



## KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, Telangana, INDIA.

కాకతీయ ప్రేఘోగికి ఎవం విజ్ఞాన సంస్థాన, వరంగల - ౪౦౬ ౦౧౫

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫

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### VISION OF THE INSTITUTE

- To make our students technologically superior and ethically strong by providing quality education with the help of our dedicated faculty and staff and thus improve the quality of human life

### MISSION OF THE INSTITUTE

- To provide latest technical knowledge, analytical and practical skills, managerial competence and interactive abilities to students, so that their employability is enhanced
- To provide a strong human resource base for catering to the changing needs of the Industry and Commerce
- To inculcate a sense of brotherhood and national integrity

## DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

### VISION OF THE DEPARTMENT

- To fulfill the needs of the industry and society through excellence in education and research in electrical engineering

### MISSION OF THE DEPARTMENT

- To produce globally competent engineers in Electrical and Electronics Engineering
- To promote scientific inclination and cultivate professional ethics
- To serve organization and society as adaptable engineers, entrepreneurs or leaders

## UG - ELECTRICAL & ELECTRONICS ENGINEERING

### PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)		Within first few years after graduation, the ELECTRICAL & ELECTRONICS ENGINEERING graduates will be able to ...
PEO1	Technical Expertise	apply the knowledge of electrical and electronics engineering to develop solutions for complex problems of electrical power industry and allied engineering areas
PEO2	Successful Career	demonstrate innovation & creativity in their professional practice, work effectively as an individual and in a team in multidisciplinary areas towards sustainable development
PEO3	Lifelong learning	adapt to a constantly changing field through higher education, professional development and self-study for contributing to well-being of society

<b>UG - ELECTRICAL &amp; ELECTRONICS ENGINEERING</b>	
<b>PROGRAM OUTCOMES (POs) &amp; PROGRAM SPECIFIC OUTCOMES (PSOs)</b>	
<b>PROGRAM OUTCOMES (POs)</b>	<b>At the time of graduation, the ELECTRICAL &amp; ELECTRONICS ENGINEERING graduates will be able to ...</b>
<b>PO1: Engineering knowledge</b>	<i>apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems</i>
<b>PO2: Problem analysis</b>	<i>identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences</i>
<b>PO3: Design/development of solutions</b>	<i>design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental Considerations</i>
<b>PO4: Conduct investigations of complex problems</b>	<i>use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions</i>
<b>PO5: Modern tool usage</b>	<i>create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations</i>
<b>PO6: The engineer and society</b>	<i>apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice</i>
<b>PO7: Environment and sustainability</b>	<i>understand the impact of the professional engineering solutions in societal and environmental contexts, demonstrate the knowledge of, and need for sustainable development</i>
<b>PO8: Ethics</b>	<i>apply ethical principles and commit to professional ethics, responsibilities, and norms of the engineering practice</i>
<b>PO9: Individual and team work</b>	<i>function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings</i>
<b>PO10: Communication</b>	<i>communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions</i>
<b>PO11: Project management and finance</b>	<i>demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments</i>
<b>PO12: Life-long learning</b>	<i>recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change</i>
<b>PROGRAM SPECIFIC OUTCOMES (PSOs):</b>	
<b>PSO1</b>	<i>apply the fundamental knowledge of electrical and electronics engineering in providing solutions for modern power industry and multi-disciplinary areas</i>
<b>PSO2</b>	<i>analyse, design and simulate systems to generate, transmit, distribute, utilize and control electrical energy to meet societal and environmental needs using electrical and electronic systems</i>



B. Tech in Electrical & Electronics Engineering

**DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING**  
**KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE: WARANGAL-15**  
*(An Autonomous Institute under Kakatiya University, Warangal)*  
**SCHEME OF INSTRUCTIONS & EVALUATION**  
**I-SEMESTER OF 4-YEAR B.TECH DEGREE PROGRAMME**

(5Th+2P+3MC)

