Energy Systems Engineering

(Formerly Sustainable Energy)

Master of Engineering: 30 Credits / 10 Courses

Students pursuing this option must complete five of the core courses and five technical electives. There is no research or thesis required for this degree.

Energy Systems Engineering Core (choose 5):		
	ENPM622 Energy Conversion I - Stationary Power*	(every fall)
	ENPM624 Renewable Energy Applications * *or* **ENME701** Sustain. Energy Conversion & the Environment* [*rec: ENME633*]	(every fall)
	ENPM627 Environmental Risk Analysis*	(every 1.5 years)
	ENPM656 Energy Conversion II -- Mobile Power*	(every spring)
	ENCH648K Advanced Fuel Cells and Batteries*	
	ENCH648L Photovoltaics: Solar Energy*	

Energy Systems Engineering Pre-approved Technical Elective courses (choose 5):		
	ENPM623 Control of Combustion Generated Air Pollution*	
	ENPM635 Thermal Systems Design Analysis* *or* **ENME635** Energy Systems Analysis*	(every 1.5 years)
	ENPM641 Systems Concepts, Issues and Processes*	(every fall)
	ENPM642 Systems Req, Design & Trade-Off Analysis* [ENPM641]	(every spring)
	ENPM650 Solar Thermal Energy Systems*	(every spring)
	ENPM651 Heat Transfer for Modern Applications*	(every 1.5 years)
	ENPM654 Energy Systems Management*	(every summer)
	ENPM660 Wind Energy Engineering*	(every fall)
	ENPM670 Advanced Energy Audit and Conservation*	(every other spring)
	ENPM808C Ocean Energy Harvesting*	(every other spring)
	ENPM808A Advanced Thermal Power Plants*	
	ENPM809M Power System Integration of Renewable Energies*	
	ENRE447 Fundamentals of Reliability Engineering*	
	ENRE600 Fundamentals of Failure Mechanisms*	
	ENRE602 Reliability Analysis*	
	ENRE620 Mathematical Techniques for Engineers* *(credit is only granted for ENRE620 or ENPM620)*	
	ENRE670 Risk Assessment for Engineers I* [ENRE602]	
	ENRE671 Risk Assessment for Engineers II* [ENRE670]	

*NOTE: Any courses not listed above must be approved by the Senior Academic Advisor **PRIOR** to registration.*

KEY	
Online Option *	(offering information)
[Prerequisite course]	Offered in Fall 2018

DISCLAIMER: All offerings are tentative and subject to change. *Updated 5/10/2018*

Energy Systems Engineering

(Formerly Sustainable Energy)

Student Name (Last, First):_____ Student ID _____

Beginning Term: _____ Anticipated Graduation: _____

Background (Educational, Training, Career, etc):

Objective (Career Field, Areas of Interest, etc.):

Energy Systems Required Core:	
Course	Planned Term

Choose From: ENCH648K, ENCH648L, ENPM622, ENPM624 or ENME701, ENPM627, ENPM656

Energy Systems Technical Electives:	
Course	Planned Term

Preapproved Electives: ENPM623, ENPM635 or ENME635, ENPM641, ENPM642, ENPM650, ENPM651, ENPM654, ENPM660, ENPM670, ENPM808C, ENPM808A, ENPM809M, ENRE447, ENRE600, ENRE602, ENRE620, ENRE670, ENRE671

Comments:

***NOTE**: Any courses not listed above must be approved by the Senior Academic Advisor **PRIOR** to registration.*

Student Signature Date

Advisor Signature Date

DISCLAIMER: All offerings are tentative and subject to change. *Updated 5/10/2018*