

R18 CURRICULUM

K. S. R. M. College of Engineering - KADAPA

(AUTONOMOUS)

Detailed Curriculum for B. Tech. (Regular) (R18)

Department of Civil Engineering

1st Semester

Subject Code	Subject Category	Subject Title	L	T	P	IM	EM	CR
1821101	BSC	Mathematics – 1	3	1	0	30	70	4
1823102	BSC	Engineering Chemistry	3	1	0	30	70	4
1824103	HSMC	English	2	0	0	30	70	2
1805104	ESC	Programming for Problem Solving	3	0	0	30	70	3
1823107	BSC	Chemistry Lab	0	0	3	50	50	1.5
1805108	ESC	Programming for Problem Solving Lab	0	0	4	50	50	2
1824109	HSMC	English Lab	0	0	2	50	50	1
Total			11	2	9	270	430	17.5

2nd Semester

Subject Code	Subject Category	Subject Title	L	T	P	IM	EM	CR
1821201	BSC	Mathematics – 2	3	1	0	30	70	4
1822202	BSC	Engineering Physics	3	1	0	30	70	4
1802205	ESC	Basic Electrical Engineering	3	1	0	30	70	4
1803207	ESC	Engineering Graphics and Design	1	0	4	50	50	3
1822208	BSC	Engineering Physics Lab	0	0	3	50	50	1.5
1802209	ESC	Basic Electrical Engineering Lab	0	0	2	50	50	1
1803211	ESC	Workshop and Manufacturing Practice	1	0	4	50	50	3
Total			11	3	13	290	410	20.5

3rd Semester

Subject Code	Subject Category	Subject Title	L	T	P	IM	EM	CR
1823301	BSC	Biology for Engineers	2	0	0	30	70	2
1821302	BSC	Numerical Methods, Probability & Statistics	2	1	0	30	70	3
1803303	ESC	Basic Mechanical Engineering	2	1	0	30	70	3
1801304	PCC	Engineering Mechanics	3	1	0	30	70	4
1801305	PCC	Surveying and Geomatics	2	1	0	30	70	3
1801306	PCC	Building Materials and Construction	2	1	0	30	70	3
1801307	PCC	Computer Aided Civil Engineering Drawing Lab	0	0	4	50	50	2
1801308	PCC	Surveying and Geomatics Lab	0	0	2	50	50	1
1801309	PCC	Civil Engineering Workshop	0	0	2	50	50	1
Total			13	5	8	330	570	22

4th Semester

Subject Code	Subject Category	Subject Title	L	T	P	IM	EM	CR
1825401	OEC 1	Managerial Economics & Financial Analysis	2	1	0	30	70	3
1824402	HSMC	Effective Technical Communication	2	1	0	30	70	3
1801403	PCC	Engineering Geology	2	0	0	30	70	2

1801404	PCC	Fluid Mechanics	3	1	0	30	70	4
1801405	PCC	Solid Mechanics – 1	3	1	0	30	70	4
1801406	PCC	Disaster Preparedness & Planning Management	2	0	0	30	70	2
18994M1	MC 1	Environmental Studies	2	0	0	30	0	0
1801407	PCC	Engineering Geology Lab	0	0	2	50	50	1
1801408	PCC	Fluid Mechanics Lab	0	0	3	50	50	1.5
1801409	PCC	Solid Mechanics Lab	0	0	3	50	50	1.5
		Total	16	4	8	360	570	22

5th Semester

Subject Code	Subject Category	Subject Title	L	T	P	IM	EM	CR
18995M1	MC 2	Human Values and Professional Ethics	2	0	0	30	0	0
1801501	PCC	Solid Mechanics – 2	2	1	0	30	70	3
1801502	PCC	Hydraulic Machinery	2	0	0	30	70	2
1801503	PCC	Structural Analysis – 1	2	1	0	30	70	3
1801504	PCC	Geotechnical Engineering	2	1	0	30	70	3
1801505	PCC	Environmental Engineering	2	0	0	30	70	2
1801506	PCC	Transportation Engineering	2	0	0	30	70	2
PEC 1	PEC 1		2	0	0	30	70	2
1801514	PCC	Geotechnical Engineering Lab	0	0	2	50	50	1
1801515	PCC	Transportation Engineering Lab	0	0	2	50	50	1
1801516	PCC	Environmental Engineering Lab	0	0	2	50	50	1
1801517	PROJ	Socially Relevant Project	0	0	0	100	0	2
		Total	14	3	6	490	640	22

