

# TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

#### **B.TECH. CIVIL ENGINEERING-R18**

#### **B.TECH I SEMESTER COURSE STRUCTURE**

#### B. Tech. I Semester

S. No	Course Code	Course Title	L	Т	P	Credits
1	BBSM1	Engineering Mathematics-I	3	1	0	3
2	BBSP1	Engineering Physics	4	1	0	4
3	BHSEN	Professional Communication Language	3	0	0	3
4	BBSBE	Basic Electrical Engineering	3	1	0	3
5	BBSEG	Engineering Graphics	2	1	2	3
6	BP112	Engineering Physics Lab	0	0	3	1.5
7	BE22	Professional Communication Language Lab	0	0	3	1.5
8	BBEEL2	Basic Electrical Engineering Lab	0	0	3	1.5
9	BBSEW	Engineering Workshop	0	0	3	1.5
			TOTA	L		22.0

DEAN ACADEMICS

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TKR College of Engineering & Technology (AUTONOMOUS)



# TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

#### **B.TECH. CIVIL ENGINEERING -R18**

#### **B.TECH I SEMESTER COURSE STRUCTURE**

#### B. Tech. II Semester

S. No	Course Code	Course Title	L	T	P	Credits
1	BBSM2	Engineering Mathematics-II	3	1	0	3
2	BBSCP	Computer Programming using C	3	0	0	3
3	BESEM	Engineering Mechanics	3	0	0	3
3	BBSC1	Engineering Chemistry	4	1	0	4
4	BBSFE	Fundamentals of mechanical Engineering	2`	1	0	2
5	BCH2	Engineering Chemistry Lab	0	0	3	1.5
6	BCPL2	Computer Programming using C Lab	0	0	3	1.5
7	BBSCL	CAD Lab	0	0	3	1.5
	J.				Total	19.5

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## TKR COLLEGE OF ENGINEERING & TECHNOLOGY (Autonomous)

#### **B.TECH. CIVIL ENGINEERING**

#### COURSE STRUCTURE & SYLLABUS

#### III SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1	A13BS1	Mathematics – IV	4	1	0	4
2	A13PC2	Strength of Materials	4	1	0	4
3	A13PC3	Fluid Mechanics	4	1	0	4
4	A13PC4	Building Materials Construction and Planning	3	0	0	3
5	A13PC5	surveying	3	0	0	3
6	A13PC6	Strength of Materials Lab	0	0	3	2
7	A13PC7	Computer Aided Design Lab	0	0	3	2
8	A13PC8	Surveying-I Lab	0	0	3	2
9	A13MC3	*Gender Sensitization Lab	0	3	0	0
		Total Credits	18	6	9	24

#### IV SEMESTER

S. No	Course Code	Course Title	L	Т	P	Credits
1	A14PC1	Strength of Materials -II	4	1	0	4
2	A14PC2	Fluid Mechanics-II	4	1	0	4
3	A14PC3	Structural Analysis	4	1	0	4
4	A14PC4	Engineering Geology	3	0	0	3
5	A14HS5	Business Economics and Financial Analysis	3	0	0	3
6	A14PC6	Fluid Mechanics Lab	0	0	3	2
7	A14PC7	Surveying II Lab	0	0	3	2
8	A14PC8	Engineering Geology Lab	0	0	3	2
9	A14MC4	*Environment Science and Technology	0	3	0	0
		Total Credits	18	6	9	24

\*Mandatory Course

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#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

# B.TECH. CIVIL ENGINEERING III YEAR COURSE STRUCTURE & SYLLABUS (R16)

#### Admitted From 2016-17 Admitted Batch

#### III YEAR I SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1	CE501PC	Concrete Technology	4	0	0	4
2	CE502PC	Design of Reinforced Concrete Structures	4	1	0	4
3	CE503PC	Water Resources Engineering	4	0	0	4
4	SM504MS	Fundamentals of Management	3	0	0	3
5		Open Elective –I	3	0	0	3
6	CE505PC	Concrete Technology Lab	0	0	3	2
7	CE506PC	Geographical Information Systems Lab	0	0	3	2
8	CE507PC	Hydraulics and Hydraulic Machinery Lab	0	0	3	2
9	*MC500HS	Professional Ethics	3	0	0	0
		Total Credits	21	1	9	24

#### III YEAR II SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1	CE601PC	Design of Steel Structures	4	1	0	4
2	CE602PC	Environmental Engineering	4	0	0	4
3	CE603PC	Soil Mechanics	4	0	0	4
4		Open Elective-II	3	0	0	3
5		Professional Elective-I	3	0	0	3
6	CE604PC	Soil Mechanics Lab	0	0	3	2
7	CE605PC	Computer Aided Drafting - II Lab	0	0	3	2
8	EN606HS	Advanced English Communication Skills Lab	0	0	3	2
		Total Credits	18	1	9	24

## \*During Sumer Vacation between III and IV Years: Industry Oriented Mini Project

#### Professional Elective - I

CE611PE	Air Pollution and Control.	
CE612PE	Advanced Structural Analysis.	
CE613PE	Ground Water Development and Management.	
CE614PE	Earth and Rock fill Dams and Slope Stability.	

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# ACADEMIC REGULATIONS COURSE STRUCTURE AND DETAILED SYLLABUS



# **CIVIL ENGINEERING**

## For

B.TECH. FOUR YEAR DEGREE COURSE (Applicable for the batches admitted from 2013-14) (I - IV Years Syllabus)



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD KUKATPALLY, HYDERABAD - 500 085.

