



- 1.5. Teaching strategies stimulate the development of the students' Higher-Order Thinking Skills (HOTS) such as critical thinking, analytical thinking, creative thinking and problem-solving.

BSEE Continuous-Quality-Improvement Plan

Cycle: August 2020 - May 2022

PO Code	PO Statement	Performance Indicators (PI)	Codes of Key Course(s) for the PI(s)	Assessment Method	Assessment Target	Assessment Result	Date of Assessment	Evaluation Method	Evaluation Result	Improvements	Time Frame of Evaluation
a	apply knowledge of mathematics and science to solve complex Electrical engineering problems;	1. Ability to use numerical solutions in solving Electrical engineering problems.	MATH 111 -Calculus 1	Faculty developed Examination (ORAL EXAM, WRITTEN EXAM, PROBLEM-BASED EXERCISES)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-20	FGD, FE, SE			First Sem SY 2020-2021
			MATH 112 - Calculus 2								
		2. Interpret mathematical /scientific representations such as graphs, table etc. in solving Electrical engineering problems.	MATH 113 - Differential Equation	Faculty developed Examination (ORAL EXAM, WRITTEN EXAM, PROBLEM-BASED EXERCISES)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-20	FGD, FE, SE			First Sem SY 2020-2021
		3. Use the concepts of physics in solving Electrical engineering problems.	EE 201 - Electrical Circuits 1	Faculty developed Examination (ORAL EXAM, WRITTEN EXAM, HANDS-ON EXERCISES)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-20	FGD, FE, SE			First Sem SY 2020-2021
b	Develop and conduct appropriate experiments, analyze and interpret data;	1. Collect sufficient and appropriate data to support the objectives of the experiment.	EE 202 - Electrical Circuits 2	Laboratory Report Rubrics (HANDS-ON EXERCISES)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-21	FGD, FE, SE			Second Sem SY 2020-2021
		2. Analyze data using appropriate method.	EE 202 - Electrical Circuits 2	Laboratory Report Rubrics (HANDS-ON EXERCISES)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-21	FGD, FE, SE			Second Sem SY 2020-2021
		3. Relate data analysis in the objective of the experiment.	EE 202 - Electrical Circuits 2	Laboratory Report Rubrics (HANDS-ON EXERCISES)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-21	FGD, FE, SE			Second Sem SY 2020-2021
	design a system, component, or process to meet desired	1. Make a design that considers realistic constraints to tackle problems in an engineering context.	EE 402 - Electrical Systems and Illumination Design	Design Project Rubrics (WRITTEN EXAM, ACTUAL EXERCISES, HANDS-ON EXERCISES)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-22	FGD, FE, SE			Second Sem SY 2021-2022

c	needs within realistic constraints such as economics, environmental, social, political, ethical, health and safety, manufacturable, and sustainability, in accordance with standards.	2. Evaluate the technical and economic viability of a Electrical engineering design.	EE 164 - Management of Engineering Project	Design management criteria (ORAL EXAM, WRITTEN EXAM)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-22	FGD, FE, SE			Second Sem SY 2021-2022
		3. Evaluate the environmental impact of a Electrical engineering solution.	EE 433 - Fundamentals of Power Plant Engineering Design	Viable Project Design (ACTUAL DESIGN, ORAL REPORT)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-22	FGD, FE, SE			Second Sem SY 2021-2022
d	function on multi-disciplinary teams;	1. Demonstrate concern about group performance to deliver assigned tasks to meet group target/s.	PRACTICUM - On the Job Training	Performance Appraisal Rubrics (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-May-21	FGD, FE, SE			Summer SY 2020-2021
		2. Contribute to discussions and decisions made by group with caring, assisting and willingness attitude.	PRACTICUM - On the Job Training	Performance Appraisal Rubrics (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-May-21	FGD, FE, SE			Summer SY 2020-2021
		3. Defend group decision and justify actions.	PRACTICUM - On the Job Training	Performance Appraisal Rubrics (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-May-21	FGD, FE, SE			Summer SY 2020-2021
e	identify, formulate, and solve complex Electrical engineering problems;	1. Identify problems in a community base on needs assessments.	ES 140 - Research Methods	Design/Proposal Project Rubrics (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-21	FGD			First Sem SY 2020-2021
		2. Formulate problem statement, objectives and identify resources required to solve the problem.	ES 140 - Research Methods	Design/Proposal Project Rubrics (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-21				First Sem SY 2020-2021
		3. Provide technical solution/s to the problem that is acceptable to the stakeholders.	ES 422 - Research Project	Design Project Rubrics (ORAL PRESENTATION, ACTUAL PROJECT PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-22	FGD, FE, SE			Second Sem SY 2021-2022
f	Recognize ethical and professional responsibilities in engineering practices;	1. Demonstrate knowledge of professional code of ethics.	EE 305 - EE laws, Codes and Professional Ethics	Performance Appraisal Rubrics (ORAL EXAM, WRITTEN EXAM)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-20	FGD, FE, SE			First Sem SY 2020-2021
		2. Evaluate the ethical and societal implications of a design solution to a problem.	EE 305 - EE laws, Codes and Professional Ethics	Performance Appraisal Rubrics (ORAL EXAM, WRITTEN EXAM)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-21	FGD, FE, SE			First Sem SY 2020-2021
		1. Discuss the analysis of an Electrical engineering problem with his/her fellow students.	EE 164 - Management of Engineering Project	Written Report Design Project Rubrics	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-21	FGD, FE, SE			First Sem SY 2020-2021

