



H-Form ECE 421

A Brief Course Description			
College	Engineering		
Department/ Program	Electrical Engineering – Communications Engineering Program		
Course Name	Antenna Theory and Design		
Course Code	ECE 421		
Year / Level	4/8		
Credit Hours	4		
Contact Hours	Lecture: 3	Lab/Tutorial: 2	Training: 0
Language	English		
Track	<input type="checkbox"/> University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Program		
	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Elective		
Pre-requisites Course	ECE 220		
Co-Requests	-		
Course Description	Review of Maxwell's equations and antenna basics. Radiation patterns and Friis equation. Radiation integrals. Linear wire antennas. Antenna arrays. Synthesis of far field patterns by array factors. Broadband antennas and matching techniques. Microstrip antennas. Introduction to antennas in wireless systems. Methods of antenna measurements. Antenna design using commercial software.		