6th Semester

Subject Code	Subject Category	Subject Title	L	T	P	IM	EM	CR
1804601	ESC	Basic Electronics and Sensor Technology	2	0	0	30	70	2
1801602	PCC	Concrete Technology	2	0	0	30	70	2
1801603	PCC	Structural Analysis – 2	2	1	0	30	70	3
1801604	PCC	Design of Reinforced Concrete Structures – 1	2	1	0	30	70	3
1801605	PCC	Foundation Engineering	2	0	0	30	70	2
1801606	PCC	Water Resources Engineering – 1	2	1	0	30	70	3
PEC 2	PEC 2		2	0	0	30	70	2
1804613	ESC	Basic Electronics and Sensor Technology Lab	0	0	2	50	50	1
1801614	PCC	Concrete Technology Lab	0	0	2	50	50	1
1801615	PCC	Foundation Engineering Lab	0	0	2	50	50	1
1801616	PROJ	Internship	0	0	0	100	0	2
		Total	12	3	6	460	640	22

K. S. R. M. College of Engineering - KADAPA

(AUTONOMOUS)

Detailed Curriculum for B. Tech. (Regular) (R18)

Department of Electrical & Electronics Engineering

B. Tech - I Semester (Theory - 4, Lab - 3)

S. No.	Subject Code	SUBJECT	SC	L	T	P	IM	EM	CR
1	1821101	Mathematics-I	BSC	3	1	0	30	70	4
2	1823102	Engineering Chemistry	BSC	3	1	0	30	70	4
3	1824103	English	HSM C	2	0	0	30	70	2
4	1805104	Programming for Problem Solving	ESC	3	0	0	30	70	3
5	1823107	Chemistry Lab	BSC	0	0	3	50	50	1.5
6	1805108	Programming for Problem Solving Lab	ESC	0	0	4	50	50	2
7	1824109	English Lab	HSM C	0	0	2	50	50	1
Total				11	02	09	27 0	430	17. 5

B. Tech - II Semester (Theory - 4, Lab - 3)

S. No.	Subject Code	SUBJECT	SC	L	T	P	IM	E M	CR
1	1821201	Mathematics-II	BSC	3	1	0	30	70	4
2	1822203	Engineering Physics	BSC	3	1	0	30	70	4
3	1802206	Basic Electrical Engineering	ESC	3	1	0	30	70	4
4	1803207	Engineering Graphics & Design	ESC	1	0	4	50	50	3
5	1822208	Engineering Physics Lab	BSC	0	0	3	50	50	1.5
6	1802210	Basic Electrical Engineering Lab	ESC	0	0	2	50	50	1
7	1803211	Workshop on Manufacturing Practices	ESC	1	0	4	50	50	3
Total				11	03	13	290	41 0	20.5

B. Tech – III Semester (Theory - 6, Lab - 3)

S. No.	Subject Code	SUBJECT	SC	L	T	P	IM	EM	CR
1	1823301	Biology for Engineers	BSC	2	0	0	30	70	2
2	1814302	Electronics Devices & Circuits	PCC	3	0	0	30	70	3
3	1802303	Electrical Circuit Analysis	PCC	3	1	0	30	70	4
4	1802304	Electromagnetic Fields	PCC	3	0	0	30	70	3
5	1802305	Electrical Machines - I	PCC	3	1	0	30	70	4
6	1802306	Power Systems - I	PCC	3	0	0	30	70	3
7	1802307	Electrical Circuit Analysis Lab	PCC	0	0	2	50	50	1
8	1814308	Electronics Devices & Circuits Lab	PCC	0	0	2	50	50	1
9	1824309	Soft Skills Lab	HSMC	0	0	2	50	50	1
Total				17	02	06	330	570	22

