC	Thermal Engineering - I	3	1	0	4
4	ME404PC	Fluid Mechanics and Hydraulic Machines	3	1	0	4
5	ME405P0	Jnstrumentation and Control Systems	3	0	0	3 ,
6.	EE409ES	Basic Electrical and Electronics Engineering Lab	0	0	2	. 1
7	ME407PC	Fluid Mechanics and Hydraulic Machines Lab	0	0	2	1
8	ME408PC	Instrumentation and Control Systems Lab	0	0	2	1
10	*MC409	Gender Sensitization Lab	0.	.0	2	0
		Total Credits	15	3	8	21

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	Р	Credits
1	ME501PC	Dynamics of Machinery	3	1	0	4
2	ME502PC	Design of Machine Members-I	3	0	0	3
3	ME503PC	Metrology & Machine Tools	3	0	0	3
4	SM504MS	Business Economics & Financial Analysis	3	0_	0	3
5	ME505PC	Thermal Engineering-II	3	0	0	3
6	ME506PC	Operations Research	3	0	0	3
7	ME507PC	Thermal Engineering Lab	0	0	2	1
8	ME508PC	Metrology & Machine Tools Lab	0	0	2	1
9	ME509PC	Kinematics & Dynamics Lab	0	0_	2	1
10	*MC510	Intellectual Property Rights	3_	0	0	0
		Total Credits	21	1_	6	22

III YEAR II SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1	ME601PC	Design of Machine Members-II	3	0	0	3
2	ME602PC	Heat Transfer	3	1	0	4
3	ME603PC	CAD & CAM	3	0	0	3
4		Professional Elective - I	3	0	0	3
5		Open Elective - I	3	0	0	3
6	ME604PC	Finite Element Methods	3	0	0	3
7	ME605PC	Heat Transfer Lab	0	0	2	1
8	ME606PC	CAD & CAM Lab	0	0	2	1
9	EN608HS	Advanced Communication Skills lab	0	0	2	1
10	*MC609	Environmental Science	3	0	0	0
		Total Credits	21	1	6	22

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	1	Р	Credits
1	ME701PC	Refrigeration & Air Conditioning	3	0	0	3.
2		Professional Elective – II	3	0	0	3
3		Professional Elective – III	3	0	0	3
4	٠	Professional Elective - IV	3	0	0	3
5		Open Elective - II	3	0_	0	3
6	ME702PC	Industrial Oriented Mini Project/ Summer Internship	0	0	Λ0	2*
7	ME703PC	Seminar	0	0	I R	1

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.TECH. MECHANICAL ENGINEERING HI YEAR COURSE STRUCTURE & SYLLABUS (RTG)

Applicable From 2016-17 Admitted Batch

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	ME50TPC	Design of Machine Members - I	4	1	0	4 .
2	ME502PC	Thermal Engineering-L	4	. 1 .	0	. 4
3	ME503PC	Metrology and Machine Tools	4	1	0	4
4	SM504MS	Fundamentals of Management	. 3	0	0	3
5		Open Elective – I	3	0	0	-3
6	ME505PC	Thermal Engineering Lab	0	0	3	2
7	ME506PC	Machine ToolsiLab	0	0	- 3	2
8	ME507PC	Engineering Metrology Lab	0	0	3	2
9	*MC500HS	Professional Ethics	. 3	0	0	0
		Total Credits	21	3	9	24

TH YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	ME601PC	Thermal Engineering -II	4	1	0	4
2	ME602PC	Design of Machine Members-II	4	1	0	4
3	ME603PC	Heat Transfer	4	1	0	4
4		Open Elective - II	3	0	0	3
5		Professional Elective - I	3	0	0	3
6	ME604PQ	Heat Transfer Lab	0	0	3	2
7	MEG05PC	CADD and MATLAB	0	0	3	2
8	EN606HS	Advanced English Communication Skills Lab	0	0	3	2
		Total Credits	18	3	9	24

During Summer Vacation between III and IV Years: Industry Oriented Mini Project

Samskruti College of Engg. & Technolomi Kondapur (V), Ghatkesar (M), R.R. Dis.

Professional Elective - I

ME611PE	Finite Element Methods
ME612PE	Refrigeration and Air Conditioning
	Machine Tool Design
ME614PE	IC Engines and Gas Turbines

^{*}Open Elective subjects' syllabus is provided in a separate document.

