

EETE 4300	<b>RADAR SYSTEMS</b>	3 Credit Hours
Prerequisite	<b>EETE 4130</b>	
Goal	To explore the concepts of Radar systems and their useful applications in various fields	
<b>Objectives</b>		<b>Outcomes</b>
<p>This course should enable the student to :</p> <ol style="list-style-type: none"> <li>1. Understand the fundamental concepts and terminology used in Radar systems.</li> <li>2. Gain knowledge in range detection and velocity and Doppler measurements</li> <li>3. Understand the radar detection in the presence of noise.</li> <li>4. Analyze the different types of radar systems</li> </ol>		<p>A student who completes the course should be able to:</p> <ol style="list-style-type: none"> <li>1. Understand and explain the principles of operation of radars</li> <li>2. Understand the basic concepts and measurements, radar equation.</li> <li>3. Explain the operation and tradeoffs for communication radar systems.</li> <li>4. Distinguish between different types of radars such as CW and Frequency modulated radar, MTI and Pulse Doppler radar.</li> <li>5. Describe Matched filter detection, Target effects on detection</li> <li>6. Gain the knowledge about tracking radar, radar antennas and arrays.</li> </ol>