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#### IV YEAR I SEMESTER

Code	Subject	L	T/P/D	C
A70140	Remote Sensing & GIS	4		4
A70143	Transportation Engineering -II	4	-	4
A70138	Estimating & Costing	4		4
A70133	Water Resources Engineering-II	4	152	4
A70134	Elective-II Finite Element Methods Advanced Foundation Engineering Watershed Management Air Pollution and Control	4		4
A70135 A70137 A70144 A70139	Elective-III Advanced Structural Design Earth and Rock fill Dams and Slope Stability Water Resources Systems Analysis Industrial Waste Water Treatment	4		4
A70195	Concrete & Highway Materials Lab	<b>—</b>	3	2
A70192	Environmental Engineering Lab		2	
	Total	24	6	28

#### IV YEAR II SEMESTER

Code	Subject	L	T/P/D	C
A80151 A80148 A80147 A80141	Elective-IV Rehabilitation and Retrofitting of Structures Geo-Environmental Engineering Design and Drawing of Irrigation Structures Solid Waste Management	4	*	4
A80150	Prestressed Concrete Structures	4	-	4
A80146	Construction Management	4		4
A80087	Industry Oriented Mini project	-	-	2
A80089	Seminar	-	6	2
A80088	Project Work	-	15	10
A80090	Comprehensive viva	-		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

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## TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

#### B.TECH. ELECTRICAL AND ELECTRONICS ENGINEERING-R18

#### **COURSE STRUCTURE & SYLLABUS**

#### B. Tech - I Semester

S. No	Course Code	Course Title	L	T	P	Credit
1	BBSM1	Engineering Mathematics-I	3	1	0	3
2	BBSP2	Applied Physics-I	3	0	0	3
3	BHSEN	Professional Communication Language	3	0	0	3
4	BBSBE	Basic Electrical Engineering	3	0	0	3
5	BBSEG	Engineering Graphics	3	0	0	3
6	BBSEW	Engineering Workshop	0	0	3	1.5
7	BBEEL2	Basic Electrical Engineering Lab	0	0	3	1.5
8	BE22	Professional Communication Language Lab	0	0	3	1.5
		TOTAL				19.5

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# TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

# B.TECH. ELECTRICAL AND ELECTRONICS ENGINEERING-R18 B.TECH. II SEMESTER COURSE STRUCTURE

#### B. Tech - II Semester

S. No	Course Code	Course Title	L	T	P	Credits
1	BBSM2	Engineering Mathematic-II	3	1	0	3
2	BBSP3	Applied Physics-II	3	0	0	3
3	BBSC1	Engineering Chemistry	4	1	0	4
4	BBSED	Electronics Devices and Circuits	3`	0	0	3
5	BBSCP	Computer Programming using C	3	0	0	3
6	BP113	Applied Physics Lab	0	0	3	1.5
7	всн2	Engineering Chemistry Lab	0	0	3	1.5
8	BEDCL2	Electronics Devices and Circuits Lab	0	0	3	1.5
9	BCPL2	Computer Programming using C Lab	0	0	3	1.5
					TOTAL	22

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# T K R COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

# B.TECH ELECTRICAL AND ELECTRONICS ENGINEERING COURSE STRUCTURE & SYLLABUS

#### **B.TECH III SEMESTER**

S.No.	Course Code	Course Title	L	Т	P	Credits
1	A23HS1	Mathematics-IV	3	1	0	4
2	A23PC2	Electromagnetic Fields	3	1	0	4
3	A23PC3	Electrical Machines-I	3	1	0	4
4	A23PC4	Network Theory	3	0	0	3
5	A23PC5	Electronic Circuits	3	0	0	3
6	A23PC6	Electrical Machines Lab-I	0	0	3	2
7	A23PC7	Electronic Devices &Circuits Lab	0	0	3	2
8	A23PC8	Networks Lab	0	0	3	2
9	A23MC3	*Environmental Science and Technology	3	0	0	0
		Total Credits	18	3	9	24

<sup>\*</sup> Mandatory Course

#### **B.TECH IV SEMESTER**

S.No.	Course Code	Course Title	L	T	P	Credits
1	A24PC1	Switching Theory & Logic Design	3	1	0	3
2	A24PC2	Power Systems-I	3	1	0	4
3	A24PC3	Electrical Machines-II	3	1	0	4
4	A24PC4	Control Systems	3	1	0	4
5	A24HS5	Business Economics and Financial Analysis	3	0	0	3
6	A24PC6	Control Systems Lab	0	0	3	2
7	A24PC7	Electrical Machines Lab-II	0	0	3	2
8	A24PC8	Electronic Circuits Lab	0	0	3	2
9	A24MC4	*Gender Sensitization Lab	0	0	3	0
		Total Credits	15	4	12	24

\*Mandatory Course

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## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

## B.TECH. ELECTRICAL AND ELECTRONICS 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	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

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#### Professional Elective - I (PE - I):

EM611PE	Computer Organization	
EE612PE	Linear Systems Analysis	
EE613PE	Linear and Digital IC Applications	
EE614PE	Electrical and Electronics Instrumentation	

<sup>\*</sup>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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# ACADEMIC REGULATIONS COURSE STRUCTURE AND DETAILED SYLLABUS



# ELECTRICAL AND ELECTRONICS ENGINEERING

## For

B.TECH. FOUR YEAR DEGREE COURSE (Applicable for the batches admitted from 2013-14) (I - IV Years Syllabus)



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD KUKATPALLY, HYDERABAD - 500 085.