Ex: - A Student of Mechanical Engineering can take Open Electives from all other departments/branches except Open Electives offered by Mechanical Engineering Dept.

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^{*}Open Elective – Students should take Open Electives from the List of Open Electives Offered by Other Departments/Branches Only.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.TECH. MECHANICAL ENGINEERING IV YEAR COURSE STRUCTURE & SYLLABUS (R16)

Applicable From 2016-17 Admitted Batch

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	ME701P€	CAD/CAM	4	0	0	4
2	ME702PC	Instrumentation and Control System	4	0	0	4
3		Professional Elective - II	3	0	0	3
4		Professional Elective - III	3	0	0	3
5		Professional Elective - IV	3	0	0	3
6	ME703PC	CAD/CAM Lab	0	0	3	2
7	ME704PC	Instrumentation and Control Systems Lab	0	0	3	2
8	ME705PC	Industry Oriented Mini Project	0	0	3	2
9	ME706PC	Seminar	0	0	2	1
-		Total Credits	17	0	11	24

IV YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1	-	Open Elective – III	3	0	0	-3 -
2		Professional Elective - V	3	0	0	3
3		Professional Elective - VI	3	0	0	- 3
4	ME801PC	Major Project	0	0	30	15
		Total Credits	9	0	30	24

Professional Elective - I

ME611PE	Finite Element Methods
ME612PE	Refrigeration and Air Conditioning
ME613PE	Machine Tool Design
ME614PE	C Engines and Gas Turbines

Professional Elective - II

ME721PE	Composite materials	
ME722PE	Industrial Management	
ME723PE	Power Plant Engineering	
ME724PE	Operations Research	

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Professional Elective - III

	The state of the s	
ME731PE	Engineering Tribology	
ME732PE	Computational Fluid Dynamics	Ŧ
ME733PE	Robotics	
ME734PE	CNC Technology	

Professional Elective - IV

ME741 PE	Mechanical Vibrations	
ME742PE	Turbo Machines	
ME743PE	MEMS	
ME744PE	Additive Manufacturing Technology	

Professional Elective - V

	The second secon		
ME851PE	Automation in Manufacturing		
ME852PE	Fluid Rower System		
ME853PE	Renewable Energy Sources	6	
ME854PE	Production Planning and Control	49 49	_ = 2

Professional Elective - VI

ME861PE	Automobile Engineering
ME862PE	Advanced Mechanics of Solids
ME863PE	Unconventional Machining Processes
ME864PE	Advanced Materials Technology

^{*}Open Elective subjects' syllabus is provided in a separate document.

*Open Elective - Students should take Open Electives from the List of Open Electives Offered by Other Departments/Branches Only.

Ex: - A Student of Mechanical Engineering can take Open Electives from all other departments/branches except Open Electives offered by Mechanical Engineering Dept.

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech. in ELECTRONICS AND COMMUNICATION ENGINEERING COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits.
1	MA101BS	Mathematics - I	3	1	0	4
2	AP102BS	Applied Physics	3	1	0	4
3	CS103ES	Programming for Problem Solving	3	1	0	4
4	ME104ES	Engineering Graphics	1	0	4	3
5	AP105BS	Applied Physics Lab	0	0	3	1.5
6	CS106ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC109ES	Environmental Science	3	0	0	0
		Induction Programme				
		Total Credits	13	3	10	18

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA201BS	Mathematics - II	3	1	0	4
2	CH202BS	Chemistry	3	1	0	4
3	EE203ES	Basic Electrical Engineering	3	0	0	3
4	ME205ES	Engineering Workshop	1	0	3	2.5
5	EN205HS	English	2	0	0	2
6	CH206BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN207HS	English Language and Communication Skills Lab	0	0	2	1
8	EE208ES	Basic Electrical Engineering Lab	0	0	2	1
		Total Credits	12	2	10	19

