



Department	Course Name	Course Number	Semester
Mechanical Engineering	Socio-economic and Environmental Aspects of Energy	0904914	

### **2025 Course Catalog Description**

The interactions between energy consumption and supply and socio-economic development; The mechanisms and channels of relations between energy supply and demand policies and economic and social development. A scenario approach which integrates the national and regional energy policies in synergy with the socio-economic development of the region; Basic relations between human needs, human activities, energy services and energy used.

### **Instructors**

Name	E-mail	Section	Office Hours	Lecture Time

### **Prerequisites**

<b>Prerequisites by topic</b>	
<b>Prerequisites by course</b>	
<b>Co-requisites by course</b>	
<b>Prerequisite for</b>	

### **Topics Covered**

Week	Topics
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

### **Evaluation**

Assessment Tools	Expected Due Date	Weight
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**Contribution of Course to Meet the Professional Components**

**Relationship to Student Outcomes**

SOs	1	2	3	4	5	6	7
<b>Availability</b>							

**Relationship to Aeronautical Engineering Program Objectives (AEPOs)**

AEPO1	AEPO2	AEPO3	AEPO4	AEPO5

**ABET Student Outcomes (SOs)**

<b>1</b>	An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
<b>2</b>	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
<b>3</b>	An ability to communicate effectively with a range of audiences
<b>4</b>	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
<b>5</b>	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
<b>6</b>	An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
<b>7</b>	An ability to acquire and apply new knowledge as needed, using appropriate learning strategies

**Updated by ABET Committee, 2025**