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#### IV YEAR I SEMESTER

Code	Subject	L	T/P/D	C
A70231	Switch Gear and Protection	4	-	4
A70232	Utilization of Electrical Energy	4	-	4
A70421	Digital Signal Processing	4	-	4
A70230	Power System Operation and Control	4	-	4
	Elective-I	4	-	4
A70228	High Voltage Engineering			
A70432	VLSI Design			
A70435	Digital Control Systems			
	Elective-II	4	-	4
A70229	Optimization Techniques			
A70226	Electrical Distribution Systems			
A70227	Electrical Estimation and Costing			
A70498	Microprocessors and Interfacing Devices Lab	7 -	3	2
A70293	Electrical Measurements Lab	-	3	2
	Total	24	6	28

#### IV YEAR II SEMESTER

Code	Subject	L	T/P/D	C
A80237	Fundamentals of HVDC and FACTS Devices	4	-	4
	Elective-III	4	-	4
A80238	Neural Networks and Fuzzy Logic			
A80324	Renewable Energy Sources			
A80244	Principles of Reliability Engineering			
	Elective-IV	4	-	4
A80234	Advanced Control Systems			
A80235	EHV AC Transmission			
A82909	Nanotechnology			
A80087	Industry Oriented Mini Project	-	-	2
A80089	Seminar	-	6	2
A80088	Project Work	-	15	10
A80090	Comprehensive Viva-Voce	-		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

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# TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

#### **B.TECH. MECHANICAL ENGINEERING-R18**

#### **COURSE STRUCTURE & SYLLABUS**

#### B. Tech. I Semester

S. No	Course Code	Course Title	L	Т	P	Credits
1	BBSM1	Engineering Mathematics-I	3	1	0	3
2	BBSP1	Engineering Physics	4	1	0	4
3	BHSEN	Professional Communication Language	3	1	0	3
4	BBSBE	Basic Electrical Engineering	3	0	0	3
5	BBSEG	Engineering Graphics	3	0	0	3
6	BP112	Engineering Physics Lab	0	0	3	1.5
7	BE22	Professional Communication Language Lab	0	0	3	1.5
8	BBEEL2	Basic Electrical Engineering Lab	0	0	3	1.5
9	BBSEW	Engineering Workshop	0	0	3	1.5
						22.0

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### TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

#### **B.TECH. MECHANICAL ENGINEERING-R18**

#### **COURSE STRUCTURE & SYLLABUS**

#### B. Tech. II Semester

S. No	Course Code	Course Title	L	Т	P	Credits
1	BBSM2	Engineering Mathematics-II	3	1	0	3
2	BBSC1	Engineering Chemistry	4	1	0	4
3	BBSCP	Computer Programming using C	3	0	0	3
3	BESEM	Engineering Mechanics	3	0	0	3
4	BBSFE	Fundamental of Mechanical Engineering	2	1	0	2
5	BCH2	Engineering Chemistry Lab	0	0	3	1.5
6	BCPL2	Computer Programming using C Lab	0	0	3	1.5
7	BFLL1	Fuels and Lubricants Lab	0	0	3	1.5
						19.5

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# T K R COLLEGE OF ENGINEERING & TECHNOLOGY (Autonomous)

#### MECHANICAL ENGINEERING

#### **COURSE STRUCTURE & SYLLABUS**

#### Semester III

S. No.	Course Code	Course Title	L	T	P	Credits
1	A33BS1	Mathematics – IV	4	1	0	4
2	A33PC2	Thermodynamics	4	1	0	4
3	A33PC3	Kinematics of Machinery	4	1	0	4
4	A33PC4	Metallurgy and Material Science	3	0	0	3
5	A33PC5	Mechanics of Solids	3	1	0	3
6	A33PC6	Fuels and Lubricants Lab	0	0	3	2
7	A33PC7	Mechanics of Solids Lab	0	0	3	2
8	A33PC8	Metallurgy and Material Science Lab	0	0	3	2
9	A33MC9	*Gender Sensitization Lab	0	0	3	0
		Total Credits	18	4	12	24

<sup>\*</sup>Mandatory course, Satisfactory/Unsatisfactory

#### SEMESTER IV

S. No.	Course Code	Cour	L	T	P	Credits
1	A34PC1	Dynamics of Machinery	3	1	0	4
2	A34PC2	Fluid Mechanics and Hydraulic Machines	4	1	0	4
3	A34ES3	Machine Drawing	2	0	4	4
4	A34ES4	Manufacturing Process	3	0	0	3
5	A34HS5	Business Economics and Financial	3	0	0	3
6	A34PC6	Kinematics and Dynamics Lab	0	0	3	2
7	A34PC7	Fluid Mechanics and Hydraulic Machines Lab	0	0	3	2
8	A34ES8	Manufacturing Process Lab	0	0	3	2
9	A34MC9	*Environmental Science and Technology	3	0	0	0
		Total Credits	18	2	15	24

\*Mandatory course, Satisfactory/Unsatisfactory

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## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

#### **B.TECH. MECHANICAL 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	ME501PC	Design of Machine Members - I	4	1	0	4
2	ME502PC	Thermal Engineering-I	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 Tools Lab	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

#### III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	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	ME604PC	Heat Transfer Lab	0	0	3	2
7	ME605PC	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

TKR College of Engineering & Technology (AUTONOMOUS)

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#### Professional Elective - I

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

<sup>\*</sup>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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# ACADEMIC REGULATIONS COURSE STRUCTURE AND DETAILED SYLLABUS



# MECHANICAL ENGINEERING

## For

B.TECH. FOUR YEAR DEGREE COURSE (Applicable for the batches admitted from 2013-14) (I - IV Years Syllabus)