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	τ	P	Credits
1	EC301PC	Electronic Devices and Circuits	3	1	0	4
2	EC302PC	Network Analysis and Transmission Lines	3	0	0	3
3	EC303PC	Digital System Design	3	1	0	4
4	EC304PC	Signals and Systems	3	1	0	4
5	EC305ES	Probability Theory and Stochastic Processes	3	0	0	3
6	EC306PC	Electronic Devices and Circuits Lab	0	0	2	1
7	EC307PC	Digital System Design Lab	0	0	2	1 ,
8	EC308ES	Basic Simulation Lab	0	0	2	1
9	*MC309	Constitution of India	3	0	0	0
		Total Credits	18	3	6	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1.	MA401BS	Laplace Transforms, Numerical Methods & Complex Variables	3	1	.0	4
2	EC402PC	Electromagnetic Fields and Waves	3	0	0	3

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech. in ELECTRONICS AND COMMUNICATION ENGINEERING COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

1 YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	AP102BS	Applied Physics	3	1	0	4
3	CS103ES	Programming for Problem Solving	3	1	0	4
4	ME104ES	Engineering Graphics	1	0	4	3
5	AP105BS	Applied Physics Lab	0	0	3	1.5
. 6	CS106ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC109ES	Environmental Science	3	0	0	0
		Induction Programme				
		Total Credits	13	3	10	18

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA201BS	Mathematics - II	3	1	0	4
2	CH202BS	Chemistry	3	1	0	4
3	EE203ES	Basic Electrical Engineering	3	0	0	3
4	ME205ES	Engineering Workshop	1	0	3	2.5
5	EN205HS	English	2	0	0	2
6	CH206BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN207HS	English Language and Communication Skills Lab	0	0	2	1
8	EE208ES	Basic Electrical Engineering Lab	0	0	2	1
		Total Credits	12	2	10	19

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	EC301PC	Electronic Devices and Circuits	3	1	0	4
2	EC302PC	Network Analysis and Transmission Lines	3	0	0	3
3	EC303PC	Digital System Design	3	1	0	4
4	EC304PC	Signals and Systems	3	1	0	4
5	EC305ES	Probability Theory and Stochastic Processes	3	0	0	3
6	EC306PC	Electronic Devices and Circuits Lab	0	0	2	1
7	EC307PC	Digital System Design Lab	0	0	2	1
8	EC308ES	Basic Simulation Lab	0	0	2	1
9	*MC309	Constitution of India	3	0	0	0
		Total Credits	18	3	6	21

II YEAR II SEMESTER

. S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA401BS	Laplace Transforms, Numerical Methods &	3	1	0	4
		Complex Variables	,		٨	
2	EC402PC	Electromagnetic Fields and Waves	3	0	0 \	3

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3	EC403PC	Analog and Digital Communications	3	1	0	4
4	EC404PC	Linear IC Applications	3	0	0	3
5	EC405PC	Electronic Circuit Analysis	3	0	0	3
6	EC406PC	Analog and Digital Communications Lab	0	0	3	1.5
7	EC407PC	IC Applications Lab	0	0	3	1.5
8	EC408PC	Electronic Circuit Analysis Lab	0	0	2	1
. 9	*MC409	Gender Sensitization Lab	0	0	2	0
		Total Credits	15	2	10	21

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	. EC501PC	Microprocessors & Microcontrollers	3	1	0	4
2	EC502PC	Data Communications and Networks	3	1	0	4
3	EC503PC	Control Systems	3	1	0	4
4	SM504MS	Business Economics & Financial Analysis	3	0	0	3
5		Professional Elective - I	3	0	0	3
6	EC505PC	Microprocessors & Microcontrollers Lab	0	0	3	1.5
7	EC506PC	Data Communications and Networks Lab	0	0	3	1.5
8	EN508HS	Advanced Communication Skills Lab	0	0	2	1
9	*MC510	Intellectual Property Rights	3	0	0	0
		Total Credits	18	3	8	22

III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EC601PC	Antennas and Propagation	3	1	0	4
2	EC602PC	Digital Signal Processing	3	1	0	4
3	EC603PC	VLSI Design	3	1	0	4 ,,
4		Professional Elective - II	3	0	0	3
5		Open Elective - I	3	0	0	3
6	EC604PC	Digital Signal Processing Lab	0	0	3	1.5
7	EC605PC	e – CAD Lab	0	0	3	1.5
8	EC606PC	Scripting Languages Lab	0	0	2	1
9	*MC609	Environmental Science	3	0	0	0
		Total Credits	18	3	8	22

