

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING (MSEE)

Renewable Energy and Power Systems Track* Options

Curriculum Program of Study

Advisor Dr. Z. Miao

Name		USF ID #	
Term/Year Admitted			
Address			
Phone			
Email			
Advisor			
Areas of focus: Renewable Energy and Power Systems			
Optional Focus areas: Grid Integration of Renewable Energy, Power			

Course Title	Number	Credits	Semester	Grade
1. Mathematics: 6 hours				
Linear and Matrix Algebra	EEL 6935	3		
Numerical Methods and Partial Differential Equations	EEL 6935	3		
Optimization Methods	EEL 6935	3		
Statistical Inference	EEL 6936	3		
Random Processes	EGN 6545	3		
Engineering Apps for Vector Analysis **	EEL 6027	3		
Engineering Apps for Partial Diff. Eq. **	EEL 6023	3		
Engineering Apps of Complex Analysis	EEL 6022	3		
2. Energy/ Power Core Courses: 12 hours (2 sets of sequences)				
1) Power Systems Analysis and Power Systems II	EEL 6250	3		
or Energy Delivery Systems	EEL 6256	3		
	EEL 6285	3		
2) Power Electronics and Electric Machines and Drives	EEL 6245	3		
	EEL 6227	3		
3) Electrical Distribution Systems and Energy Delivery Systems	EEL 6936	3		
	EEL 6285	3		
4) Design Energy Efficiency & Solar Power and Design of Solar Power Plants	EEL 6935	3		
	EEL 6936	3		
3. Electives: 6 hours				
Power Quality	EEL 6935	3		
Power System Optimization and Control	EEL 6936	3		
Power System Market	EEL 6936	3		
Power System Protection	EEL 6935	3		
Digital Control Theory	EEL 5631	3		
Stochastic Estimation and Control	EEL 6936	3		
Multivariable Control Systems	EEL 6935	3		
4. Thesis/Coursework Options:				
Thesis Option: 6 hours	EEL 6971	6		
Non-thesis Option: 6 hours of project, additional electives or independent study		6		

*Tracks are for student benefit only. They will not show on scripts or diplomas.

**This course is no longer offered but will be recognized for credit if previously taken.

Total Credits Outside EE
Total Credits Independent Study
Total Credits (30 required)

