

Easwari Engineering College  
 Ramapuram 600 089  
 Department of Electrical and Electronics Engineering  
 Academic Year: 2016-17  
 Pedagogical Initiatives for Effective Teaching  
**Odd Semester**

Sl.No.	Subject Code/ Name of the Subject	Pedagogical Initiatives Adopted	Content	Outcome
1.	EE6301/Digital Logic Circuits	1. Animation Videos	1. Introduction to Counters	Students were able to understand the concept of counters
2.	EE6302/Electromagnetic Theory	1. Flash card	1. Coordinate systems	Clear idea about the Coordinate system were given
3.	EC6202/Electronic Devices and Circuits	1. Animation Videos	1. PN junction Diodes	Working of PN junction Diode was clearly understood by the students
4.	EE6303/Linear Integrated Circuits and Applications	1. Animated videos 2. Technical quiz	1. IC Fabrication Steps 2. Application of Operational Amplifier	Animation provides the clear picture of fabrication of IC
5.	EE6501/Power System Analysis	1. Chart based teaching	1. Building algorithm for Z Bus	Step by step procedure of bus building algorithm to calculate ZBus was clearly understood by the students
6.	EE6502/Microprocessors and Microcontrollers	1. Mind mapping	1. Microprocessor 8085 Overview	Clear overview of Microprocessor 8085 was given
7.	ME6701/Power Plant Engineering	1. Animation Videos	1. Thermal Power Plant 2. Nuclear Power Plant	Process involved in the thermal and nuclear power plant were clearly known to the students
8.	EE6503/Power Electronics	1. NPTEL	1. Power Electronics Devices	Overview of all power electronic devices were taught clearly
9.	EE6504/Electrical Machines - II	1. Flash Card 2. Mind Mapping 3. EDUSAT	1. Three Phase Induction Motor Construction 2. Single Phase Induction Motor 3. Construction of Synchronous Generator	Construction of Synchronous generator and three phase induction motor were taught clearly
10.	IC6501/Control Systems	1. Flashcard	1. Construction of Bode Plot	Procedure for drawing Bode plot was clearly taught

11.	EE6701/High Voltage Engineering	1. Mind mapping	1. Lightning phenomenon	Lightning phenomenon was explained in a clear way
12.	EE6702/Protection and Switchgear	1. Animation Videos	1. Working of Relay	Working of Relay operation was taught in a better way which helps them in doing mini projects
13.	EE6703/Special Electrical Machines	1. Chart	1. Overview of Special Electrical Machines	All special electrical machines were taught clearly
14.	EE6704/Biomedical Instrumentation	1. Animated Videos	1. Cardio vascular system	Animation on cardio vascular system gave a better idea about human physiology
15.	GE6081/Fundamentals of Nanoscience	1. Mind mapping	1. Nanostructure materials	Types of Nano structural materials were understood by the students

### Even Semester

Sl.No.	Subject Code/ Name of the Subject	Pedagogical Initiatives Adopted	Content	Outcome
1.	EE6402 Transmission and Distribution	1. Model based teaching 2. Model based Teaching	1. Structure of Power System 2. Types of cables	Cut section of cables gave a clear idea about the layers of cables
2.	EE6603 Power System Operation and Control	1. Technical quiz	1. Voltage control methods	Various voltage control methods and its applications were clearly understood by the students
3.	EE6801 Electric Energy Generation, Utilization and Conservation	1. Mind Mapping	1. Power Tariff 2. Power Generation Plants	Structure of power tariff in the real time system was known by the students