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	EC701PC	Microwave and Optical Communications	3	0	0	3
2		Professional Elective – III	3	0	0	3
3		Professional Elective – IV	3	0	0	3
4		Open Elective - II	3	0	0	3
5	SM702MS	Professional Practice, Law & Ethics	2	0	0	2
6	· EC703PC	Microwave and Optical Communications Lab	0	0	2	1 '
7	EC704PC	Industrial Oriented Mini Project/ Summer Internship	0	0	0	2*
8	EC705PC	Seminar	0	0	2	1
9	EC706PC	Project Stage - I	0	0	6	3
		Total Credits	14	0	100	21

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.TECH. ELECTRONICS AND COMMUNICATION ENGINEERING III YEAR COURSE STRUCTURE & SYLLABUS (R16)

Applicable From 2016-17 Admitted Batch

III YEAR I SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1	EC501PC	Electromagnetic Theory and Transmission Lines	4	1	0	4
2	EC502PC	Linear and Digital IC Applications	4	0	0	4
3	EC503PC	Digital Communications	4	1	0	4
4	SM504MS	Fundamentals of Management	3	0	0	3
5		Open Elective – I	3	0	0	3
6	EC505PC	Linear IC Applications Lab	0	0	3	2
7	EC506PC	Digital IC Applications Lab	0	0	3	2
8	EC507PC	Digital Communications Lab	0	0	3	2
9	*MC500HS	Professional Ethics	3	0	0	0
		Total Credits	21	2	9	24

III YEAR II SEMESTER

S. No	Course Code	Course Title	L	Т	P	Credits
1		Open Elective-II	3	0	0	3
2		Professional Elective-I	3	0	0	3
3	EC601PC	Aniennas and Wave Propagation	4	0	0	4
4	EC602PC	Microprocessors and Microcontrollers	4	0	0	4
_ 5	EC603PC	Digital Signal Processing	4	0	0	4
6	EC604PC	Digital Signal Processing Lab	0	0	3	2
7	EC605PC	Microprocessors and Microcontrollers Lab	0	0	3	2
8	EN606HS	Advanced English Communication Skills Lab	0	0	3	2
		Total Credits	18	0	9	24

During Summer Vacation between III and IV Years: Industry Oriented Mini Project

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R16 B.TECH ECE.

Professional Elective - I

EC611PE	Computer organization and operating system
EC612PE	Digital Image Processing
EC613PE	Spread Spectrum Communications
EC614PE	Digital system Design

^{*}Open Elective subjects' syllabus is provided in a separate document.

*Open Elective – Students should take Open Electives from the List of Open Electives Offered by Other Departments/Branches Only.

Ex: - A Student of Mechanical Engineering can take Open Electives from all other departments/branches except Open Electives offered by Mechanical Engineering Dept.

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.TECH. ELECTRONICS AND COMMUNICATION ENGINEERING IV YEAR COURSE STRUCTURE & SYLLABUS (R16)

Applicable From 2016-17 Admitted Batch

IV YEAR I SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1	EC701PC	Microwave Engineering	4	0	0	4
2		Professional Elective - II	3	0	0	3
3		Professional Elective - III	3	0	0	3
4		Professional Elective - IV	3	0	0	3
5	EC702PC	VLSI Design	4	0	U	4
6	EC703PC	VLSI and E-CAD Lab	0	0	3	2
. 7	EC704PC	Microwave Engineering Lab	0	0	3	2
8	EC705PC	Industry Oriented Mini Project	0	0	3	2
9	EC706PC	Seminar	0	0	2	1
		Total Credits	17	0	11	24

IV YEAR II SEMESTER

S.No.	Course Code	Course Title	 L	Т	P	Credits
1		Open Elective – III	3	0	0	3
2		Professional Elective -V	3	0	0	3
3		Professional Elective -VI	 3	0	0	3
4	EC801PC	Major Project	 0	0	30	15
		Total Credits	 9	0	30	24

Professional Elective - I

EC611PE	Computer organization and operating system
EC612PE	Digital Image Processing
EC613PE	Spread Spectrum Communications
EC614PE	Digital system Design

Professional Elective - II

EC721PE	Computer Networks
EC722PE	Telecommunication Switching Systems and Networks
EC723PE	RF Circuit Design
EC724PE	Artificial Neural Networks

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Professional Elective - III

EC731PE	Cellular and Mobile Communications
EC732PE	Electronics Measurements and Instrumentation
EC733PE	EMI and EMC
EC734PE	Object Oriented Programming through JAVA

