

# ENGINEERING SCIENCE MAJOR CHECKLIST

## BACHELOR OF ARTS

<b>BASIC SCIENCE &amp; MATHEMATICS (4.5 units)</b>			
Course Number	Course Title	Suggested Year	Done
<b>MATH 121</b>	Calculus I	FR	
<b>MATH 122</b>	Calculus II	FR	
<b>PHYS 190</b>	Physics & Engineering Colloquium (1/2)	FR	
<b>PHYS 201</b>	Newtonian Mechanics	FR	
<b>PHYS 202</b>	Electricity & Magnetism	SO	
<b>ENGINEERING CORE (3.5 units)</b>			
<b>ENGS 191</b>	Engineering Foundations (1/2)	FR	
<b>ENGS 200</b>	Engineering Design Exploration	SO	
<b>ENGS 211</b>	Statics & Materials Testing	SO	
<b>ENGS 490</b>	Design Capstone I	SR	
<b>ENGINEERING TOPICS (Choose 2 units)</b>			
<b>ENGS 220</b>	Circuits & Electronics		
<b>ENGS 320</b>	Instrumentation & Control Systems Engineering		
<b>ENGS 330</b>	Dynamics		
<b>ENGS 340</b>	Introduction to Thermal & Fluid Sciences		
<b>ENGS 341</b>	Heat & Mass Transfer		
<b>ENGS 342</b>	Fluid Mechanics		
<b>FOCUS AREA (3 units)</b>			
<i>Choose one focus area and complete the three required units. Additional focus areas available with program coordinator approval.</i>			
<b>Chemistry</b>			
<b>CHEM 112 or 118</b>	General Chemistry II (Chem 111 or 117 required)		
<b>CHEM 221</b>	Organic Chemistry		
<b>CHEM 260</b>	Descriptive Inorganic Chemistry		
<b>Environmental Studies</b>			
<b>ENSC 101</b>	Environmental Science		
<b>ENSC 230</b>	Critical Zone Science and Management		
<b>ENSC 270</b>	Geographic Information Systems		
			<b>Total Units (At least 13)</b>

Note that this check sheet is intended as a guide; the Academic Catalog contains more details and nuances, and students are encouraged to check that book along with the academic advisors as needed.