B. Tech – IV Semester (Theory - 6, Lab - 3)

S. No.	Subject Code	SUBJECT	SC	L	T	P	IM	EM	CR
1	1821401	Mathematics - III	BSC	3	0	0	30	70	3
2	1814402	Digital System Design	PCC	3	0	0	30	70	3
3	1802403	Electrical Measurements	PCC	3	0	0	30	70	3
4	1802404	Control Systems	PCC	3	0	0	30	70	3
5	1802405	Electrical Machines - II	PCC	3	0	0	30	70	3
6	1802406	Power Systems - II	PCC	3	0	0	30	70	3
7	1802407	Electrical Measurements Lab	PCC	0	0	2	50	50	1
8	1802408	Electrical Machines - I Lab	PCC	0	0	2	50	50	1
9	1805409	Python Programming Lab	ESC	0	0	4	50	50	2
10	18994M1	Environmental Science	MC	2	0	0	30	00	0
Total				20	00	08	360	570	22

B. Tech – V Semester (Theory - 5, Lab - 3)

S. No.	Subject Code	SUBJECT	SC	L	T	P	IM	EM	CR
1	1804501	Microprocessors & Microcontrollers	PC C	3	0	0	30	70	3
2	1814502	Linear Digital IC Applications	PC C	3	0	0	30	70	3
3	1802503	Power Electronics	PC C	3	0	0	30	70	3
4	1802504	Power System Operation & Control	PC C	3	0	0	30	70	3
5		Professional Elective-I (PE-I)							
	1802505	Energy Auditing & Demand Side Management	PEC	3	0	0	30	70	3
	1802506	Electrical Machine Design	PEC	3	0	0	30	70	3
	1802507	Advanced Control Systems	PEC	3	0	0	30	70	3
	1802508	Instrumentation	PEC	3	0	0	30	70	3
	1802509	Energy Conversion Systems	PEC	3	0	0	30	70	3
6	1802510	Electrical Machines - II Lab	PC C	0	0	3	50	50	1.5
7	1802511	Control Systems & Simulation Lab	PC C	0	0	3	50	50	1.5
8	1824512	Advanced English Communication Lab	H S M C	0	0	4	50	50	2
10	1802513	Socially Relevant Projects(60 hrs/Semester)	PR OJ	-	-	-	100	-	2
Total				15	01	08	400	500	22

B. Tech – VI Semester (Theory - 5, Lab - 3)

S. No.	Subject Code	SUBJECT	S C	L	T	P	IM	EM	CR
1	1824601	Management Science	HSMC	3	0	0	30	70	3
2	1802602	Power Semiconductor Drives	PCC	3	0	0	30	70	3
3	1802603	Switchgear & Protection	PCC	3	0	0	30	70	3
4		Professional Elective -II (PE - II)							
	1802604	Power System Deregulation	PEC	3	0	0	30	70	3
	1802605	High Voltage DC Transmission	PEC	3	0	0	30	70	3
	1802606	PLC & its Applications	PEC	3	0	0	30	70	3
	1802607	Signals & Systems	PEC	3	0	0	30	70	3
	1802608	Electric & Hybrid Vehicles	PEC	3	0	0	30	70	3
5	--	Open Elective - I (OE-I)	OEC	3	0	0	30	70	3
6	1802609	Power Electronics & Simulation Lab	PCC	0	0	3	50	50	1.5
7	1802610	Power Systems - I Lab	PCC	0	0	3	50	50	1.5
8	1802611	Internet of Things Lab	PCC	0	0	4	50	50	2
9	1802612	Internship	PROJ	0	0	0	100	00	2
10	18996M2	Constitution of India	MC	2	0	0	30	--	--
Total				17	00	10	430	500	22