Professional Elective - IV

EC741PE	Optimization Techniques
EC742PE	Embedded System Design
EC743PE	Satellite Communications
EC744PE	Network Security and Cryptography

Professional Elective - V

EC851PE	Optical Communications
EC852PE	Wireless Communications and Networks
EC853PE	Design of Fault Tolerant Systems
EC854PE	Bio Medical Instrumentation

Professional Elective -VI

EC861PE	Radar Systems
EC862PE	Coding Theory and Techniques
EC863PE	Database Management Systems
EC864PE	Global Positioning System

^{*}Open Elective subjects' syllabus is provided in a separate document.

*Open Elective – Students should take Open Electives from the List of Open Electives Offered by Other Departments/Branches Only.

Ex: - A Student of Mechanical Engineering can take Open Electives from all other departments/branches except Open Electives offered by Mechanical Engineering Dept.

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R18 B.Tech. CSE Syllabus

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech. in COMPUTER SCIENCE AND ENGINEERING **COURSE STRUCTURE & SYLLABUS (R18)**

19-20

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

1 6 227 61	***************************************					
S. No.	Course	Course Title		Т	Р	Credits
0	Code					
1	MA101BS	Mathematics - I	3	1	0	4
2	CH102BS	Chemistry	3_	1	0	4
3	EE103ES	Basic Electrical Engineering	3	0	0	3
4	ME105ES	Engineering Workshop	1	0	3	2.5
5	EN105HS	English	2	0	0	2
6	CH106BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN107HS	English Language and Communication Skills Lab	0	0	2	1
8	EE108ES	Basic Electrical Engineering Lab	0	0	2	1
59		Induction Programme				
	**	Total Credits	12	2	10	19
			12	2	10	

I YEAR II SEMESTER

		<u> </u>				
S. No.	Course Code	Course Title	L	T	P	Credits
1	MA201BS	Mathematics - II	3	1_	0	4
2	AP202BS	Applied Physics	3	1	0	4
3	CS203ES	Programming for Problem Solving	3	1	0	4
4	ME204ES	Engineering Graphics	1	0_	4	3
5	AP205BS	Applied Physics Lab	0	0	3	1.5
6	CS206ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC209ES	Environmental Science	3	0	0	0
		Total Credits	13	3	10	18

II YEAR I SEMESTER

S. No.	Course Code	Course Title	· L	т	P	Credits
1	CS301ES	Analog and Digital Electronics	3	0	0	3
2	CS302PC	Data Structures	3	1	0	4
3	MA303BS	Computer Oriented Statistical Methods	3	1	0	4
4	CS304PC	Computer Organization and Architecture	3	0	0	3
5	CS305PC	Object Oriented Programming using C++	2	0	0	2
6	CS306ES	Analog and Digital Electronics Lab	0	0	2	1
7	CS307PC	Data Structures Lab	0	0	3	1.5
8	CS308PC	IT Workshop Lab	0	0	3	1.5
9	CS309PC	C++ Programming Lab	0	0	2	1
10	*MC309	Gender Sensitization Lab	0	0	2	b
		Total Credits	14	2_	12	21

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech. in COMPUTER SCIENCE AND ENGINEERING COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	CH102BS	Chemistry	3	1	0	4
3	EE103ES	Basic Electrical Engineering	3	0	0	3
4	ME105ES	Engineering Workshop	1	0	3	2.5
5	EN105HS	English	2	0	0	2
6	CH106BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN107HS	English Language and Communication Skills Lab	0	0	2	1
8	EE108ES	Basic Electrical Engineering Lab	0	0	2	1
		Induction Programme				
		Total Credits	12	2	10	19

I YEAR II SEMESTER

S. No.	Course Code	Course Title	1		P	Credits
1	MA201BS	Mathematics - II	3	1	. 0	4
2	AP202BS	Applied Physics	3	1	0	4
3	CS203ES	Programming for Problem Solving	3,	1	0	4
4	ME204ES	Engineering Graphics	1	0	4	3 -
5	AP205BS	Applied Physics Lab	0	0	3	1.5
6	CS206ES	Programming for Problem Solving Lab	0	0	3	1.5
• 7	*MC209ES	Environmental Science	3	0	0	. 0
		Total Credits	13	3	10	18