Sl.No	Course Category	Course Code	Course Name	Periods/week			Credits C	Evaluation Scheme				
				L	T	P		CIE			ESE	Total Marks
							TA	MSE	Total			
1	BSC	U18MH101	Engineering Mathematics - I	3	1	-	4	10	30	40	60	100
2	ESC	U18CS102	Programming for Problem Solving using C	3	-	-	3	10	30	40	60	100
3	BSC	U18CH103	Engineering Chemistry	3	1	-	4	10	30	40	60	100
4	ESC	U18ME104	Engineering Drawing	2	-	4	4	10	30	40	60	100
5	ESC	U18CE105	Engineering Mechanics	3	1	-	4	10	30	40	60	100
6	ESC	U18CS107	Programming for Problem Solving using C Laboratory	-	-	2	1	40	-	40	60	100
7	BSC	U18CH108	Engineering Chemistry Laboratory	-	-	2	1	40	-	40	60	100
8	MC	U18CH109	Environmental Studies*	2	-	-	-	10	30	40	60	100
9	MC	U18EA110	EAA* : Sports/Yoga/NSS	-	-	2	-	100	-	100	-	100
10	MC	U18MH111	Universal Human Values-I ( <i>Induction Programme</i> )	-	-	-	-	-	-	-	-	-
<b>Total</b>				<b>16</b>	<b>3</b>	<b>10</b>	<b>21</b>	<b>240</b>	<b>180</b>	<b>420</b>	<b>480</b>	<b>900</b>

Note: L - Lectures; T - Tutorials; P - Practicals; CIE - Continuous Internal Evaluation; TA - Teachers Assessment; MSE - Mid Semester Examination; ESE - End Semester Examination; EAA - Extra Academic Activity;

\* indicates mandatory non-credit course

Student Contact Hours/Week : 29

Total Credits(C) : 22



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**SCHEME OF INSTRUCTIONS & EVALUATION**  
**II-SEMESTER OF 4-YEAR B.TECH DEGREE PROGRAMME**

(5Th+4P+1MC)

Sl.No	Course Category	Course Code	Course Name	Periods/week			Credits	Evaluation Scheme				
				L	T	P		C	CIE			ESE
							TA		MSE	Total		
1	BSC	U18MH201	Engineering Mathematics - II	3	1	-	4	10	30	40	60	100
2	ESC	U18CS202	Data Structures through C	3	-	-	3	10	30	40	60	100
3	BSC	U18PH203	Engineering Physics	3	1	-	4	10	30	40	60	100
4	HSMC	U18MH204	English for Communication	2	-	2	3	10	30	40	60	100
5	ESC	U18EE205	Basic Electrical Engineering	3	1	-	4	10	30	40	60	100
6	ESC	U18EE206	Basic Electrical Engineering Laboratory	-	-	2	1	40	-	40	60	100
7	ESC	U18CS207	Data Structures through C Laboratory	-	-	2	1	40	-	40	60	100
8	BSC	U18PH208	Engineering Physics Laboratory	-	-	2	1	40	-	40	60	100
9	ESC	U18ME209	Workshop Practice	-	-	2	1	40	-	40	60	100
10	MC	U18EA210	EAA* : Sports/Yoga/NSS	-	-	2	-	100	-	100	-	100
<b>Total</b>				<b>14</b>	<b>3</b>	<b>12</b>	<b>22</b>	<b>310</b>	<b>150</b>	<b>460</b>	<b>540</b>	<b>1000</b>

Note: L - Lectures; T - Tutorials; P - Practicals; CIE - Continuous Internal Evaluation; TA - Teachers Assessment; MSE - Mid Semester Examination; ESE - End Semester Examination; EAA - Extra Academic Activity;

\* indicates mandatory non-credit course

Student Contact Hours/Week : 29

Total Credits(C) : 22



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**SCHEME OF INSTRUCTIONS & EVALUATION**  
**III-SEMESTER OF 4-YEAR B.TECH DEGREE PROGRAMME**

(6Th+3P)

