

**Course Name: Project**

**Course Code: EE 783**

**Credit: 2**

**Prerequisites:**

Sl. No.	Subject	Description	Level of Study
01	Mathematics	Co-ordinate System, Vector Calculus	Class XII, 1st Sem
02	Physics	Electrostatics, Electromagnetism	1st Sem, 2nd Sem
03	Electrical Machines	DC Machines, Synchronous Machines, Transformers, induction machines	4th sem, 5th sem
04	Power Systems	Parameters of a transmission line, Relay, Circuit Breakers, Reactive power compensation.	5th sem, 6th sem, 7th sem
05	Power Electronics	Rectifiers, Inverters, Control of power electronic devices.	6th sem
06	Control System	PD, PI, PID controllers, Nyquist criterion, Stability analysis	5th, 6th sem
07	MATLAB, PSPICE, PSIM	Programming	

**Course Objective:**

- To introduce students to research methodology and problem identification.
- To familiarize the students with the application of their past knowledge and advanced learning in the field of their chosen project.
- To expose the students to team based activity to cooperate and interact to find the solution to a unknown problem and prepare professional quality textual and audiovisual presentation to project their ideas and solutions in brief to an external audience .

**Course Outcomes:**

*At the end of the course, a student will be able to:*

1. **Identify** the area of interest and select the topic on which work can be done. **Apply** the theoretical knowledge and study the available documents of the work that was previously done on the selected topic and determine a course of action.
2. **Develop** a software model of their intended hardware setup and **analyze** the output data under different experimental conditions. **Set Up** a hardware configuration of the software model of the intended work
3. **Practice** different types of wiring and devices connections keeping in mind technical, economical, safety issues and record the data taken from each configuration.
4. **Evaluate** possible causes of discrepancy in practical observations in comparison to theory.
5. **Prepare professional** quality textual and graphical presentations of data and computational results, incorporating accepted data analysis and synthesis methods, mathematical software, and word-processing tools.
6. Primarily via team-based activities, students will **demonstrate** the ability to interact effectively on a social and interpersonal level with fellow students, and will demonstrate the ability to divide up and share task responsibilities to complete the project

**CO- PO mapping:**

CO		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO1 0	PO1 1	PO1 2
EE783.	1	3	3	2	2	1	2	2	1	-	1	1	2
EE783.	2	2	-	3	2	2	-	1	-	3	-	1	3
EE783.	3	3	2	-	-	1	2	-	2	-	-	2	1
EE783.	4	3	3	2	2	-	2	2	1	1	1	-	-
EE783.	5	2	-	3	2	2	-	1	-	3	2	1	2
EE783.	6	3	2	-	1	1	2	-	1	3	2	2	1
EE783.		2.66 6667	2.5	2.5	1.8	1.4	2	1.5	1.25	2.5	1.5	1.4	1.8
		0.88 8889	0.83 3333	0.83 3333	0.6	0.46 6667	0.66 6667	0.5	0.41 6667	0.83 3333	0.5	0.46 6667	0.6
<b>Compre hensive Attainm ent</b>	<b>2.351 2339</b>	<b>2.08 9986</b>	<b>1.95 9362</b>	<b>1.95 9362</b>	<b>1.41 074</b>	<b>1.09 7242</b>	<b>1.56 7489</b>	<b>1.17 5617</b>	<b>0.97 9681</b>	<b>1.95 9362</b>	<b>1.17 5617</b>	<b>1.09 7242</b>	<b>1.41 074</b>
		<p><b>* Enter correlation levels 1, 2 or 3 as defined below: 1: Slight (Low) 2: Moderate (Medium)3: Substantial (High) and It there is no correlation, put “-”</b></p>											