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#### IV YEAR I SEMESTER

Code	Subject	L	T/P/D	C
A70352	Operations Research	4		4
A70353	Power Plant Engineering	4	-	4
A70328	CAD/CAM	4	-	4
A70343	Instrumentation and Control Systems	4	-	4
Mark Service	ELECTIVE - I	4	-	4
A70355	Robotics			
A70346	Mechanical Vibrations			
A70348	Mechatronics			
A70347	Mechanics of Composite Materials			
A70332	Industrial Management			
	ELECTIVE – II	4	-	4
A70359	Unconventional Machining Processes			
A70337	CNC Technology			
A70336	Automation in Manufacturing			
A70339	Design for Manufacturing	1 1		
A72909	Nanotechnology	1 1		
A70390	Computer Aided Design & Manufacturing Lab	1-1	3	2
A70391	Production Drawing Practice and Instrumentation Lab	1-	3	2
	Total	24	6	28

#### IV YEAR II SEMESTER

Code	Subject	L	T/P/D	С
A80366	Production Planning and Control	4	-	4
	ELECTIVE – III	4		4
A80527	Artificial Neural Networks	- 1		
A80367	Total Quality Management	- 1		
A80363	Maintenance and Safety Engineering	1 1	F 8	
A80365	Plant Layout & Material Handling			
	ELECTIVE – IV	4	-	4
A80324	Renewable Energy Sources	1 1		.01
A80362	Jet Propulsion & Rocket Engineering	1 1		
A80338	Computational Fluid Dynamics	1 1		
A80361	Gas Dynamics	- 1 1		
A80087	Industry Oriented Mini Project		-	2
A80089	Seminar	-	6	2
A80088	Project Work		15	10
A80090	Comprehensive Viva	-	-	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

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# TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

## **B.TECH. ELECTRONICS & COMMUNICATION ENGINEERING - R18**

#### **B.TECH. I SEMESTER COURSE STRUCTURE**

#### B. Tech. I Semester

S. No	Course Code	Course Title	L	T	P	Credits
1	BBSM1	Engineering Mathematics-I	3	1	0	3
2	BBSP2	Applied Physics-I	3	0	0	3
3	BBSC1	Engineering Chemistry	4	1	0	4
4	BBSED	Electronics Devices and Circuits	3	0	0	3
5	DBSCP	Computer Programming using C	3	0	0	3
6	BEDCL2	Electronic Devices and Circuits Lab	0	0	3	1.5
7	BCPL2	Computer Programming using C Lab	0	0	3	1.5
8	BCH2	Engineering Chemistry Lab	0	0	3	1.5
					TOTAL	20.5

DEAN ACADEMICS

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### TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

#### B.TECH. ELECTRONICS & COMMUNICATION ENGINEERING - R18

#### **B.TECH. II SEMESTER COURSE STRUCTURE**

#### B. Tech. II Semester

S. No	Course Code	Course Title	L	T	P	Credits
1	BBSM2	Engineering Mathematics-II	3	1	0	3
2	BBSP3	Applied Physics-II	3	0	0	3
3	BHSEN	Professional Communication Language	3	0	0	3
4	BBSBE	Basic Electrical Engineering	3`	0	0	3
5	BBSEG	Engineering Graphics	3	0	0	3
6	BP113	Applied Physics Lab	0	0	3	1.5
7	BE22	Professional Communication Language Lab	0	0	3	1.5
8	BBEEL2	Basic Electrical Engineering Lab	0	0	3	1.5
9	BBSEW	Engineering Workshop	0	0	3	1.5
		······································	TOTA	AL		21.0

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## TKR COLLEGE OF ENGINEERING & TECHNOLOGY (Autonomous)

## **B.TECH. ELECTRONICS & COMMUNICATION ENGINEERING COURSE STRUCTURE & SYLLABUS**

#### III SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1	A43HS1	Mathematics – IV	4	1	0	4
2	A43PC2	Analog Electronics	4	1	0	4
3	A43PC3	Electrical Technology	4	1	0	4
4	A43PC4	Signals and Stochastic Process	3	1	0	3
5	A43PC5	Network Analysis	3	1	0	3
6	A43PC6	Electronic Devices and Circuits Lab	0	0	3	2
7	A43PC7	Basic Simulation Lab	0	0	3	2
8	A43PC8	Basic Electrical Engineering Lab	0	0	3	2
9	A43MC3	*Environmental Science and Technology	3	0	0	0
		Total Credits	21	5	9	24

#### **IVSEMESTER**

S. No.	Course Code	Course Title	L	T	P	Credits
1	A44PC1	Switching Theory and Logic Design	3	1	0	3
2	A44PC2	Pulse and Digital Circuits	4	0	0	4
3	A44PC3	Control Systems	4	1	0	4
4	A44PC4	Analog Communications	4	0	0	4
5	A44HS5	Business Economics and Financial Analysis	3	0	0	3
6	A44PC6	Analog Communications Lab	0	0	3	2
7	A44PC7	Pulse and Digital Circuits Lab	0	0	3	2
8	A44PC8	Analog Electronics Lab	0	0	3	2
9	A44MC4	*Gender Sensitization Lab	0	0	3	0
		Total Credits	18	2	12	24

\*Mandatory Course

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## 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	T	P	Credits
1		Open Elective-II	3	0	0	3
2		Professional Elective-I	3	0	0	3
3	EC601PC	Antennas 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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#### Professional Elective - I

