Coastal Carolina University BSc. Engineering Science Program Course Checklist

PHYSICS CONCENTRATION	
Academic Year 1, Fall Term (AY1-FA)	Academic Year 1, Spring Term (AY1-SP)
$\Box \text{UNIV 110 Q} - \text{First Year Experience (3)}$	□ ENGL 102 – Composition and Critical Reading (4)
$\Box \text{ENGL 101} - \text{Composition (4)}$	$\square \text{MATH 161} - \text{Calculus II (4)}$
$\square MATH 160 - Calculus I (4)$	□ PHYS 214 – Fundamentals of Physics II (3)
$\square PHYS 211 - Essentials of Physics I (3)$	□ PHYS 214L – Fundamentals of Physics II Lab (1)
PHYS 211L – Essentials of Physics I Lab (1)	□ CSCI 135 – Introduction to Programming (3)
ENGR 101 – Inquiring Minds Want to Design: Introduction to Engineering (3)	 ENGR 102 – Engineering Graphics Communication (3)
Academic Year 2, Fall Term (AY2-FA)	Academic Year 2, Spring Term (AY2-SP)
Core : Critical Thinking and Reasoning (3)	□ STAT 201 – Elementary Statistics (3)
PHIL 102 – Introduction to Ethics: Engineering Ethics (3)	 STAT 201L – Elementary Statistics Computer Lab (1)
$\square MATH 260 - Calculus III (4)$	CHEM 111 – General Chemistry I (3)
□ ENGR 234 – Engineering Mechanics I: Statics (3)	CHEM 111L – General Chemistry Lab I (1)
\Box ENGR 202 – Engineering Problem Solving (3)	□ ENGR 235 – Electric Circuits (3)
ENGR 199 – Cohort Grand Challenge I (1)	 ENGR 244 – Engineering Mechanics II: Dynamics (3)
□ ENGR 299 – Cohort Grand Challenge II (1)	□ PHYS 250 – Communicating STEM (3)
Academic Year 3, Fall Term (AY3-FA)	Academic Year 3, Spring Term (AY3-SP)
□ Core : Artistic Expression (3)	Core: Human and Social Behavior I (3)
□ Select ONE (3):	□ Core : Foreign Language (5)
• HIST 201 – History of the United States	□ ENGR 333 – Engineering Fluid Mechanics (3)
 POLI 201 – Introduction to American Government 	PHYS 310 – Mathematical Methods for Scientists and Engineers (3)
□ MATH 320 – Elemen. Differential Equations (3)	
□ ENGR 302 – Materials Science for Engineers (3)	
 ENGR 323 – Engineering Thermodynamics and Heat Transfer (3) 	
□ ENGR 203 Engineering Professionalism and	
Pathways (3)	
Academic Year 4, Fall Term (AY4-FA)	Academic Year 4, Fall Term (AY4-FA)
Core: Human and Social Behavior II (3)	Core: Humanistic Thought II (3)
□ ENGR 399 – Integrated Science and Design (2)	ENGR 499Q – Senior Design (2)
PHYS 351 – Computational Methods for Scientists and Engineers (3)	ENGR Selective Elective – Select ONE (3):
□ ENGR 495 – Engineering Internship (3)	 ENGR 315 – Electric Power and Renewable Energy
ENGR – Professional Enhancement Selective Elective IV (2)	• ENGR 321 – Electronics
	 ENGR 450 – Radiation Detection and Measurement
	PHYS 352 – Experimental Methods for Scientists and Engineers (3)
	ENGR – Professional Enhancement Selective Elective V (2)

Professional Enhancement Selective Elective IV and V: 1-4 credits of ENGR 495, ENGR 397, CCU Abroad or other approved experiences

Engineering courses offered both fall and spring terms: ENGR 234, ENGR 202, ENGR 244, ENGR 323, ENGR 333