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SI.No.	Subject Code/ Name of the Subject	Pedagogical Initiatives Adopted	Content	Outcome
16.	EE6301/Digital Logic Circuits	1. NPTEL	1. Design of synchronous sequential Circuits	Students were able to do mini projects based on the counters
17.	EE6302/Electromagnetic Theory	1. Technical Quiz	1. Electric and Magnetic field	Comparative study of both electric and magnetic field was understood by the students
18.	EC6202/Electronic Devices and Circuits	1. Animation Videos	1. PN Junction diode	A clear picture of working of PN junction diode was given
19.	EE6303/Linear Integrated Circuits and Applications	1. Animated videos 3. Technical quiz	1. IC Fabrication Steps 2. Application of Operational Amplifier	Step by step procedure of IC fabrication and Operational amplifier was thoroughly known by the students
20.	EE6501/Power System Analysis	1. NPTEL Videos	1. Load flow Analysis using Guass Siedal Method	Load flow analysis algorithm was clearly understood which helps the students to solve power flow analysis problems
21.	EE6502/Microprocessors and Microcontrollers	1. NPTEL Video	1. Peripheral Interfacing with Microprocessor 8085	Clear picture of peripheral inter facing was given which improves their programming skills
22.	EE6504/Electrical Machines - II	1. Flash Card 2. Mind Mapping	1. Three Phase Induction Motor Construction 2. Single Phase Induction Motor	Construction of AC machines were known which helps them while studying the course Design of Electrical Machines
23.	IC6501/Control Systems	1. Flashcard	1. Construction of Root locus	Step by step procedure for drawing root locus was

				clearly known by the students
24.	EE6701/High Voltage Engineering	I. Flashcard	I. Generation of High voltage	Various high voltage generation techniques were studied which helps them in doing projects on High Voltage testing.
25.	EE6703/Special Electrical Machines	I. Model based teaching	I. Synchronous reluctance Motor	Cut section of synchronous reluctance motor gave a clear view of special machines

#### Even Semester

Sl.No.	Subject Code/ Name of the Subject	Pedagogical Initiatives Adopted	Content	Outcome
4.	EE6201 Circuit Theory	I. Technical Quiz	I. Application of electrical theorems	Students were able to know day to day life application of all circuit theorems
5.	EE6401 Electrical Machines - I	I. NPTEL	I. Magnetic circuits	NPTEL Video gave a clear idea about magnetic circuits
6.	CS6456 Object Oriented Programming	I. Brainstorming	I. Constructors and Destructors	This session improved the thinking ability of the students on constructors and destructors
7.	EE6402 Transmission and Distribution	I. Z to A Approach	I. Derivation of Cable parameters	Cable parameters derivation was understood clearly by the students in step by step manner
8.	EE6403 Discrete Time Systems and Signal Processing	I. Animation video 2. Simulation	I. Sampling theorem 2. Filter design	This gave a clear picture about sampling theorem and design of filters
9.	EE6404 Measurements and Instrumentation	I. Model based teaching	I. Moving Coil and Moving Iron meters	Students were able to understand the inner parts of ammeter and voltmeters
10.	EC6651 Communication Engineering	I. Flashcard	I. Modulation Techniques	Clear picture of modulation techniques was given to the students
11.	EE6602 Embedded Systems	I. Technical Quiz	I. Recent Embedded processors and Control	Students were able to know about the recent trends in embedded processor and

				control
12.	EE6603 Power System Operation and Control	1. Simulation	1. Load frequency control using MATLAB simulink	Load frequency control of speed governing mechanism was taught through a simulated power system problem
13.	EE6604 Design of Electrical Machines	1. Real Time Videos 2. Model based teaching	1. Methods of transformer cooling 2. DC shunt motor	Students got the knowledge about the cooling mechanism in transformers
14.	EE6002 Power System Transients	1. Simulation 2. Animation Videos	1. Simulation studies using PSCAD 2. Formation of Lightning	Simulation studies helps the students to do their final year projects in power system field
15.	EE6801 Electric Energy Generation, Utilization and Conservation	1. Model Based Teaching	1. Solar PV Generation	Generation of power through solar had become familiar with the students which help them to do their projects in Solar power generation
16.	EE6009 Power Electronics for Renewable Energy Systems	1. Animation Videos	1. Solar Power Plant 2. Wind Power Plant	Process involved in the solar and wind power plant were clearly known to the students
17.	GE6075 Professional Ethics in Engineering	1. Power Point presentation	1. Case study on Chernobyl crisis	Students were able to know how to deal with a risk situation in an industry