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

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

## **ACADEMIC REGULATIONS COURSE STRUCTURE** AND **DETAILED SYLLABUS**



# **ELECTRONICS AND COMMUNICATION ENGINEERING**

## For

B.TECH. FOUR YEAR DEGREE COURSE (Applicable for the batches admitted from 2013-14) (I - IV Years Syllabus)



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#### IV YEAR I SEMESTER

Code	Subject	L	T/P/D	С
A70014	Management Science	4	-	4
A70442	Microwave Engineering	4	-	4
A70515	Computer Networks	4	-	4
A70434	Cellular and Mobile Communications	4	-	4
A70436 A70443 A70505	Elective -I: Digital Image Processing Multimedia and Signal Coding Object Oriented Programming through Java	4	-	4
A70447 A70444 A70440	Elective -II: Television Engineering Optical Communications Embedded Systems Design	4	•	4
A70086	Advanced Communication Skills Lab,	-	3	2
A70499	Microwave Engineering and Digital Communications Lab	-	3	2
	Total	24	6	28

#### IV YEAR II SEMESTER

Code	Subject	L	T/P/D	C
A80452 A81102 A80527		4	-	4
A80431 A80450 A80449	Elective -IV: Telecommunication Switching Systems and Networks Radar Systems Network Security	4	•	4
A80454 A80437 A80451	Elective -V: Wireless Communications and Networks Digital Signal Processors and Architectures RF Circuit Design	4	-	4
A80087	Industry Oriented Mini Project	-		2
A80089	Seminar	-	6	2
A80088	Major Project Work	-	15	10
A80090	Comprehensive Viva	1-1	-	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

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### TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

## **B.TECH. COMPUTER SCIENCE & ENGINEERING-R18**

#### **B.TECH I SEMSTER COURSE STRUCTURE**

#### B. Tech - I Semester

S. No	Course Code	Course Title	L	T	P	Credits
1	BBSM1	Engineering Mathematics-I	3	1	0	3
2	BBSP2	Applied Physics-I	3	0	0	3
3	BBSC1	Engineering Chemistry	4	1	0	4
4	BBSED	Electronics Devices and Circuits	3	0	0	3
5	DBSCP	Computer Programming using C	3	1	0	3
6	BEDCL2	Electronics Devices and Circuits Lab	0	0	3	1.5
7	BCPL2	Computer Programming using C Lab	0	0	3	1.5
8	BCH2	Engineering Chemistry Lab	0	0	3	1.5
		TOTAL	<del>-</del>			20.5

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#### TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

## **B.TECH. COMPUTER SCIENCE & ENGINEERING -R18 B.TECH II SEMESTER COURSE STRUCTURE**

#### B. Tech. II Semester

S. No	Course Code	Course Title	L	T	P	Credits
1	BBSM2	Engineering Mathematics-II	3	1	0	3
2	BBSP3	Applied Physics-II	3	0	0	3
3	BHSEN	Professional Communication Language	3	0	0	3
4	BBSBE	Basic Electrical Engineering	3`	0	0	3
5	BBSEG	Engineering Graphics	3	0	0	3
6	BP113	Applied Physics Lab	0	0	3	1.5
7	BE22	Professional Communication Language Lab	0	0	3	1.5
8	BBEEL2	Basic Electrical Engineering Lab	0	0	3	1.5
9	BBSEW	Engineering Workshop	0	0	3	1.5
					Total	21.0

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# T K R COLLEGE OF ENGINEERING & TECHNOLOGY (Autonomous)

#### B.TECH. COMPUTER SCIENCE AND ENGINEERING

#### **COURSE STRUCTURE & SYLLABUS**

#### III SEMESTER

S. No	Course Code	Course Title	L	Т	P	Credits
1	A53HS1	Mathematics – IV	4	1	0	4
2	A53PC2	Data Structures through C++	4	0	0	4
3	A53PC3	Mathematical Foundations of Computer Science	4	0	0	4
4	A53PC4	Digital Logic Design	3	0	0	3
5	A53PC5	Object Oriented Programming through Java	3	0	0	3
6	A53PC6	Data Structures through C++ Lab	0	0	3	2
7	A53PC7	IT Workshop	0	0	3	2
8	A53PC8	Java Programming Lab	0	0	3	2
9	A53MC3	*Environmental Science and Technology	3	0	0	0
		Total Credits	21	1	9	24

#### IV SEMESTER

S. No	Course Code	Course Title	L	Т	P	Credits
1	A54PC1	Computer Organization	4	0	0	4
2	A54PC2	Database Management Systems	4	0	0	4
3	A54PC3	Operating Systems	4	0	0	4
4	A54PC4	Formal Languages and Automata Theory	3	0	0	3
5	A54HS5	Business Economics and Financial Analysis	3	0	0	3
6	A54PC6	Computer Organization Lab	0	0	3	2
7	A54PC7	Database Management Systems Lab	0	0	3	2
8	A54PC8	Operating Systems Lab	0	0	3	2
9	A54MC4	*Gender Sensitization Lab	0	0	3	0
-2.		Total Credits	18	0	12	24

\* Satisfactory/Unsatisfactory

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## 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	T	P	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
		<b>Total Credits</b>	21	0	9	24

#### III YEAR II SEMESTER

S. No	Course Code	Course Title	L	T	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

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#### 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)

<sup>\*</sup>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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# ACADEMIC REGULATIONS COURSE STRUCTURE AND DETAILED SYLLABUS

# COMPUTER SCIENCE AND ENGINEERING

## For

B.TECH. FOUR YEAR DEGREE COURSE (Applicable for the batches admitted from 2013-14) (I - IV Years Syllabus)



