

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING (MSEE)

Systems and Security Track* Option

Curriculum Program of Study

Advisor Drs. Chang and Chen

Name		USF ID #	
Term/Year Admitted			
Address			
Phone			
Email			
Advisor			
Areas of focus: Systems and Security Optional			
Focus areas: Sub Groups			

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		
Biostatistics	PHC 6050	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. System and Security Core Courses: 12 hours (2 sets of sequences)				
Sequence 1 –Systems				
Broadband Networks	EEL 6506	3		
Data Networks, Systems and Security	EEL 6935	3		
Wireless Network Architectures and Protocols	EEL 6597	3		
Network Science	EEL 6935	3		
Deep Learning	EEL 6935	3		
Robotics and AI	EEL 6935	3		
Sequence 2 - Security				
Data Networks, Systems and Security	EEL 6935	3		
Cryptography and Data Security	EEL 6935	3		
Emerging Topics in Cyber Security	EEL 6935	3		
Wireless Mobile Computing and Security	EEL 6935	3		
Sequence 3 – Data Analytics				
Data Analytics for Electrical and Systems Engineers	EEL 6935	3		
Advanced Data Analytics	EEL 6935	3		
Network Science	EEL 6935	3		
3. Electives: 6 hours				
Thesis Option: 6 hours	EEL 6971	6		
Non-thesis Option: 6 hours of project, additional electives or independent study	EEL 6971	6		
*Tracks are for student benefit only. They will not show on scripts or diplomas.			Total Credits Outside EE	
** This course is no longer offered but will be recognized for credit if previously taken.			Total Credits Independent Study	
			Total Credits (30 required)	