MINOR: SUSTAINABLE ENERGY TECHNOLOGIES

Student Learning Outcomes

Students graduating from this program will:

- Explain the scientific and engineering principles underlying major sustainable energy technologies, including solar, wind, bioenergy, geothermal, and energy storage systems.
- Evaluate the performance, advantages, limitations, and environmental impacts of different sustainable energy technologies using appropriate technical and analytical tools.
- Assess the sustainability and life-cycle impacts (environmental, economic, and social) of energy technologies and propose strategies to improve system performance.

Program Requirements

A minimum grade of a C- is required for all minor and prerequisite courses.

Code	Title	Credits
Required Coursework:		
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
PHYSICS 210	General Physics I	4-5
or PHYSICS 240	Physics For Scientists and Engineers I	
SET 300	Introduction to Sustainable Energy Technologies	3
SET 400	Sustainable Energy and Materials	3
Elective Coursework		**3**
Additional coursework is required to meet the prerequisites required for Elective coursework.		
E&C-ENGR 445	Introduction to Flexible Electronics	
E&C-ENGR 453	Introduction to Wind Energy Systems	
E&C-ENGR 457	Fundamentals of Solar Photovoltaic Cells	
E&C-ENGR 463	Advanced Sustainable Energy Systems Engineering	
MEC-ENGR 440	Heating Ventilation and Air Conditioning	
MEC-ENGR 451	Power Plant Design	
MEC-ENGR 467	Fuel Cells and Renewable Energy Systems	
MSE 440	Advanced Battery Materials	
Total Credits		**18-19**