CERTIFICATE IN COMMUNICATION SYSTEMS

This certificate program is for those who want to become proficient in communication system principles and applications. The student will take the two fundamental courses and two courses from a large number of electives, for emphasis in data compression, computer networks, and analog/digital communications.

Curriculum

No more than one course may be a 400-level course.

Code	Title	Credit Hours
Required Courses		**(6)**
ECE 511	Analysis of Random Signals	3
ECE 513	Communication Engineering Fundamentals	3
Elective Courses		**(6-8)**
Select a minimum of two courses from the following:		6-8
ECE 403	Digital and Data Communication Systems	3-4
or ECE 405	Digital and Data Communication Systems with Laboratory	
ECE 406	Wireless Communications Systems	3
or ECE 504	Wireless Communication System Design	
ECE 421	Microwave Circuits and Systems	3-4
or ECE 423	Microwave Circuits and Systems with Laboratory	
ECE 503	5G Wireless Network: Architecture, New Radio, and Security	3
ECE 508	Video Communications	3
ECE 510	Internet of Things and Cyber Physical Systems	3
ECE 514	Digital Communication Principles	3
ECE 515	Modern Digital Communications	3
ECE 516	Coding for Distributed Storage Systems	3
ECE 519	Coding for Reliable Communications	3
ECE 520	Information Theory and Applications	3
ECE 541	Communications Networks Performance Analysis	3
ECE 542	Design and Optimization of Computer Networks	3
ECE 543	Computer Network Security	3
ECE 544	Wireless and Mobile Networks	3
ECE 545	Modern Internet Technologies	3
ECE 546	Wireless Network Security	3
ECE 547		3
Total Credit Hours		**12-14**