Program Educational Objectives (PEO)

Program educational objectives (PEOs) are broad statements that describe what graduates are expected to achieve a few years after graduation. The program aims at imparting quality education to agricultural engineering graduates for contributing to society through modern technologies and practices.

The Program will prepare and produce graduate Agricultural Engineers who will be able to:

S. No.	PEO Statement
1	Demonstrate sound engineering knowledge and skills in their professional practice.
2	Practice engineering activities considering their impact on societal, economic, environmental, and ethical aspects.
3	Manage teamwork, exhibit interpersonal skills, and strive for continual professional development.

Key Performance Indicators (KPI) to Measure PEO

PEO #	КРІ	Measurement Tool	
PEO 1	At least 50% of employers would be satisfied with the knowledge and skills of employed graduates.	Employer Survey	
	At least 50% alumni would be satisfied with their knowledge and skills.	Alumni Survey	
PEO 2	At least 50% of employed graduates exhibit an understanding of societal, economic, and environmental considerations in engineering solutions.	Employer Survey	
	At least 50% of employed graduates value the code of conduct and norms of professional practice.	Employer Survey	
PEO 3	At least 50% of employed graduates demonstrate management, teamwork, and interpersonal skills in performing their activities.	Employer Survey	
	At least 50% of graduates participate in at least one professional development activity per year, such as short courses, workshops, or seminars etc.	Alumni Survey	

Mapping of PEO to University's Vision and Mission

Program Educational Objectives	UET Vision	UET Mission	Program Mission
PEO-1: Competence (Engineering knowledge and Skills)	~	~	~
PEO-2: Societal, economic, environmental, and ethical considerations in professional practice.	~	~	~
PEO-3: Leadership, management and interpersonal skills, and lifelong learning.	~	~	~

Program Learning Outcomes (PLO) or Graduate Attributes (GA)

Program outcomes (graduate attributes) are the narrower statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and attitude that the students acquire while progressing through the program.

PLO / GA	Title	Description		
1	Engineering Knowledge	GA1: An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems (WK1 to WK4).		
2	Problem Analysis	GA2: An ability to identify, formulate, research literature, and analyz complex engineering problems reaching substantiated conclusion using first principles of mathematics, natural sciences and engineering sciences (WK1 to WK4).		
3	Design/Development of Solutions	GA3: An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations (WK5).		
4	Investigation	GA4: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions (WK8).		
5	Modern Tool Usage	GA5: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations (WK6).		
6	The Engineer and Society	GA6: An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems (WK7).		
7	Environment and Sustainability	GA7: An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of, and need for, sustainable development (WK7).		

8	Ethics	GA8: An ability to apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice (WK7).
9	Individual and Teamwork	GA9: An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.
10	Communication	GA10: An ability to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11	Project Management	GA11: An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.
12	Lifelong Learning	GA12: An ability to recognize the need for, and have the preparation and ability to engage in, independent and life-long learning in the broadest context of technological change.

Mapping of PEO to PLO

PLO #	PLO	PEO-1	PEO-2	PEO-3
1	Engineering Knowledge	~		
2	Problem Analysis	✓		
3	Design/Development of Solutions	~		
4	Investigation	~		
5	Modern Tool Usage	✓		
6	The Engineer and Society		~	
7	Environment and Sustainability		~	
8	Ethics		~	
9	Individual and Teamwork			✓
10	Communication			✓
11	Project Management			✓
12	Lifelong Learning			✓