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#### IV YEAR I SEMESTER

Code	Subject	L	T/P/D	C
A70511	Linux Programming	4	7.0	4
A70530	Design Patterns	4	-	4
A70520	Data Warehousing and Data Mining	4	-	4
A70519	Cloud Computing	4	-	4
A70540 A70532 A70536 A70529 A70352	ELECTIVE – I Software Project Management Image processing and Pattern Recognition Mobile Computing Computer Graphics Operations Research	4	e <b>=</b>	4
A70534 A70539 A70533 A70526 A70628	ELECTIVE – II Machine Learning Soft Computing Information Retrieval Systems Artificial Intelligence Computer Forensics	4	) <del>-</del>	4
A70596	Linux Programming Lab	-	3	2
A70595	Data Warehousing and Mining Lab		3	2
	Total	24	6	28

#### IV YEAR II SEMESTER

Code	Subject	L	T/P/D	С
A80014	Management Science	4		4
	ELECTIVE III	4	-	4
A80551	Web Services			
A80538	Semantic Web and Social Networks			
A80537	Scripting Languages		j	
A80547	Multimedia & Rich Internet Applications			
	ELECTIVE – IV	4	(=)	4
A80542	Ad hoc and Sensor Networks			
A80550	Storage Area Networks			
A80543	Database Security			
A80439	Embedded Systems			
A80087	Industry Oriented Mini Project	-	-	2
A80089	Seminar	-	6	2
A80088	Project Work	-	15	10
A80543 A80439 A80087 A80089	Comprehensive Viva	-		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

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# TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

#### **B.TECH. INFORMATION TECHNOLOGY-R18**

#### B.TECH. I SEMESTER COURSE STRUCTURE

#### IT B. Tech - I Semester

S. No	Course Code	Course Title	L	T	P	Credits
1	BBSM1	Engineering Mathematics-I	3	1	0	3
2	BBSP2	Applied Physics-I	3	0	0	3
3	BHSEN	Professional Communication Language	3	0	0	3
4	BBSBE	Basic Electrical Engineering	3	0	0	3
5	BBSEG	Engineering Graphics	3	0	0	3
6	BBSEW	Engineering Workshop	0	0	3	1.5
7	BBEEL2	BEE Lab	0	0	3	1.5
8	BE22	Professional Communication Language Lab	0	0	3	1.5
	•		TOTA	L		19.5

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## TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

#### **B.TECH. INFORMATION TECHNOLOGY-R18**

#### **B.TECH. II SEMESTER COURSE STRUCTURE**

#### B.Tech. II Semester

S.	Course	G THE	]	Hour per we	eek	Cwodit	
No	Code	Course Title	Lecture	Tutorial	Practical	Credits	
1	BBSM2	Engineering Mathematics-II	3	1	0	3	
2	BBSP3	Applied Physics-II	3	1	0	3	
3	BBSC1	Engineering Chemistry	4	1	0	4	
4	BBSED	Electronics Devices and Circuits	3,	1	0	3	
5	BBSCP	Computer Programming using C	3	1	0	3	
6	BP113	Applied Physics Lab	0	0	3	1.5	
7	BCH2	Engineering Chemistry Lab	0	0	3	1.5	
8	BEDCL2	Electronics Devices and Circuits Lab	0	0	3	1.5	
9	BCPL2	Computer Programming using C Lab	0	0	3	1.5	
				т	OTAL	22	

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# T K R COLLEGE OF ENGINEERING & TECHNOLOGY (Autonomous)

#### **B.TECH. INFORMATION TECHNOLOGY**

#### **COURSE STRUCTURE & SYLLABUS**

#### III SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1	A63HS1	Mathematics – IV	4	1	0	4
2	A63PC2	Data Structures through C++	4	0	0	4
3	A63PC3	Mathematical Foundations of Computer Science	4	0	0	4
4	A63PC4	Digital Logic Design	3	0	0	3
5	A63PC5	Object Oriented Programming through Java	3	0	0	3
6	A63PC6	Data Structures through C++ Lab	0	0	3	2
7	A63PC7	IT Workshop	0	0	3	2
8	A63PC8	Java Programming Lab	0	0	3	2
9	A63MC3	*Environmental Science and Technology	3	0	0	0
		Total Credits	21	1	9	24

#### IV SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1	A64PC1	Computer Organization	4	0	0	4
2	A64PC2	Database Management Systems	4	0	0	4
3	A64PC3	Operating Systems	4	0	0	4
4	A64PC4	Formal Languages and Automata Theory	3	0	0	3
5	A64HS5	Business Economics and Financial Analysis	3	0	0	3
6	A64PC6	Computer Organization Lab	0	0	3	2
7	A64PC7	Database Management Systems Lab	0	0	3	2
8	A64PC8	Operating Systems Lab	0	0	3	2
9	A64MC4	*Gender Sensitization Lab	0	0	3	0
		Total Credits	18	0	12	24

\* Satisfactory/Unsatisfactory

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#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

# B.TECH. INFORMATION TECHNOLOGY 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	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	T	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

TKR College of Engineering & Technology (AUTONOMOUS)

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#### Professional Elective - I

CS611PE	Mobile Computing
IT612PE	Object Oriented Analysis and Design
IT613PE	Computer Forensics
CS614PE	Information Security Management (Security Analyst - I)
CS615PE	Introduction to Analytics (Associate Analytics - I)

<sup>\*</sup>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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# ACADEMIC REGULATIONS COURSE STRUCTURE AND DETAILED SYLLABUS