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	CS301ES	Analog and Digital Electronics	3	0	0	3
2 .	CS302PC	Data Structures	3	1	0	4
3	MA303BS	Computer Oriented Statistical Methods	3	1	0	4
4	CS304PC	Computer Organization and Architecture	3	0	0	3
5	CS305PC	Object Oriented Programming using C++	2	0	0	2
6	CS306ES	Analog and Digital Electronics Lab	0	0	2	1
_7	CS307PC	Data Structures Lab	0	0	3	1.5
8	CS308PC	IT Workshop Lab	0	0	3	1.5
9	CS309PC	C++ Programming Lab	0	0	2	1
10	*MC309	Gender Sensitization Lab	0	0	2	0
	,	Total Credits	14	2	12	21

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Kondapur (V), Ghetheser (M), R.R. Dist

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	Р	Credits
1	CS401PC	Discrete Mathematics	3	0	0	3
2	SM402MS	Business Economics & Financial Analysis	3	0	0	3
3	CS403PC	Operating Systems	3	0	0	3
4	CS404PC	Database Management Systems	3	1	0	4
5	CS405PC	Java Programming	3	1	0	4
6	CS406PC	Operating Systems Lab	0	0	3	1.5
7	CS407PC	Database Management Systems Lab	0	0	3	1.5
8	CS408PC	Java Programming Lab	0	0	2	11
9	*MC409	Constitution of India	3	0_	0	0
		Total Credits	18	2	8	21

III YEAR I SEMESTER

S. No.	Course Code	Course Title	Ľ	T	B	Credits
1	CS501PC	Formal Languages & Automata Theory	3	0	0	3
2	CS502PC	Software Engineering	3	0	0	. 3
3	CS503PC	Computer Networks	3	0	O	3
4	CS504PC	Web Technologies	3	0	0	3
5		Professional Elective-I	3	0	0	3
6		Professional Elective -II	.3	0	0	3
7	CS505PC	Software Engineering Lab	0	0	3	1.5
8	CS506PC	Computer Networks & Web Technologies Lab	0	0	- 3	1.5
. 9	EN508HS	Advanced Communication Skills Lab	0	0	2	1
10	*MC510	Intellectual Property Rights	3	0	0	0
	-	Total Credits	21	0	8	22

III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Cretlits
1	CS601PC	Machine Learning	3	1	0.	4
2	CS602PC	Compiler Design	3	1	0	4
3	CS603PC	Design and Analysis of Algorithms	3	1	0	-4
4		Professional Elective - III	3	0	0	3
5		Open Elective-I	3	0	0	3
6	CS604PC	Machine Learning Lab	0	0	3	1.5
7	CS605PC	Compiler Design Lab	-0	0	3	1.5
8		Professional Elective-III Lab	0	0	2	1
9	MC609	Environmental Science	3	0	.0	0
		Total Credits	18	3	8	22

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	٦	T	Р	Credits
. 1	CS701PC	Cryptography & Network Security	3_	0	0	3
1	CS702PC	Data Mining	2	0	/0	2

Samskruti College of Engg. & Technology Kondapur (V), Ghetkeser (M), R.R. Disi

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.TECH. COMPUTER SCIENCE AND ENGINEERING III YEAR COURSE STRUCTURE & SYLLABUS (R16)

Applicable From 2016-17 Admitted Batch

III YEAR I SEMESTER

S. No	Course Code	Course Title	L	Т	Ρ.	Credits
1	CS501PC	Design and Analysis of Algorithms	4	0	0	4
2	CS502PC	Data Communication and Computer Networks	4	0	0	4
3	CS503PC	Software Engineering	4	0	0	4
4	SM504MS	Fundamentals of Management	. 3	0	0	3
5		Open Elective –I	3	0	0	3-
6	CS505PC	Design and Analysis of Algorithms Lab	0	0	3	2
7	CS506PC	Computer Networks Lab	0	0	3	2
8	CS507PC	Software Engineering Lab	0	0	3	2
9	*MC500HS	Professional Ethics	3	0	0	0
		Total Credits	21	0	9	24

