

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING (MSEE)
CONCENTRATION IN CONTROL THEORY TRACK* OPTIONS

Curriculum Program of Study Advisor Dr. Moreno

Name		USF ID #	
Term/Year Admitted			
Address			
Phone			
Email			
Advisor			

Course	Number	Credit	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		
Random Processes	EEE 6545	3		
Time Series Analysis	STA 6876	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. Control Theory Core: 12 hours (2 sets of sequences)				
1) Digital Control Theory	EEL 5631	3		
Systems & Control Theory I	EEL 6614	3		
2) Introduction to VHDL	EEL 6727	3		
Rapid System Prototyping	EEL 6729	3		
3) Multivariable Control Systems	EEL 6935	3		
Stochastic Estimation and Control	EEL 6936	3		
4) Embedded Systems	EEL 6935	3		
Systems & Control Theory I	EEL 6614	3		
5) Digital Signal Processing I	EEE 6502	3		
Digital Signal Processing II	EEL 6752	3		
3. Electives: 6 hours				
Real Time Control in Smart Grids	EEL 6936	3		
Bioelectricity	EEL 6935	3		
MEMS I/Chem BioSensors	EEE 6276	3		
Power Electronics	EEL 6935	3		
Robotics and AI	EEL 6935	3		
Advanced Human Gross Anatomy	GMS 6609	3		
Deep Learning	EEL 6586	3		
4. Thesis/Coursework Options:				
Thesis Option: 6 hours	EEL 6971	6		
Non-Thesis Option: 6 hours of additional Electives, or Independent Study, or Project.		6		

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

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

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