# INFORMATION TECHNOLOGY / COMPUTER SCIENCE TECHNOLOGY

## For

B.TECH. FOUR YEAR DEGREE COURSE (Applicable for the batches admitted from 2014-15) (I - IV Years Syllabus)



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#### IV YEAR I SEMESTER

Code	Subject	L	T/P/D	C
	Information Security	4	-	4
	Design Patterns	4	-	4
	Mobile Application Development	4	-	4
	Information Retrieval Systems	4	-	4
	ELECTIVE – I Wireless Networks and Mobile Computing Image Processing and Pattern Recognition Soft Computing Semantic Web and Social Networks Operations Research	4	•	4
	ELECTIVE – II Software Project Management Computer Graphics Human Computer Interaction Scripting Languages Computer Forensics	4	-	4
	Case Tools and Software Testing Lab		3	2
	Mobile Applications Development Lab	-	3	2
	Total	24	6	28

#### IV YEAR II SEMESTER

Code	Subject	L	T/P/D	С
	Management Science	4	-	4
	ELECTIVE III Web Services E – Commerce Middleware Technologies Ad hoc and Sensor Networks	4	-	4
	ELECTIVE IV Multimedia & Rich Internet Applications Artificial Intelligence Storage Area Networks Machine Learning	4	2	4
	Industry Oriented Mini Project	-	-	2
	Seminar	-	6	2
	Project Work	-	15	10
	Comprehensive Viva	-	17.1	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

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(AUTONOMOUS)



# TKR COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS) M.TECH (POWERELECTRONICS) COURSE STRUCTURE AND SYLLABUS

IYear-ISemester

Category	CourseTitle	Int. marks	Ext. marks	L	Р	С
CoreCourse I	Machine Modeling and Analysis	30	70	4		4
Core Course II	Modern Control Theory	30	70	4		4
Core Course III	PowerElectronicDevicesand Circuits	30	70	4		4
Core Electivel	Special Machines     HVDC Transmission     Programmable LogicControllers and their Applications	30	70	4		4
Core ElectiveII	Microcontrollers and Applications     Embedded Systems     DigitalControlSystems	30	70	4	-	4
Open Electivel	Optimization Techniques     Renewable energysystems     Solar energy and applications     Analysisofpowerconverters	30	70	4		4
Laboratoryl	PowerConvertersSimulationLab	30	70		4	2
Seminarl	Seminar-I	50	-		4	2
	Total Credits			24	8	28

#### IYear-II Semester

Category	CourseTitle	Int. marks	Ext. Marks	L	Р	С
Core Course IV	PowerElectronicConverters	30	70	4		4
Core Course V	PowerElectronicControlofDC Drives	30	70	4		4
Core Course VI	PowerElectronicControlofAC Drives	30	70	4		4
Core ElectiveIII	PowerQuality     Advanced DigitalSignal Processing     SwitchedMode PowerSupplies(SMPS)	30	70	4		4
Core ElectiveIV	Flexible ACTransmission Systems     High-FrequencyMagneticComponents     DynamicsofElectricalMachines	30	70	4	-	4
Open ElectiveII	Smartgridtechnologies     Al Techniquesin Electrical Engineering     ReliabilityEngineering     EnergyAuditing, Conservation&Management	30	70	4		4
Laboratoryll	PowerConvertersand DrivesLab	30	70		4	2
SeminarII	Seminar-II	50			4	2
Total Credits				24	8	28

#### IIYear-I Semester

CourseTitle	Int. marks	Ext. marks	L	Р	С
ComprehensiveViva-Voce		100			4
ProjectworkReviewl	50			24	12
Total Credits				24	16

#### **IIYear-IISemester**

CourseTitle	Int. marks	Ext. marks	L	Р	С
ProjectworkReviewII	50			8	4
ProjectEvaluation(Viva-Voce)	-	150		16	12
Total Credits				24	16

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TKR College of Engineering & Technology
(AUTONOMOUS)
Medbowli, Meerpet, Hyderabad- 500097.

#### TKR COLLEGE OF ENGINEERING & TECHNOLOGY

#### (Autonomous)

#### M.TECH (COMPUTER SCIENCE AND ENGINEERING)

#### COURSE STRUCTURE

#### I Semester

	Course Title	Int. marks	Ext. marks	L	P	C
A251PC1	Data Structures and Algorithms	30	70	4		4
A251PC2	Data Science	30	70	4		4
A251PC3	Distributed Systems	30	70	4		4
A251PE4	<ol> <li>Information Security</li> <li>Mobile Applications Development</li> <li>Wireless Networks</li> <li>Multimedia and Gaming</li> </ol>	30	70	3	2	4
A251PE5	<ol> <li>Machine Learning</li> <li>Natural Language Processing</li> <li>Design Patterns</li> <li>Advanced Computer Architecture</li> </ol>	30	70	3	2	4
A2510E6	Open Elective – 1	30	70	4		4
A251PC7	Software Lab-1	30	70		4	2
A251SE8	Seminar	50			4	2
	Total Credits			24	8	28

#### II Semester

	Course Title	Int. marks	Ext. marks	L	P	C
A252PC1	Network Programming	30	70	4		4
A252PC2	Mining with Big Data	30	70	4		4
A252PC3	Internet Technologies and Services	30	70	4		4
A252PE4	Core Elective—3 1. Cyber Security 2. Advanced Databases 3. Social Network Analysis 4. Cloud Computing	30	70	3	2	4
A252PE5	Core Elective- 4 1. Deep Learning 2. Internet of Things 3. Service Oriented Computing 4. Distributed Computing	30	70	3	2	4
A252OE6	Open Elective – 2	30	70	4		4
A252PC7	Software Lab-2	30	70		4	2
A252SE8	Seminar	50			4	2
	Total Credits			24	8	28

Note: In core elective courses two practical hours to be conducted for every week and implement the concepts discussed in theory hours.