III YEAR II SEMESTER

S. No	Course Code	Course Title	L	Т	P	Credits
1	CS601PC	Compiler Design	4	0	0	4
2	CS602PC	Web Technologies	4	0	0	4
3	CS603PC	Cryptography and Network Security	4	0_	0	4
4	-	Open Elective-II	3	0	0	3
5		Professional Elective-I	3	0	0	3
6	CS604PC	Cryptography and Network Security Lab	0	0	3	2
7	CS605PC	Web Technologies Lab	0	0	3	2
8	EN606HS	Advanced English Communication Skills Lab	0	0	3	2
		Total Credits	18	0	9	24

During Summer Vacation between III and IV Years: Industry Oriented Mini Project

Samskruti College of Engg. & Technology Kondapur (V), Ghetheser (M), R.R. Dia:

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.TECH. COMPUTER SCIENCE AND ENGINEERING IV YEAR COURSE STRUCTURE & SYLLABUS (R16)

Applicable From 2016-17 Admitted Batch

IV YEAR I SEMESTER

S. No	Course Code	Course Title	L	Т	P	Credits
1	CS701PC	Data Mining	4	0	0	4
2	CS702PC	Principles of Programming Languages	4	0	0	4
3		Professional Elective – II	3	0	0	3
4		Professional Elective – III	3	0	0	3
5		Professional Elective – IV	3	0	0	3
6	CS703PC	Data Mining Lab	0	0	3_	2
7		PE-II Lab #	0	0	3	2
	CS751PC	Python Programming Lab				
	CS752PC	Mobile Application Development Lab				
	CS753PC	Web Scripting Languages Lab				
	CS754PC	Internet of Things Lab				
8	CS705PC	Industry Oriented Mini Project	0	0	3	2
9	CS706PC	Seminar	0	0_	2	1
		Total Credits	17	0_	11	24

[#] Courses in PE - II and PE - II Lab must be in 1-1 correspondence.

IV YEAR II SEMESTER

S. No	Course Code	Course Title	L	Т	P	Credits
18	_	Open Elective – III	3	0	0	3
2		Professional Elective – V	3	0	0	3
3		Professional Elective – VI	3_	0	0_	3
4	CS801PC	Major Project	0	0	30	15
		Total Credits	9	0_	30	24

Professional Elective - I

CS611PE	Mobile Computing
CS612PE	Design Patterns
CS613PE	Artificial Intelligence
CS614PE	Information Security Management (Security Analyst - I)
CS615PE	Introduction to Analytics (Associate Analytics - I)

Samskruti College of Engg. & Technology
Kondapur (V), Chathasar (M), R.R. Disc

Professional Elective - II

CS721PE	Python Programming	
CS722PE	Mobile Application Development	
CS723PE	Web Scripting Languages	
CS724PE	Internet of Things	

Professional Elective - III

CS731PE	Graph Theory
CS732PE	Distributed Systems
CS733PE	Machine Learning
CS734PE	Software Process and Project Management

Professional Elective - IV

CS741PE	Computational Complexity	
CS742PE	Cloud Computing	
CS743PE	Blockchain Technology	
CS744PE	Social Network Analysis	

Professional Elective - V

	Information Theory & Coding
CS852PE	Real-Time Systems
CS853PE	Data Analytics
CS854PE	Modern Software Engineering

Professional Elective - VI

CS861PE	Advanced Algorithms
CS862PE	Web Services and Service Oriented Architecture
	Computer Forensics
CS864PE	Neural Networks and Deep Learning

^{*}Open Elective subjects' syllabus is provided in a separate document.

*Open Elective - Students should take Open Electives from the List of Open Electives Offered by Other Departments/Branches Only.

Ex: - A Student of Mechanical Engineering can take Open Electives from all other departments/branches except Open Electives offered by Mechanical Engineering Dept.

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MASTER OF BUSINESS ADMINISTRATION MBA (Regular) R-19 Effective from Academic Year 2019 - 20 Admitted Batch

