



Yashoda Shikshan Prasarak Mandal's
Yashoda Technical Campus

Approved by AICTE Delhi/ Govt. of Maharashtra
NII-4, Wadhe, Satara-415011
Email : principalpoly_ytc@ytc.edu In Call: 02162-271238/39 Mob. 9172220775
Faculty of Polytechnic



DEPARTMENT OF ELECTRICAL ENGINEERING

Class: SY
Sem: Even

Academic Year: 2024-25
Subject: D.C. Machines and Transformers (314322)

Program Outcome:

PO1: Basic and Discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

PO2: Problem analysis: Identify and analyse well-defined engineering problems using codified standard methods.

PO3: Design/ development of solutions : Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

PO4: Engineering Tools, Experimentation and Testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

PO5: Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices

PO6: Project Management: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

PO7: Life-long learning: Ability to analyse individual needs and engage in updating in the context of technological changes.

Program Specific Outcomes:

PSO1: Electrical Equipment: Maintain various types of rotating & Static Electrical Equipment

PSO2: Electrical Power System: Maintain different types of electrical power system

Course Outcome:

E314322_a	Test the performance of D.C. Generators.
E314322_b	Test the performance of D.C. Motors
E314322_c	Test the performance of Single phase transformers
E314322_d	Use three phase transformer for different applications.
E314322_e	Use relevant special purpose transformers for different applications.

CO-PO Mapping:

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
E314322 a	3	1	1	2	1	1	1	2	
E314322 b	3	2	2	2	3	1	2	2	
E314322 c	3	1	1	2	2	1	1	2	
E314322 d	3	2	2	2	3	1	1	2	
E314322 e	3	1	1	2	2	1	1	2	
Average of PO	3.00	1.40	1.40	2.00	2.20	1.00	1.20	2.00	
Average of PO Mapping in %	100.00	46.67	46.67	66.67	73.33	33.33	40.00	66.67	

Course Coordinator

Academic Coordinator

Vision of Program

To empower the students' abilities of academic, technical and professional competence in the field of Electrical Engineering and to nature them in the developing areas to help the society.

Mission of Program

- M1:** To provide adequate knowledge in the field of Electrical Engineering to take the real time Challenges with professional skills.
- M2:** To improve continuous learning skills to meet employability objectives.
- M3:** To communicate strong ethical qualities between students for helping the society.



Yashoda Shikshan Prasarak Mandal's
Yashoda Technical Campus

Approved by AICTE Delhi/ Govt. of Maharashtra
NH-3, Wadhe, Satara 415011
Email : principalpoly_ytc@ytc.edu.in Call: 02162-271238/39 Mob. 9172220775
Faculty of Polytechnic



DEPARTMENT OF ELECTRICAL ENGINEERING

Class: SY

Academic Year: 2024-25

Sem: Even

Subject: D.C. Machines and Transformers (314322)

Program Outcome:

PO1: Basic and Discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

PO2: Problem analysis: Identify and analyse well-defined engineering problems using codified standard methods.

PO3: Design/ development of solutions : Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

PO4: Engineering Tools, Experimentation and Testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

PO5: Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices

PO6: Project Management: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

PO7: Life-long learning: Ability to analyse individual needs and engage in updating in the context of technological changes.

Program Spacific Outcomes:

PSO1: Electrical Equipment: Maintain various types of rotating & Static Electrical Equipment

PSO2: Electrical Power System: Maintain different types of electrical power system

Course Outcome:

E314322_a	Test the performance of D.C. Generators.
E314322_b	Test the performance of D.C. Motors
E314322_c	Test the performance of Single phase transformers
E314322_d	Use three phase transformer for different applications.
E314322_e	Use relevant special purpose transformers for different applications.

CO-PO Mapping:

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
E314322 a	3	1	1	2	1	1	1	2	
E314322 b	3	2	2	2	3	1	2	2	
E314322 c	3	1	1	2	2	1	1	2	
E314322 d	3	2	2	2	3	1	1	2	
E314322 e	3	1	1	2	2	1	1	2	
Average of PO	3.00	1.40	1.40	2.00	2.20	1.00	1.20	2.00	
Average of PO Mapping in %	100.00	46.67	46.67	66.67	73.33	33.33	40.00	66.67	

Course Coordinator

Academic Coordinator

Vision of Program

To empower the students' abilities of academic, technical and professional competence in the field of Electrical Engineering and to nature them in the developing areas to help the society.

Mission of Program

M1: To provide adequate knowledge in the field of Electrical Engineering to take the real time Challenges with professional skills.

M2: To improve continuous learning skills to meet employability objectives.

M3: To communicate strong ethical qualities between students for helping the society.