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#### II Year - I Semester

Course Title	Int. marks	Ext. marks	L	P	C
A253CV1		100			4
A253PW2	50			24	12
Total Credits				24	16

#### II Year - II Semester

Course Title	Int. marks	Ext. marks	L	P	C
A254PW1	50			8	4
A254PW2		150		16	12
Total Credits				24	16

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## TKR COLLEGE OF ENGINEERING& TECHNOLOGY

#### (Autonomous)

## MASTER OF BUSINESS ADMINISTRATION (MBA) R18

#### From Academic Year 2018- 19 Admitted batch COURSE STRUCTURE AND SYLLABUS

#### I Semester

Course Code	Course title	Int. marks	Ext. marks	L	T	P	C
B141PC1	Management and Organizational Behavior	30	70	3	1	0	4
B141PC2	Business Economics	30	70	3	1	0	4
B141PC3	Financial Accounting & Analysis	30	70	3	1	0	4
B141PC4	Business Statistics	30	70	3	1	0	4
B141PC5	Business Law and Ethics	30	70	3	1	0	4
B141PC6	Entrepreneurship	30	70	3	1	0	4
B141PC7	Business Communication - Lab	100		0	0	3	2
	TOTAL	280	420	18	6	3	26

#### **II Semester**

Course Code	Course title	Int. marks	Ext. marks	L	Т	P	C
B142PC1	Human Resource Management	30	70	3	1	0	4
B142PC2	Marketing Management	30	70	3	1	0	4
B142PC3	Financial Management	30	70	3	1	0	4
B142PC4	Quantitative Analysis for Business Decisions	30	70	3	1	0	4
B142PC5	Business Research Methodology	30	70	3	1	0	4
B142PC6	Total Quality Management	30	70	3	1	0	4
B142PC7	Management Information system	30	70	3	1	0	4
	TOTAL	210	490	21	7	0	28,

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#### III Semester:

Course Code	Course title	Int. marks	Ext. marks	L	T	P	C
.A143PC1	Production & Operations	30	70	3	1	0	4
	Management						
A143PC2	Management Information	30	70	3	1	0	4
	Systems						
A143PC3	Data Analytics	30	70	3	1	0	4
A143PE4	ELECTIVE -I	30	70	3	0	0	3
	(MRKG/HRM/FIN/Entre					-	
	preneurship)						
	A143PE4M1: Digital						
	Marketing						
	A143PE4F1: Security						
	Analysis and portfolio						
	Management A143PE4H1: Performance	1		-			
	Management Systems						
	A143PE4E1: Start up		1				
	Management						
A143PE5	ELECTIVE –II	30	70	3	0	0	3
	(MRKG/HRM/FIN/Entre						
	preneurship ) A143PE5M2:Advertising						
	and Sales management						
	A143PE5F2: Financial Institutions, Markets &						
~	Services						
	A143PE5H2: Learning and	-	+		-		
	Development Development						
	A143PE5E2 MSME		-				
	Management						
A143PE6	ELECTIVE -III	30	70	3	0	0	3
	(MRKG/HRM/FIN/Entre						
	preneurship)						
	A143PE6M3:Consumer Behaviour						
	A143PE6F3: Strategic Management						
_	Accounting						
U.	A143PE6H3: Management of						
	Industrial Relations						
	A143PE6E3: Family Business						
	Management						
	TOTAL	180	420	18	3	0	21

DEAN ACADEMICS TKR College of Engineering & Technology (AUTOMOMOUS) Medbowli, Meerpet, Hyderabad - 500 097

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#### **IV Semester:**

Course Code	Course title	Int. marks	Ext. marks	L	T	P	C
A144PC1	Strategic Management	30	70	3	1	0	4
A144PE2	ELECTIVE-IV	30	70	3	0	0	3
	(MRKG/HRM/FIN/Entrepreneurs				1		
	hip)						
	A144PE2M1: Customer						
	Relationship Management						
	A144PE2F1: International						
	Financial Management						
	A144PE2H1: International				1		
	Human Resource Management						
	A144PE2E1: Entrepreneurial			_			-
	Finance						
A144PE3	ELECTIVE-V	30	70	3	0	0	3
	(MRKG/HRM/FIN/Entrepreneu	30	70	3	0	0	3
	rship)	30	1,0	3	0	0	3
	A144PE3M2: International				-		-
	Marketing						
	A144PE3F2: Strategic Investment				1		-
	and Financing Decisions		1				
	and Financing Decisions A144PE3H2: Leadership and				-	-	
	Change Management						
	A144PE3E2 Entrepreneurial Marketing						
A144PE4	ELECTIVE-VI	30	70	3	0	0	3
	(MRKG/HRM/FIN/Entrepreneu rship)						
	A144PE4M3: Marketing of Services						
	A144PE4F3: Risk Management						
	A144PE4H3: Talent and Knowledge Management						
	A144PE4E3: Creativity Innovation and						
	Entrepreneurship						
A144PC5	Pre Submission of Project Work	100	-	0	1	1	1
A144PC6	Comprehensive Viva-Voce	-	100	0	1	1	1
A144PC7	Main Project Viva-Voce	50	150	0	2	3	2
	TOTAL	270	530	12	5	5	17

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