g	communicate effectively with a range of audience	2. Write a comprehensive laboratory report.	EE 303 - Electrical Machines 2	Laboratory Report Rubrics (HANDS-ON EXERCISES)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-21	FGD, FE, SE			Second Sem SY 2020-2021
		3. Defend satisfactorily his thesis or design project from a panel of experts.	ES 422 - Research Project	Thesis/Design Project Presentation Rubrics (HANDS-ON EXERCISES)	90% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-21	FGD, FE, SE			First Sem SY 2020-2021
h	understand the impact of engineering solutions in a global, economic, environmental, and societal context;	1. Identify the global, economic, environmental and social issues involved in a Electrical engineering solutions.	ES 422 - Research Project	Design Project Rubrics (ORAL PRESENTATION, ACTUAL PROJECT PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-22	FGD, FE, SE			Second Sem SY 2021-2022
		2. Explain the impact of civil engineering solutions corresponding to the global, economic, environmental and societal issues.	ES 422 - Research Project	Design Project Rubrics (ORAL PRESENTATION, ACTUAL PROJECT PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-21	FGD, FE, SE			Second Sem SY 2021-2022
		3. Evaluate conflicting or competing values to make decisions pertaining to creation of a Electrical engineering solutions.	ES 422 - Research Project	Design Project Rubrics (ORAL PRESENTATION, ACTUAL PROJECT PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-21	FGD, FE, SE			Second Sem SY 2021-2022
i	recognition of the need for, and engage in life-long learning;	1. Describe the skills required of a lifelong learner.	EE 164 - Management of Engineering Project	Written/Oral Presentation Demonstration Rubrics	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-21	FGD, FE, SE			First Sem SY 2021-2022
		2. Explain the need for lifelong learning.	EE 433 - Fundamentals of Power Plant Engineering Design	Written/Oral Presentation Demonstration Rubrics	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-21	FGD, FE, SE			First Sem SY 2021-2022
		3. Demonstrate the ability for self-directed or lifelong learning.	EE 402 - Electrical Systems and Illumination Design	Written/Oral Presentation Demonstration Rubrics	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-21				First Sem SY 2021-2022
j	Articulate and discuss the latest development in the field of electrical engineering.	1. Identify current and critical issues in relation to the engineering field.	EE 431- Power systems Analysis	Design Project Written Reports (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-21	FGD, FE, SE			Second Sem SY 2020-2021
		2. Apply alternative engineering solutions or scenarios relative to current issues.	EE 433- Distribution systems and Substation Design	Design Project Written Reports (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-21				Second Sem SY 2020-2021

		3. Recognize the need to be updated on important issues within the engineering discipline and profession.	EE 431- Power systems Analysis	Design Project Written Reports (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-21	FGD, FE, SE			Second Sem SY 2020-2021
k	Apply the techniques, skills, and modern engineering tools necessary for Electrical engineering practice;	1. Identify modern Electrical engineering tools to conduct investigations, laboratory works and other related engineering practice.	EE 304 - Electrical Apparatus and Devices	Design Project Written Reports Rubrics (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-21	FGD, FE, SE			First Sem SY 2021-2022
		2. Use modern Electrical engineering tools for a given task under minimum supervision.	EE 401 - Electrical Standards and Practices	Design Project Written Reports Rubrics (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-21	FGD, FE, SE			First Sem SY 2021-2022
		3. Demonstrate technical knowledge in utilizing widely-spread state-of-the-art tools use in	EE 403 - Instrumentation and Control	Design Project Written Reports Rubrics (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Oct-21				First Sem SY 2021-2022
l	Demonstrate knowledge and understand of engineering and management principles as a member and leader of a team to manage projects in a multidisciplinary environment.	1. Outline the different management principles applicable to the Electrical engineering practice.	EE 403 - Instrumentation and Control	Written Report Project Design Rubrics (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-22	FGD, FE, SE			Second Sem SY 2021-2022
		2. Choose applicable management options in the design, planning and implementation of a Electrical engineering project.	EE 433- Distribution systems and Substation Design	Written Report Project Design Rubrics (ORAL PRESENTATION)	60% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-22	FGD, FE, SE			Second Sem SY 2021-2022
		3. Develop improvement processes based on the merits of the Electrical engineering operations.	EE 164 - Management of Engineering Project	Written Report Project Design Rubrics (ORAL PRESENTATION)	40% of the students enrolled in the subject should get a minimum grade of 75		31-Mar-22	FGD, FE, SE			Second Sem SY 2021-2022

FGD - Focus Group Discussion

FE - Formative Evaluation

SE -Summative Evaluation


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