Sl.No	Course Category	Course Code	Course Name	Periods/week			Credits	Evaluation Scheme				
				L	T	P		C	CIE			ESE
							TA		MSE	Total		
1	BSC	U18MH301	Engineering Mathematics - III	3	1	-	4	10	30	40	60	100
2	HSMC	U18TP302	Soft and Interpersonal Skills	-	-	2	1	10	30	40	60	100
3	PCC	U18EE303	Network Theory	3	1	-	4	10	30	40	60	100
4	PCC	U18EE304	Electrical Measurements & Instrumentation	3	-	-	3	10	30	40	60	100
5	PCC	U18EE305	Electromagnetic Fields	3	-	-	3	10	30	40	60	100
6	PCC	U18EC310	Electronic Devices and Circuits	3	-	-	3	10	30	40	60	100
7	PCC	U18EE307	Electrical Measurements & Instrumentation Laboratory	-	-	2	1	40	-	40	60	100
8	PCC	U18EE308	Networks & Simulation Laboratory	-	-	2	1	40	-	40	60	100
9	PCC	U18EC311	Electronic Devices and Circuits Laboratory	-	-	2	1	40	-	40	60	100
<b>Total</b>				<b>15</b>	<b>2</b>	<b>8</b>	<b>21</b>	<b>180</b>	<b>180</b>	<b>360</b>	<b>540</b>	<b>900</b>

Note: L - Lectures; T - Tutorials; P - Practicals; CIE - Continuous Internal Evaluation; TA - Teachers Assessment; MSE - Mid Semester Examination; ESE - End Semester Examination;

Student Contact Hours/Week : 25

Total Credits(C) : 21



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**SCHEME OF INSTRUCTIONS & EVALUATION**  
**IV-SEMESTER OF 4-YEAR B.TECH DEGREE PROGRAMME**

(6Th+3P+2MC)

Sl.No	Course Category	Course Code	Course Name	Periods/week			Credits	Evaluation Scheme				
				L	T	P		C	CIE			ESE
							TA		MSE	Total		
1	MC	U18MH415	Essence of Indian Traditional Knowledge	2	-	-	-	10	30	40	60	100
2	OE	U18OE401	Open Elective -II	3	1	-	4	10	30	40	60	100
3	HSMC	U18MH402	Professional English	-	-	2	1	10	30	40	60	100
4	OE	U18OE403	Open Elective -I	3	-	-	3	10	30	40	60	100
5	PCC	U18EE404	Power Systems-I	3	-	-	3	10	30	40	60	100
6	PCC	U18EE405	Electrical Machines-I	3	1	-	4	10	30	40	60	100
7	PCC	U18EC412	Analog and Digital Electronics	3	-	-	3	10	30	40	60	100
8	PCC	U18EE407	Electrical Machines Laboratory -I	-	-	2	1	40	-	40	60	100
9	PCC	U18EC413	Analog and Digital Electronics Laboratory	-	-	2	1	40	-	40	60	100
10	OE	U18OE411	OE-I based lab	-	-	2	1	40	-	40	60	100
11	MC	U18CH409	Environmental Studies*	2	-	-	-	10	30	40	60	100
<b>Total</b>				<b>17/19*</b>	<b>2</b>	<b>8</b>	<b>21</b>	<b>190/200*</b>	<b>210/240*</b>	<b>400/440*</b>	<b>600/660*</b>	<b>1000/1100*</b>

Note: L - Lectures; T - Tutorials; P - Practicals; CIE - Continuous Internal Evaluation; TA - Teachers Assessment; MSE - Mid Semester Examination; ESE - End Semester Examination;

**\* indicates mandatory non-credit course for Lateral Entry Students only**

Student Contact Hours/Week : 27/29\*

Total Credits(C) : 21

**Open Elective-I**

U18OE403A: Object Oriented Programming (CSE)

U18OE403B: Fluid Mechanics &amp; Hydraulic Machines (CE)

U18OE403C: Mechatronics (ME)

U18OE403D: Web Programming (IT)

U18OE403F: Strength of Materials (ME)

**Open Elective-II**

U18OE401A: Applicable Mathematics (MH)

U18OE401C: Elements of Mechanical Engineering (ME)

U18OE401E: Fundamentals of Computer Networks

(IT)

