

**MORGAN STATE UNIVERSITY DEPARTMENT OF PHYSICS
BACHELOR OF SCIENCE DEGREE IN ENGINEERING PHYSICS
SUGGESTED CURRICULUM SEQUENCE**

FRESHMAN YEAR (FIRST SEMESTER)

MATH 241	Calculus I	4
XXXX-BP	Biological & Physical Sciences	4
ENGL 101-EC	Freshman Composition I	3
ORNS 106	Freshman Orientation	1
XXXX-HH	Health & Healthful Living	3
PHEC XXX	Physical Education	1
		16

FRESHMAN YEAR (SECOND SEMESTER)

PHYS 205-BP	University Physics I (w/ Lab)	5
MATH 242	Calculus II	4
ENGL 102-EC	Freshman Composition II	3
COSC 150-IM	Comp Sci & Data Analysis	3
		15

SOPHOMORE YEAR (FIRST SEMESTER)

PHYS 206	University Physics II (w/ Lab)	5
MATH 243	Calculus III	4
CHEM 110	Gen. Chem. for Engr. Students (w/ Lab)	4
HIST 350-CI	African Diaspora	3
		16

SOPHOMORE YEAR (SECOND SEMESTER)

PHYS 300	Modern Physics	3
PHYS 308	Thermodynamics & Stat. Mechanics	3
MATH 340	Differential Equations	3
PHYS 312	Properties of Materials	3
XXXX-SB	Social & Behavioral Science Core	3
		15

JUNIOR YEAR (FIRST SEMESTER)

PHYS 301	Analytical Mechanics I	3
PHYS 303	Electricity & Magnetism I	3
PHYS 305	Mathematical Physics I	3
ENGR XXX	Engineering Elective #1	3
XXXX-SB	Social & Behavioral Science Core	3
		15

JUNIOR YEAR (SECOND SEMESTER)

PHYS 302	Analytical Mechanics II	3
PHYS 304	Electricity & Magnetism II	3
PHYS 406	Mathematical Physics II	3
PHYS 412	Laboratory Micro Computers	3
PHIL 109-CT	Introduction to Logic	3
		15

SENIOR YEAR (FIRST SEMESTER)

PHYS 401	Optics	3
PHYS 409	Experimental Physics	3
ENGR XXX	Engineering Science	3
ENGR XXX	Engineering Design #1	3
XXXX-AH	Arts & Humanities Core	3
		15

SENIOR YEAR (SECOND SEMESTER)

PHYS 408	Quantum Mechanics I	3
ENGR XXX	Engineering Design #2	3
XXXX	Complementary Studies #1	3
XXXX	Complementary Studies #2	3
XXXX-AH	Arts & Humanities Core	3
		15

TOTAL CREDIT HOURS

122