B. Tech – VII Semester (Theory - 5, Lab - 3, Project - I Stage)

S. No .	Subject Code	SUBJECT	S C	L	T	P	IM	E M	C R
1	1824701	Project Management	HSM C	3	0	0	30	70	3
2	1802702	Utilization of Electrical Power	PCC	3	0	0	30	70	3
3		Professional Elective -III (PE - III)							
	1802703	Flexible AC Transmission System	PEC	3	0	0	30	70	3
	1802704	Power Quality	PEC	3	0	0	30	70	3
	1802705	Digital Control Systems	PEC	3	0	0	30	70	3
	1802706	Digital Signal Processing	PEC	3	0	0	30	70	3
	1802707	Smart Grid	PEC	3	0	0	30	70	3
4	--	Open Elective - II (OE-II)	OEC	3	0	0	30	70	3
5	--	Open Elective - III (OE-III)	OEC	3	0	0	30	70	3
6	1802708	LabView Programming	ESC	0	0	3	50	50	1.5
7	1802709	Power Systems -II Lab	PCC	0	0	3	50	50	1.5
8	1824710	Effective Technical Communication Skills Lab	HSM C	0	0	2	50	50	1
8	1802711	Project Stage - I	PRO J	0	0	6	100	00	3
9	18997M3	Universal Human Values	MC	2	0	0	30	00	0
Total				19	00	10	380	450	22

B. Tech – VIII Semester (Theory - 2, Project - II Stage)

S. No .	Subject Code	SUBJECT	SC	L	T	P	IM	EM	CR
1		Professional Elective - IV (PE-IV)							
	1802801	Electrical Distribution Systems	PEC	3	0	0	30	70	3
	1802802	Advanced Electric Drives	PEC	3	0	0	30	70	3
	1802803	Industrial Automation & Control	PEC	3	0	0	30	70	3
	1802804	SCADA & its Application	PEC	3	0	0	30	70	3
	1802805	Distributed Generation & Micro Grid	PEC	3	0	0	30	70	3
2	--	Open Elective -IV (OE-IV)	OEC	3	0	0	30	70	3
3	1802806	Technical Seminar	PRO J	2	0	0	100	00	1
4	1802807	Project Stage - II	PRO J	0	0	10	50	50	5
Total				08	0	10	210	190	12

Open Electives

S. No.	Subject Code	SUBJECT	SC	L	T	P	I M	E M	C R
		Open Elective - I							
1	18OE201	Fundamentals of Control Systems	OE C	3	0	0	30	70	3
2	18OE202	MATLAB Programming	OE C	3	0	0	30	70	3
		Open Elective - II							
3	18OE203	Energy Conversion Systems	OE C	3	0	0	30	70	3
4	18OE204	Internet of Things	OE C	3	0	0	30	70	3
		Open Elective - III							
5	18OE205	Artificial Neural Networks & Fuzzy Logic	OE C	3	0	0	30	70	3
6	18OE206	Power System Engineering	OE C	3	0	0	30	70	3
		Open Elective - IV							
7	18OE207	Fundamentals of Power Electronics & Drives	OE C	3	0	0	30	70	3
8	18OE208	System Reliability Concepts	OE C	3	0	0	30	70	3

K. S. R. M. College of Engineering - KADAPA

(AUTONOMOUS)

Detailed Curriculum for B. Tech. (Regular) (R18)

Department of Mechanical Engineering

I SEM R-18(Mechanical)

Subject Code	Subject Category	Subject Title	L	T	P	IM	EM	CR
1821101	BSC	Mathematics - I	3	1	0	30	70	4
1823102	BSC	Engineering Chemistry	3	1	0	30	70	4
1824103	HSMC	English	2	0	0	30	70	2
1805104	ESC	Programming for Problem Solving	3	0	0	30	70	3
1823107	BSC	Chemistry Lab	0	0	3	50	50	1.5
1805108	ESC	Programming for Problem Solving Lab	0	0	4	50	50	2
1824109	HSMC	English Lab	0	0	2	50	50	1
		Total	11	2	9	270	430	17.5

Second Semester(mechanical)

