Program: Engineering Physics  
Major: Engineering Physics - Physics  
Degree: Bachelor of Science (B.S.)  

University Core (Total Listed 42-44)

Specific courses within the University Core are listed on pages 90-91.

• Courses from the major may apply to the areas marked in the University Core.

Written and Oral Communication ................................................. 9

Quantitative Reasoning/Scientific Method ................................. 10-11
• Math................................................................. 3
  Life Science ......................................................... 4
• Physical Science ..................................................... 3-4

Critical Inquiry and Aesthetic Analysis ....................................... 6
Aesthetic Analysis .............................................................. 3
• Critical Inquiry ......................................................... 3

Support Courses ................................................................. 9-19

PHIL 1123 Contemporary Moral Problems
ECON 1103 Introduction to Economics
FMKT 2323 Global Protocol and Diversity (or Foreign Language)

Students majoring in the Engineering Physics program are encouraged to complete the following courses in high school.

One year of High School Algebra II and Trigonometry OR
MATH 1513 College Algebra AND
MATH 1593 Plane Trigonometry OR
MATH 1555 College Algebra and Trigonometry

One year of high school physics OR
PHY 1003 Introduction to Physics

Major Requirements

Engineering Physics - Physics ................................. 95-96

Physics ........................................................................ 23

Required courses:

PHY 2014 Physics for Scientists and Engineers I and Lab
PHY 2114 Physics for Scientists and Engineers II and Lab
PHY 3103 Modern Physics
PHY 3883 Mathematical Physics I
PHY 4003 Mathematical Physics II
*PHY 4163 Analytical Mechanics OR
*ENGR 4183 Electromagnetic Fields II
*PHY 4173 Classical Mechanics OR
*PHY 4203 Quantum Mechanics

Engineering ................................................................. 49

Required courses:

ENGR 1112 Introduction to Engineering and Laboratory
ENGR 1213 Engineering Computing and Laboratory
ENGR 2033 Statics
ENGR 2043 Dynamics
ENGR 2143 Strength of Materials
ENGR 2303 Electrical Science
ENGR 2311 Electrical Science Laboratory
ENGR 3183 Electromagnetic Fields I

American Historical and Political Analysis ................................ 6
American National Government ............................................. 3
American History ............................................................. 3

• Cultural and Language Analysis ....................................... 3-4
Second Language ............................................................ 4
OR
Cultural Analysis ............................................................. 3

• Social and Behavioral Analysis ........................................ 3

Life Skills ....................................................................... 5
Required Health Course .................................................. 2
• Elective Life Skills ....................................................... 3

Mathematics ................................................................. 14-15

Required courses:

MATH 2305 Accelerated Calculus 1 and 2 OR
MATH 2313 Calculus 1 AND
MATH 2323 Calculus 2
MATH 2333 Calculus 3
MATH 2343 Calculus 4
MATH 3103 Differential Equations

Chemistry ....................................................................... 5

Required courses:

CHEM 1315 Chemistry for Engineering and Lab

Physics or Engineering Electives ........................................... 4

Any 3000 or 4000 level PHY or ENGR course with the following exceptions: PHY 3014, PHY 3044, PHY 3054, or PHY 3503.

*Students in the Accelerated BS/MS program in Engineering Physics must enroll in the graduate level versions of this course. Students need only three 5000-level courses as part of the accelerated program.

The number of credits needed to meet degree requirements exceeds 124 hours and will vary according to course selection.

- CONTINUED ON NEXT PAGE -
Program: Engineering Physics - continued
Major: Engineering Physics - Physics
Degree: Bachelor of Science (B.S.)

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Minimum Grade Requirements

1. Average in (a) all college course work, and (b) course work at UCO ................................................................. 2.00

2. A minimum grade of “C” must be earned in all courses in the major to count toward meeting degree requirements.

For other regulations pertaining to graduation, see pages 62-63 of the 2011-2012 catalog.