This plan provides the PLO/SLO assessment plan for AY 2022-2025

Name of the program: ____M.S. in Energy Management_____

Date of submission: 6/30/2022   Academic Year: 2022-2023

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Program's Student Learning Outcome Assessment Plan

MS in Energy Management Student Outcomes

Graduates of the M.S. in Energy Management program are expected to:

1. Compare and contrast methods and equipment which are used to reduce energy consumption in buildings.

2. Analyze conventional and alternative energy technologies.

3. Evaluate economic and social factors which influence energy policy and management decisions.

4. Complete a multidisciplinary research study in a specific area of energy management.

5. Explain and argue aspects of current environmental issues.

6. Differentiate and critique specific issues in areas of specialization such as facilities management, equipment assessment, computer applications, power plant systems and environmental law.

Matrix of Relationships between Courses and Program Outcomes

	1	2	3	4	5	6

1

ENGY 610	●		●			
ENGY 670		●	●		●	
ENGY 695			●			
ENGY 710		●				
ENGY 775		●				
ENGY 890				●		
ENVT 601					●	
ENGY 615	●					●
ENGY 620	●					●
ENGY 625	●					●
ENGY 630			●			●
ENGY 660			●		●	●
ENGY 688		●				●
ENGY 718	●					●
ENGY 730	●					●
ENGY 740		●				●
ENGY 785			●		●	●

Method of Assessment

Our direct method of assessment is based on Faculty Course Assessment Reports (FCARs) which are submitted by the faculty for each course they teach.

The FCAR requires the faculty member to identify course-specific learning outcomes (LO's) for his/her course and to establish appropriate performance tasks (APTs) with appropriate documentation to assess to what extent the Student Outcomes are being met. These APTs may

be quizzes, exam questions, reports, projects, presentations, etc. Each student's APT is then scored with the method shown in the table below to create an EGMU vector for that specific Student Outcome and a corresponding assessment metric.

The department has determined that the minimum level of quality that it felt was necessary in order to produce graduates that will ultimately achieve our Program Educational Objectives is an EGMU score of 2.0 for each Student Outcome. This score of 2.0 was chosen by the department because in the EGMU score of 2.0 indicates Good and therefore represents what a student would need in order to satisfy the requirements for graduation. A typical EGMU vector for a class with 19 students in which the APT was the third problem of the first exam might be (8, 9, 1, 1) which would signify that 8 students demonstrated a complete and accurate understanding, while 9 students applied appropriate strategies, etc. The average score in this case being 43/19 = 2.26 which is Good.

EGMU	Rubric	Score
E - Excellent	Fully demonstrates/accomplishes the attributes and behavior in the rubric	3
G – Good	Mostly demonstrates/accomplishes the attributes and behavior in the rubric	2
M – Minimal	Minimally demonstrates/accomplishes the attributes and behavior in the rubric	1
U - Unsatisfactory	Does not demonstrate/accomplish the attributes and behavior in the rubric	0

Timeline of Assessment

Program Learning Outcomes	AY 22-23	AY 23-24	AY 24-25
1	●		
2	●		
3		●	
4		●	
5			●
6			●

3

Responsibilities for Assessment

During AY 22-23, the data collection, analysis and implementation of action items for PLO#1 and #2 will be led by Dr. Amundsen.

During AY 23-24, the data collection, analysis and implementation of action items for PLO#3 and #4 will be led by Dr. Amundsen.

During AY 24-25, the data collection, analysis and implementation of action items for PLO#5 and #6 will be led by Dr. Amundsen.

Communication of Assessment

Departmental assessment meetings will be held at the beginning of each semester during AY 22-23, AY 23-24 and AY 24-25 to coordinate data collection, analysis and implementation of action items, and communicate plans and results to all faculty.