Subject Code	Subject Category	Subject Title	L	T	P	IM	EM	CR
1821201	BSC	Mathematics - II	3	1	0	30	70	4
1822204	BSC	Engineering Physics	3	1	0	30	70	4
1802205	ESC	Basic Electrical Engineering	3	1	0	30	70	4
1803207	ESC	Engineering Graphics & Design	1	0	4	50	50	3
1822208	BSC	Engineering Physics Lab	0	0	3	50	50	1.5
1802209	ESC	Basic Electrical Engineering Lab	0	0	2	50	50	1
1803211	ESC	Workshop and Manufacturing Practices	1	0	4	50	50	3
		Total	11	3	13	290	410	20.5

Semester III [Second year]

S. N O	Course Code	Subject code	Course Title	Hours per week			IM	EM	Total contact hours	credits
				L	T	P				
1	BSC 301	1823301	Biology for Engineers	3	0	0	30	70	3	3
2	BSC	1821302	Numerical methods, probability and statics	2	0	0	30	70	2	2
3	ESC 301	1801303	Engineering Mechanics	3	0	0	30	70	3	3
4	PCC- ME	1803304	Manufacturing Process	3	0	0	30	70	3	3
5	PCC- ME	1803305	Strength of materials	3	0	0	30	70	3	3
6	PCC- ME	1803306	Material science and engineering	3	0	0	30	70	3	3
7	PCC- ME	1803307	Thermodynamics	3	0	0	30	70	3	3
8	PCC	1803308	Material science, Mechanics of solids Lab	0	0	3	50	50	3	1
9	PCC	1803309	Manufacturing technology Lab	0	0	3	50	50	3	1
					Total credits					22
					Total Hours					26

Semester IV (Second Year)

S. N O	Course Code	Subject code	Course Title	Hours per week			IM	EM	Total contac t hours	credit s
				L	T	P				
1	PCC- ME	1803401	Applied Thermodynamics	3	0	0	30	70	3	3
2	PCC- ME	1803402	Fluid Mechanics &Fluid Machinery	3	0	0	30	70	3	3
3	PCC- ME	1803403	Kinematics of Machinery	3	0	0	30	70	3	3
4	ESC	1814404	Basic Electronic Engineering	3	1	0	30	70	4	4
5	PCC- ME	1803405	Instrumentation and control systems	3	0	0	30	70	3	3
6	PCC- ME	1803406	Computer Aided Machine Drawing	1	0	2	50	50	3	2
7	ESC	1803407	Basic Electronics & MOF Lab	0	0	3	50	50	3	1.5
8	MC-I	18994M1	Environmental Science	2	0	0	30	0	2	0
9	PCC – ME	1803408	Seminar(LAB)	0	0	1	100	0	1	1
10	HMSC-	1824409	Advanced English communication Lab	0	0	3	50	50	03	1.5
					Total credits					22
					Total Hours					27

Semester V (Third Year) R-18

S. N O	Course Code	Subject code	Course Title	Hours per week			IM	EM	Total contact hours	credits
				L	T	P				
1	PCC- ME	1803501	Heat Transfer	3	0	0	30	70	3	3
2	PCC- ME	1803502	DME-I	3	0	0	30	70	3	3
3	PCC-ME	1803503	Metrology	3	0	0	30	70	3	2
4	PCC- ME	1803504	Dynamics of Machinery	3	0	0	30	70	3	3
5	HSMC	1825505	Managerial Economics	3	0	0	30	70	3	3
6	ME PEC	1803506	1. Automobile engineering (Professional Elective-I)	3	0	0	30	70	3	3
	PEC	1803507	2. Mechanical behavior of metals	3	0	0	30	70	3	3
	PEC	1803508	3. Renew enable technologies	3	0	0	30	70	3	3
	PEC	1803509	4. Supply Chain Management	3	0	0	30	70	3	3
	PEC	1803510	5. Manufacturing Methods in precision engineering	3	0	0	30	70	3	3
	PEC	1803511	6. Design for manufacturing	3	0	0	30	70	3	3
7	AU1	1803512	Additive manufacturing	0	0	3	30		3	0
8	PCC-ME	1803513	Mechanical Engg Lab(Thermal –I)	0	0	3	50	50	3	1.5
9	PCC-ME	1803514	Mechanical Engg Lab(CAD Lab)	0	0	3	50	50	3	1.5
10	Project-I	1803515	Socially relevant project	0	0	0	50	50	0	2
					Total credits					22
					Total Hours					27