COURSE STRUCTURE AND SYLLABUS

I Year I Semester

Course Code	Course Title	L	T	Р	Credits
19MBA01	Management and Organizational Behaviour	3	1	0	4
19MBA02	Business Economics	3	1	0	4
19MBA03	Financial Accounting & Analysis	3	1	0	4
19MBA04	Research Methodology and Statistical Analysis	3	1	0	4
19MBA05	Legal and Business Environment	3	1	0	4
Open Elective-I 19MBA06	6A Business Ethics and Corporate Governance 6B Project Management 6C Technology Management 6D Cross Cultural Management	3	0	0	3
19MBA07	Business Communication Lab.	0	0	2	2
19MBA08	Statistical Data Analysis Lab	0_	0	2	. 2
	TOTAL	18	5	4	27

| Year || Semester

Course Code	Course Title	L	Τ	Р	Credits
19MBA09	Human Resource Management	3	1	0	4
19MBA10	Marketing Management	3	1	0	4
19MBA11	Financial Management	3	1	0	4
19MBA12	Quantitative Analysis for Business Decisions	3	1	0	4
19MBA13	Entrepreneurship	3	1	0	4
19MBA14	Logistics & Supply Chain Management	3	1	0	4
Open Elective-II 19MBA15	15A Total Quality Management 15B Marketing Research 15C International Business 15D Rural Marketing	3	0	0	3
	TOTAL	21	6	0	27

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III SEMESTER

Course Code	Course Title	Intl marks	Ext marks	L	T	P	С
17MBA15	Production & Operations Management	25	75	3	1	0	4
17MBA16	Management Information Systems	25	75	.3	1	0	4
17MBA17	Data Analytics	25	75	3	1	0	4

17MBA18 M1/H1/FI/E1	(MRKG/HRM/FIN/ Entrepreneurship)	25	75	3	0	0	.3
17MBA19 M2/H2/F2/E2	(MRKG/HRM/FIN/ Entrepreneurship)	25	75	3	0	0	3
17MBA20 M3/H3/F3/E3	(MRKG/HRM/FIN/ Entrepreneurship)	25	75	3	0	0	3
	TOTAL	150	450	18	3	0	21

IV SEMESTER

Course Code	Course Title	Intl marks	Ext marks	L	T	Р	С
17MBA21	Strategic Management	25	75	3	1	0	4
17MBA22 M4/H4/F4/E4	(MRKG/HRM/FIN/ Entrepreneurship)	25	75	3	0	0	3
17MBA23 M5/H5/F5/E5	(MRKG/HRM/FIN/ Entrepreneurship)	25	75	3	0	0	3
17MBA24 M6/H6/F6/E6	(MRKG/HRM/FIN/ Entrepreneurship)	25	75	3	0	0	3
17MBA25	Pre Submission of Project Work	100	•	0	1	1	1
17MBA26	Comprehensive Viva-Voce	-	100	0	1	1	1
17MBA27	Main Project Viva-Voce	_	100	0	0	5	2
	TOTAL	200	500	12	3	7	17

Samskruti College of Engg. & Technology Kondepur (V), Ghetheser (M), R.R. Dis.

LIST OF ELECTIVE SUBJECTS

Students have to select any One Specialization (Marketing, Finance, Human Resources, and Entrepreneurship) and he/she needs to select the Core Elective subjects listed under the chosen specialization only.

Course Cod	WARKEING	Credits
17MBA18 M	- Stat Marketing	3
17MBA19 M2	r intertaining and bales ivialingement	3
17MBA20 M3	Consumer Behaviour	2 0
17MBA22M4	Customer Relationship Management	3
17MBA23M5	International Marketing	3
17MBA24M6	Marketing of Services	3
	FINANCE	3
17MBA18F1	Security Analysis and Portfolio Management	
17MBA19F2	Financial Institutions, Markets & Services	3
17MBA20F3	Strategic Management Accounting	3
17MBA22F4	International Financial Management	3
17MBA23F5	Strategic Investment and Financing Decisions	3
17MBA24F6	Risk Management	3
	HUMAN RESOURCES	3
17MBA18H1	Performance Management Systems	3
17MBA19H2	Learning and Development	3
17MBA20H3	Management of Industrial Relations	3
17MBA22H4	International Human Resource Management	
17MBA23H5	Leadership and Change Management	3
17MBA24H6	Talent and Knowledge Management	3
1.	ENTREPRENEURSHIP	3
7MBA18E1	Start up Management	1000
7MBA19E2	MSME Management	3
7MBA20E3	Family Business Management	3
7MBA22E4	Entrepreneurial Finance	3
7MBA23E5	Entrepreneurial Marketing	3
7MBA24E6	Creativity Innovation and Entrepreneurship	3
10		3

Principal
Samskruti College of Engg. & Techr
Kondapur (V), Ghatteser (M), R.R. L.