**Open Elective-I based Laboratory**

U18OE411A: Object Oriented Programming Laboratory (CSE)

U18OE411B: Fluid Mechanics &amp; Hydraulic Machines Laboratory (CE)

U18OE411C: Mechatronics Laboratory (ME)

U18OE411D: Web Programming Laboratory (IT)

U18OE411F: Strength of Materials Laboratory (ME)



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**SCHEME OF INSTRUCTIONS & EVALUATION**  
**V-SEMESTER OF 4-YEAR B.TECH DEGREE PROGRAMME**

(5Th+3P+1MC+1Seminar)

Sl.No	Course Category	Course Code	Course Name	Periods/week			Credits C	Evaluation Scheme				
				L	T	P		CIE			ESE	Total Marks
							TA	MSE	Total			
1	MC	U18MH501	Universal Human Values - II	2	-	-	-	10	30	40	60	100
2	PE	U18PE502	Professional Elective - I / MOOC-I	3	-	-	3	10	30	40	60	100
3	PCC	U18EE503	Power Systems-II	3	-	-	3	10	30	40	60	100
4	PCC	U18EE504	Electrical Machines-II	3	-	-	3	10	30	40	60	100
5	PCC	U18EE506	Power Electronics	3	-	-	3	10	30	40	60	100
6	PCC	U18EC511	Microprocessors and Microcontroller Systems	3	-	-	3	10	30	40	60	100
7	PCC	U18EE508	Electrical Machines Laboratory-II	-	-	2	1	40	-	40	60	100
8	PCC	U18EE509	Power Electronics Laboratory	-	-	2	1	40	-	40	60	100
9	PCC	U18EC512	Microprocessors and Microcontroller Systems Laboratory	-	-	2	1	40	-	40	60	100
10	PROJ	U18EE510	Seminar	-	-	2	1	100	-	100	-	100
<b>Total</b>				<b>17</b>	<b>-</b>	<b>8</b>	<b>19</b>	<b>280</b>	<b>180</b>	<b>460</b>	<b>540</b>	<b>1000</b>
<b>Additional Learning*:</b>				<i>Maximum credits allowed for Honours/Minor</i>			-	-	-	-	-	-
				<b>Total credits for Honours/Minor students:</b>			<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

\* List of courses for additional learning through MOOCs towards Honours/Minor in Engineering shall be prescribed by the department under Honours/Minor Curricula

Note: L - Lectures; T - Tutorials; P - Practicals; CIE - Continuous Internal Evaluation; TA - Teachers Assessment; MSE - Mid Semester Examination; ESE - End Semester Examination;

Student Contact Hours/Week : 25

Total Credits(C) : 19

**Professional Elective-I/MOOC - I**

U18EE502A: Renewable Energy Systems

U18EE502B: Electrical Engineering Materials

U18EE502C: Communication Engineering

U18EE502M: MOOCs Course



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**SCHEME OF INSTRUCTIONS & EVALUATION**  
**VI-SEMESTER OF 4-YEAR B.TECH DEGREE PROGRAMME**

(7Th+3P+1Mini Project)

Sl.No	Course Category	Course Code	Course Name	Periods/week			Credits C	Evaluation Scheme				
				L	T	P		CIE			ESE	Total Marks
								TA	MSE	Total		
1	HSMC	U18TP601	Quantitative Aptitude & Logical Reasoning	2	-	-	1	10	30	40	60	100
2	HSMC	U18MH602	Management, Economics and Accountancy	3	-	-	3	10	30	40	60	100
3	PE	U18EE603	Professional Elective - II / MOOC-II	3	-	-	3	10	30	40	60	100
4	PCC	U18EE604	Power System Operation and Control	3	-	-	3	10	30	40	60	100
5	PCC	U18EE605	Power Semiconductor Drives	3	-	-	3	10	30	40	60	100
6	PCC	U18EE606	Control Systems Engineering	3	1	-	4	10	30	40	60	100
7	PCC	U18EI614	Signals & Linear Systems	3	-	-	3	10	30	40	60	100
8	PCC	U18EE607	Control Systems Engineering Laboratory	-	-	2	1	40	-	40	60	100
9	PCC	U18EE608	Power Semiconductor Drives Laboratory	-	-	2	1	40	-	40	60	100
10	PROJ	U18EE610	Mini Project	-	-	2	1	100	-	100	-	100
<b>Total</b>				<b>20</b>	<b>1</b>	<b>6</b>	<b>23</b>	<b>250</b>	<b>210</b>	<b>460</b>	<b>540</b>	<b>1000</b>
<b>Additional Learning*:</b>				<i>Maximum credits allowed for Honours/Minor</i>				-	-	-	-	-
				<b>Total credits for Honours/Minor students:</b>				-	-	-	-	-