Semester VI (Third Year)

S. N O	Course Code	Subject code	Course Title	Hours per week			IM	EM	Total contac t hours	credit s
				L	T	P				
1	PCC-	1803601	Machine tools	3	0	0	30	70	3	3
2	PCC-	1803602	DME-II	3	0	0	30	70	3	3
3	PCC	1803603	Operations Research	3	0	0	30	70	3	3
4	PCC	1803604	Power Plant engineering	3	0	0	30	70	3	2
5	PEC- II	1803605	Gas turbine and jet propulsion systems	3	0	0	30	70	3	3
	PEC- II	1803606	Computer aided process planning	3	0	0	30	70	3	3
	PEC- II	1803607	Concurrent Engineering	3	0	0	30	70	3	3
	PEC- II	1803608	Introduction to Artificial Intelligence & Expert systems	3	0	0	30	70	3	3
	PEC- II	1803609	Virtual Reality Systems	3	0	0	30	70	3	3
	PEC- II	1803610	Autotronics	3	0	0	30	70	3	3
6	OEC-I	1803611	Energy Systems Engineering	3	0	0	30	70	3	3
	OEC-I	1803612	Robotics And Application In Manufacturing	3	0	0	30	70	3	3
7	PCC-	1803613	Machine tools Lab	0	0	3	50	50	3	1.5
8	PCC-	1803614	Heat Transfer Lab	0	0	3	50	50	3	1.5
9	Project-II	1803615	Internship	0	0	0	100	0	0	2
10	MC-II	1825616	Organizational behaviour	2	0	0	30	0	2	0
11	HSMC	1824617	Professional Ethics and soft skills	2	0		30		0	0
					Total credits					22
					Total Hours					25

K. S. R. M. College of Engineering - KADAPA

(AUTONOMOUS)

Detailed Curriculum for B. Tech. (Regular) (R18)

Department of Electronics & Communication Engineering

I Semester

S. No.	Subject Code	Subject Title	Category	L	T	P	IM	EM	CR
1	1821101	Mathematics – I	BSC	3	1	0	30	70	4
2	1822102	Engineering Physics	BSC	3	1	0	30	70	4
3	1802103	Basic Electrical Engineering	ESC	3	1	0	30	70	4
4	1803107	Engineering Graphics & Design	ESC	1	0	4	50	50	3
5	1822108	Engineering Physics Lab	BSC	0	0	3	50	50	1.5
6	1802109	Basic Electrical Engineering Lab	ESC	0	0	2	50	50	1
7	1803110	Workshop and Manufacturing Practices	ESC	1	0	4	50	50	3
		Total							20.5

II Semester

S. No.	Subject Code	Subject Title	Category	L	T	P	IM	EM	CR
1	1821201	Mathematics – II	BSC	3	1	0	30	70	4
2	1823202	Engineering Chemistry	BSC	3	1	0	30	70	4
3	1824203	English	HSMC	2	0	0	30	70	2
4	1805204	Programming for Problem Solving	ESC	3	0	0	30	70	3
5	1823207	Chemistry Lab	BSC	0	0	3	50	50	1.5
6	1805208	Programming for Problem Solving Lab	ESC	0	0	4	50	50	2
7	1824209	English Lab	HSMC	0	0	2	50	50	1
		Total							17.5

III Semester

S. No.	Subject Code	Subject	Category	L	T	P	IM	EM	Credits
1	1821301	Mathematics- III	BS	3	1	0	30	70	4
2	1825307	Managerial Economics and Financial Analysis	HS	3	0	0	30	70	3
3	1804303	Electronic Devices and Circuits	EC	3	0	0	30	70	3
4	1804304	Digital System Design	EC	3	0	0	30	70	3
5	1804305	Signals and Systems	EC	3	0	0	30	70	3
6	1804306	Network Theory	EC	3	0	0	30	70	3
7	1805307	Python Programming	ES	0	0	3	50	50	1.5
8	1804308	Electronic Devices and Circuits Lab	EC	0	0	3	50	50	1.5
9	18993M1	Environment Science	MC	2	0	0	30	0	0
Total:									22

