

**Jharkhand University of Technology,  
Ranchi**

**Course Structure  
5<sup>th</sup> & 6<sup>th</sup> Semester**

**Department of Electrical Engineering**

## Department of Electrical Engineering

### Course structure

#### 5<sup>th</sup> Semester

S.No	Course Code	Subject	L	T	P	Credit
01	EE501	Electrical Machine-II	4	1	0	4
02	EE502	Principles of Control Systems	3	1	0	3
03	EE503	Microprocessor and Microcontroller	3	1	0	3
04		Professional Elective-I	3	1	0	3
05		Open Elective-I	3	1	0	3
<b>Laboratory/ Sessional</b>						
01	EE501P	Electrical Machine-II Lab	0	0	3	1
02	EE502P	Principles of Control Systems Lab	0	0	3	1
03	EE503P	Microprocessor and Microcontroller Lab	0	0	3	1
04	EE504P	Basic Computational Lab	0	0	3	1
05	EE505P	General Proficiency/Seminar	0	0	3	2
<b>Total credit</b>						22

<b>Professional Elective-I</b>	
<b>EE511</b>	Signal & System
<b>EE512</b>	Electrical Machine Design
<b>EE513</b>	Transforms in Electrical Engineering
<b>EE514</b>	Applied Electrical Engineering

<b>Open Elective-I</b>	
<b>EE521</b>	Power Plant Engineering
<b>EE522</b>	Industrial Instrumentation and Automation
<b>EE523</b>	Principles of Control Systems*
<b>EE524</b>	Electromechanical Energy Conversion and Transformers*
Any paper floated by the other department can be selected/ opted by the Electrical Engineering Students	

**\*This course is not offered to Electrical Engineering students.**

## Department of Electrical Engineering

### Course structure

#### 6<sup>th</sup> Semester

S.No	Course Code	Subject	L	T	P	Credit
01	EE601	Power Systems-II	4	1	0	4
02	EE602	Power Electronics	3	1	0	3
03	EE603	Advanced Control Systems	3	1	0	3
04		Professional Elective-II	3	1	0	3
05		Open Elective-II	3	1	0	3
06						
<b>Laboratory/ Sessional</b>						
01	EE601P	Power System-II Lab	0	0	3	1
02	EE602P	Power Electronics Lab	0	0	3	1
03	EE603P	Simulation Lab	0	0	3	1
04	EE604P	Electrical Workshop	0	0	3	1
05		Internship/Tour & Training/Industrial Training	0	0	3	2
<b>Total credit</b>						22

<b>Professional Elective-II</b>	
<b>EE611</b>	Electrical Estimation and Costing
<b>EE612</b>	Electrical Engineering Materials
<b>EE613</b>	Power System Restructuring
<b>EE614</b>	Green Energy Technology

<b>Open Elective-II</b>	
<b>EE621</b>	Advanced Control Systems*
<b>EE622</b>	Soft Computing Techniques
<b>EE623</b>	Power Electronics*
<b>EE624</b>	Mine Electrical Engineering*
<b>EE625</b>	Green Energy Technology*
Any paper floated by the other department can be selected/ opted by the Electrical Engineering Students	

**\*This course is not offered to Electrical Engineering students.**