

Master of Science in Engineering
Concentration: Communication Systems

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Degree Codes: ES MSE ENGR

SCH Requirements: Thesis option: 30 SCH; Non-thesis option: 36 SCH

Non-Thesis Option (36 SCH)

Course Category	Number	Course Name	Credit Hours	Total SCH
Core Courses			Total: 3	30
	ENGR 510 + ENGR 589A	Engineering Research Methods for Coursework option ENGR 510 (2 SCH) + ENGR589A-001 (1 SCH)	3	
Communication Systems			Total: 15	
	ELEN 525	Telecommunication Theory and Applications	3	
	ELEN 527	Optical Communication Systems	3	
	ELEN 526	Advanced Wireless Networking	3	
	CIS 521	Introduction to Information Assurance	3	
	CIS 544	Network Design and Implementation	3	
Engineering Management*			Total: 6	
	INEN 507	Engineering Administration	3	
	INEN 509	Economics and Decision Making	3	
	INEN 518	Project Management	3	
Statistics and Operations Research*			Total: 6	
	STAT 405	Statistical Methods	3	
	INEN 502	Operations Research Methods	3	
Electives*				6
	ELEN 550C	Special Problems in Electrical Engineering	0-6	
	ELEN 557	Special Topics in Electrical Engineering	0-6	
			TOTAL	36

* Course substitutions will be possible in consultation with the student's graduate committee.

Thesis Option (30 SCH)

Course Category	Number	Course Name	Credit Hours	Total SCH
Core Courses				18
<i>Engineering Research Methods</i>	ENGR 510 + ENGR 511	Engineering Research Methods for Coursework option ENGR 510 (2 SCH) + ENGR 511 (1 SCH)	3	
<i>Communication Systems</i>	ELEN 525	Telecommunication Theory and Applications	3	
	ELEN 527	Optical Communication Systems	3	
	ELEN 526	Advanced Wireless Networking	3	
	CIS 521	Introduction to Information Assurance	3	
	CIS 544	Network Design and Implementation	3	
Electives*				6
	STAT 405	Statistical Methods	3	
	INEN 502	Operations Research Methods	3	
	INEN 507	Engineering Administration	3	
	INEN 509	Economics and Decision Making	3	
	INEN 518	Project Management	3	
	ELEN 550C	Special Problems in Electrical Engineering	0-6	
	ELEN 557	Special Topics in Electrical Engineering	0-6	
Thesis Hours				6
	ENGR 551	Interdisciplinary Research and Thesis	6	
			TOTAL	30

* Course substitutions will be possible in consultation with the student's graduate committee.