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Note: L - Lectures; T - Tutorials; P - Practicals; CIE - Continuous Internal Evaluation; TA - Teachers Assessment; MSE - Mid Semester Examination; ESE - End Semester Examination;

Student Contact Hours/Week : 27

Total Credits(C) : 23

**Professional Elective-II/ MOOC - II**

U18EE 603A: Utilization of Electrical Energy

U18EE 603B: High Voltage Engineering

U18EE 603C: Electric Vehicles

U18EE 603M: MOOCs Course





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**SCHEME OF INSTRUCTIONS & EVALUATION**  
**VII-SEMESTER OF 4-YEAR B.TECH DEGREE PROGRAMME**

**(4Th+2P+1MC+1Major Project)**

Sl.No	Course Category	Course Code	Course Name	Periods/week			Credits C	Evaluation Scheme				
				L	T	P		CIE			ESE	Total Marks
							TA	MSE	Total			
1	OE	U18OE701	Open Elective- III	3	-	-	3	10	30	40	60	100
2	PE	U18EE702	Professional Elective - III / MOOC-III	3	-	-	3	10	30	40	60	100
3	PE	U18EE703	Professional Elective - IV / MOOC-IV	3	-	-	3	10	30	40	60	100
4	PCC	U18EE704	Power System Protection	3	-	-	3	10	30	40	60	100
5	PCC	U18EE705	Electrical Simulation Laboratory	-	-	2	1	40	-	40	60	100
6	PCC	U18EE706	Power Systems Laboratory	-	-	2	1	40	-	40	60	100
7	PROJ	U18EE707	Major Project - Phase - I	-	-	6	3	100	-	100	-	100
8	MC	U18EE708	Internship Evaluation	-	-	2	-	100	-	100	-	100
<b>Total</b>				<b>12</b>	<b>-</b>	<b>12</b>	<b>17</b>	<b>320</b>	<b>120</b>	<b>440</b>	<b>360</b>	<b>800</b>
<b>Additional Learning*:</b>			<i>Maximum credits allowed for Honours/Minor</i>	-	-	-	7	-	-	-	-	-
<b>Total credits for Honours/Minor students:</b>				-	-	-	<b>17+7</b>	-	-	-	-	-

\* List of courses for additional learning through **MOOCs** towards Honours/Minor in Engineering shall be prescribed by the department under Honours/ Minor Curricula

Note: L - Lectures; T - Tutorials; P - Practicals; CIE - Continuous Internal Evaluation; TA - Teachers Assessment; MSE - Mid Semester Examination;  
 ESE - End Semester Examination;

Student Contact Hours/Week : 24

Total Credits(C) : 17

**Open Elective-III**

OE 701A: Disaster Management

OE 701B: Project Management

OE 701C: Professional Ethics in Engineering

OE 701D: Rural Technology and Community Developments

**Professional Elective-III/MOOC-III**

U18EE702A: HVDC & FACTS

U18EE702B: Embedded Systems

U18EE702C: Micro grid & Distributed Generation

U18EE702M: MOOCs Course

**Professional Elective-IV / MOOC-IV**

U18EE703A: Computer Methods in Power Systems

U18EE703B: Power Quality

U18EE703C: Power System Deregulation

U18EE703M: MOOCs Course



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**SCHEME OF INSTRUCTIONS & EVALUATION**  
**VIII-SEMESTER OF 4-YEAR B.TECH DEGREE PROGRAMME**