IV Semester

S. No.	Subject Code	Subject	Category	L	T	P	IM	EM	Credits
1	1823401	Biology for Engineers	BS	2	0	0	30	70	2
2	1804402	Probability Theory and Stochastic Processes	EC	3	0	0	30	70	3
3	1804403	Analog and Digital Circuits	EC	3	0	0	30	70	3
4	1802404	Control Systems	EC	3	0	0	30	70	3
5	1804405	Linear IC Applications	EC	3	0	0	30	70	3

6	1804406	Electromagnetic Theory and Transmission lines	EC	3	0	0	30	70	3
7	1804407	LabView Programming	ES	0	0	3	50	50	1.5
8	1804408	Analog and Digital Circuits Lab	EC	0	0	3	50	50	1.5
9	1824409	Advanced English Communication Skills	HS	0	0	4	50	50	2
		Total:							22

V Semester

S. No.	Subject Code	Subject	Category	L	T	P	IM	EM	Credits
1	1804501	Antennas and Wave Propagation	EC	3	0	0	30	70	3
2	1804502	Digital Signal Processing	EC	3	0	0	30	70	3
3	1804503	Computer Organization	EC	2	0	0	30	70	2
4	1804504	Analog Communication	EC	3	0	0	30	70	3
5	1804505	Digital IC Applications	EC	3	0	0	30	70	3
6	1804506	Microprocessors & Microcontrollers	EC	3	0	0	30	70	3
7	1804507	Microprocessors & Microcontrollers Lab	EC	0	0	3	50	50	1.5
8	1804508	Analog and Digital ICs lab	EC	0	0	3	50	50	1.5
9	1804509	Socially Relevant Project	PR				100		2
		Total:							22

VI Semester

S. No.	Subject Code	Subject	Category	L	T	P	IM	EM	Credits
1	1804601	Embedded Systems	EC	3	0	0	30	70	3
2	1804602	Digital Communication	EC	3	0	0	30	70	3
3	1804603	Microwave Engineering	EC	3	1	0	30	70	3
4	1804604	Open Elective I	OE	3	0	0	30	70	3
5	1804605	Professional Elective I	ECEL	3	0	0	30	70	3
6	1804606	Analog and digital communication Lab	EC	0	0	3	50	50	1.5
7	1804607	Digital Signal Processing Lab	EC	0	0	3	50	50	1.5
8	1824608	Micro Wave &Optical Communication Lab	EC	0	0	2	50	50	2
9	1899609	Organizational Behaviour	MC	3	0	0	30		0
10	1804610	Internship	PR				100		2
		Total:							22

VII Semester

S. No.	Subject Code	Subject	Category	L	T	P	IM	EM	Credits
1	1804701	Internet Of Things	EC	3	0	0	30	70	3
2	1804702	Professional Elective II	EC	3	0	0	30	70	3
3	1804703	Electronic Measurements & Instrumentation	EC	3	0	0	30	70	3
4	1804704	Professional Elective III	ECEL	3	0	0	30	70	3

K. S. R. M. College of Engineering - KADAPA

(AUTONOMOUS)

Detailed Curriculum for B. Tech. (Regular)
(R18)

Department of Computer Science & Engineering

First Semester

Subject Code	Subject Category	Subject Title	L	T	P	IM	E M	CR
1821101	BSC	Mathematics - I	3	1	0	30	70	4
1822104	BSC	Engineering Physics	3	1	0	30	70	4
1802103	ESC	Basic Electrical Engineering	3	1	0	30	70	4
1803107	ESC	Engineering Graphics & Design	1	0	4	50	50	3
1822108	BSC	Engineering Physics Lab	0	0	3	50	50	1.5
1802109	ESC	Basic Electrical Engineering Lab	0	0	2	50	50	1
1803110	ESC	Workshop and Manufacturing Practices	1	0	4	50	50	3
		Total	11	3	13	290	410	20.5

