

Renewable Energy Engineering Department
Performance Indicators for Students Outcomes

No.	Students Outcomes	Performance Indicators	course
1	An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.	1. Ability to solve complex engineering problems using principles of engineering, and mathematics. 2. Apply knowledge in physics to renewable energy system.	611543 611521 611301 611531 611311 611511 611422
2	An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.	1. Design of renewable energy system. 2. Calculate the payback period of renewable energy system. 3. Study how to reduce the environmental impact from renewable energy system.	611521 611311 611422 611532 611532 611543 611421 611511
3	An ability to communicate effectively with a range of audiences.	1. Engage in oral presentation 2. Prepare and organize a written document.	611541 611511 611341 611301
4	An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	1. Study the energy economics of renewable energy system. 2. Study the environmental impact of renewable energy system. 3. Identify and deal with ethical issues in renewable energy projects.	611311 611341 611532 611511 611521 611543 611411 611532
5	An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	1. Ability to function as a team member. 2. Ability to establish goals, plan tasks, and meet objectives.	611526 611422 611341 611540
6	An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	1. Use laboratory instruments and equipment to conduct experiments and collect data. 2. Analyze and interpret collected experimental data.	611536 611301
7	An ability to acquire and apply new knowledge as needed, using appropriate learning strategies	1. Ability to solve engineering problems using computer software. 2. Ability to design renewable energy systems using computer software.	611311 611422 611341 611422 611422 611341