(3Th+1Major Project)

Sl.No	Course Category	Course Code	Course Name	Periods/week			Credits	Evaluation Scheme				
				L	T	P		C	CIE			ESE
							TA		MSE	Total		
1	PE	U18EE 801	Professional Elective -V / MOOC -V	3	-	-	3	10	30	40	60	100
2	PE	U18EE 802	Professional Elective -VI/MOOC -VI	3	-	-	3	10	30	40	60	100
3	OE	U18OE 803	Open Elective -IV / MOOC -VII	3	-	-	3	10	30	40	60	100
4	PROJ	U18EE 804	Major Project - Phase - II	-	-	14	7	40	-	40	60	100
<b>Total</b>				<b>9</b>	<b>-</b>	<b>14</b>	<b>16</b>	<b>70</b>	<b>90</b>	<b>160</b>	<b>240</b>	<b>400</b>
<b>Additional Learning*:</b>			<i>Maximum credits allowed for Honours/Minor</i>	-	-	-	7	-	-	-	-	-
<b>Total credits for Honours/Minor students:</b>				<b>-</b>	<b>-</b>	<b>-</b>	<b>16+7</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

\* List of courses for additional learning through MOOCs towards Honours/Minor in Engineering shall be prescribed by the department under Honours/ Minor Curricula

Note: L - Lectures; T - Tutorials; P - Practicals; CIE - Continuous Internal Evaluation; TA - Teachers Assessment; MSE - Mid Semester Examination; ESE - End Semester Examination;

Student Contact Hours/Week : 23

Total Credits(C) : 16

**Professional Elective-V / MOOC-V**

U18EE801A: AI Techniques in Electrical Engineering

U18EE801B: Electrical Power Distribution Systems

U18EE801C: SCADA

U18EE801M: MOOCs Course

**Professional Elective-VI / MOOC-VI**

U18EE802A: Digital Control Systems

U18EE802B: Advance Power System Protection

U18EE802C: Digital Signal Processing

U18EE802M: MOOCs Course

**Open Elective-IV / MOOC-VII**

U18OE803A: Operations Research

U18OE803B: Management Information Systems

U18OE803C: Entrepreneurship Development

U18OE803D: Forex and Foreign Trade

U18OE803M: MOOCs Course



**DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING**  
**KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE: WARANGAL-15**  
*(An Autonomous Institute under Kakatiya University, Warangal)*  
**SCHEME OF INSTRUCTION AND EVALUATION**  
**I-VIII-SEMESTER OF 4-YEAR B.TECH DEGREE PROGRAMME**  
**Semester Vs Course Category Weightage**  
*(in terms of Total No. of Courses / Total No. of Credits)*

Semester	No. of Courses / No. of Credits (course category wise)									
	BSC	ESC	HSMC	PCC	PE	OE	MC	PROJ	B.Tech Programme Total	B.Tech (Honours/Minor) Programme
I	3/9	4/12	-	-	-	-	3/0	-	10/21	<i>Additional 20 credits through 8 courses out of the list of courses prescribed under Honours/Minor curricula</i>
II	3/9	5/10	1/3	-	-	-	1/0	-	10/22	
III	1/4	-	1/1	7/16	-	-	-	-	9/21	
IV	-	-	1/1	5/12	-	3/8	2/0	-	11/21	
V	-	-	-	7/15	1/3	-	1/0	1/1	10/19	
VI	-	-	2/4	6/15	1/3	-	-	1/1	10/23	
VII	-	-	-	3/5	2/6	1/3	1/0	1/3	8/17	
VIII	-	-	-	-	2/6	1/3	-	1/7	4/16	
Total:	7/22	9/22	5/9	28/63	6/18	5/14	8/0	4/12	72/160	(72+8) / (160+20)
% Weightage of course category	13.75% (22/160)	13.75% (22/160)	5.625% (9/160)	39.375% (63/160)	11.25% (18/160)	8.75% (14/160)	0% (0/160)	7.5% (12/160)	100% (160/160)	-