Second Semester

Subject Code	Subject Category	Subject Title	L	T	P	IM	E M	CR
1821201	BSC	Mathematics - II	3	1	0	30	70	4
1823202	BSC	Engineering Chemistry	3	1	0	30	70	4
1824203	HSMC	English	2	0	0	30	70	2
1805204	ESC	Programming for Problem Solving	3	0	0	30	70	3
1823205	BSC	Chemistry Lab	0	0	3	50	50	1.5
1805208	ESC	Programming for Problem Solving Lab	0	0	4	50	50	2
1824209	HSMC	English Lab	0	0	2	50	50	1
		Total	11	2	9	270	430	17.5

Semester 3

SL.No	Subject Code	Subject	L	T	P	CR
Theory <u> </u>						
1	1804301	Basics of Electronics Engineering	3	0	0	3
2	1805302	Data structures	3	0	0	3
3	1805303	Discrete Mathematics	3	0	0	3
4	1805304	Digital Logic Design	3	0	0	3
5	1805305	Python Programming	3	0	0	3
6	1825306	Managerial Economics and Financial Accounting (Humanities -1)	3	0	0	3
7	1825307	Environmental Sciences (Mandatory Course - 1)	2	0	0	0
Lab <u>s</u>						
1	1804308	Basics of Electronics Engg Lab	0	0	2	1
2	1805309	Data structures Lab	0	0	3	1.5
3	1805310	Python Programming Lab	0	0	3	1.5
		Total	20	0	8	22

Semester 4

SL.No	Subject Code	Subject	L	T	P	CR
<u>Theory</u>						
1	1821401	Probability & Statistics	3	0	0	3
2	1805402	Computer Organization	3	0	0	3
3	1805403	Operating Systems	3	0	0	3
4	1805404	Design and Analysis of Algorithms	3	0	0	3
5	1805405	Java Programming	3	0	0	3
6	1805406	Formal Languages and Automata Theory	3	0	0	3
7	1825407	Biology for Engineers	2	0	0	2
<u>Lab s</u>						
1	1805408	Java Programming lab	0	0	2	1
2	1805409	Operating Systems Lab	0	0	2	1
		Total	20	0	4	22

Semester 5

SL.No	Subject Code	Subject	L	T	P	CR
<u>Theory</u>						
1	1805501	Web Technologies	2	0	0	2
2	1805502	Data Base Management Systems	3	0	0	3
3	1805503	Computer Networks	3	0	0	3
4	1805504	Software Engineering	3	0	0	3
5	1805505 1805506 1805507	Professional Elective – 1 1. Human Computer Interaction 2. Multimedia Systems 3. Distributed Systems	3	0	0	3
6	1805508	Compiler Design	3	0	0	3
7	1825509	Constitution of India (Mandatory Course)	2	-	-	0
<u>Lab s</u>						
1	1805510	Databases Lab	0	0	2	1
2	1805511	Web Technologies Lab	0	0	2	1
3	1824512	Advanced English & Communication Skills lab	0	0	2	1
4	1805513	Socially Relevant Project	0	0	4	2
		Total	19	0	10	22

Semester 6

SL.No	Subject Code	Subject	L	T	P	CR
<u>Theory</u>						
1	1805601	Internet of Things	3	0	0	3
2	1805602	Data Mining	3	0	0	3
3	1805603 1805604 1805605	Professional Elective-2 1. Artificial Intelligence 2. Software Testing 3. Mobile Adhoc Networks	3	0	0	3
4		Open Elective-1	3	0	0	3
5	1825609	Management Science	3	0	0	3
6	1805608	Mobile Application Development	3	0	0	3
<u>Labs</u>						
1	1805609	IOT Lab	0	0	2	1
2	1805610	Mobile Application Development Lab	0	0	2	1
3	1805611	Internship	0	0	4	2
		Total	18	0	8	22