

BACHELOR OF SCIENCE IN APPLIED PHYSICS - GENERAL

| Code | Title | Credit Hours |
|--|--|--------------|
| Wellness Requirement | | |
| APPH 1040 | Scientific Foundations of Health or APPH 10 The Science of Physical Activity and Health or APPH 10 Flourishing: Strategies for Well-being and Resilience | 2 |
| Institutional Priority | | |
| CS 1301 | Introduction to Computing or CS 1371 Computing for Engineers | 3 |
| Mathematics and Quantitative Skills | | |
| MATH 1552 | Integral Calculus | 4 |
| Political Science and U.S. History | | |
| Choose one of the following: | | 3 |
| HIST 2111 | The United States to 1877 | |
| HIST 2112 | The United States since 1877 | |
| INTA 1200 | American Government in Comparative Perspective | |
| POL 1101 | Government of the United States | |
| PUBP 3000 | American Constitutional Issues | |
| Arts, Humanities, and Ethics | | |
| Any HUM | | 6 |
| Communicating in Writing | | |
| ENGL 1101 | English Composition I | 3 |
| ENGL 1102 | English Composition II | 3 |
| Technology, Mathematics, and Sciences | | |
| PHYS 2211 | Principles of Physics I ¹ | 4 |
| PHYS 2212 | Principles of Physics II ⁵ | 4 |
| MATH 1551 | Differential Calculus | 2 |
| MATH 1553 | Introduction to Linear Algebra or MATH 1554 Linear Algebra or MATH 1554 Linear Algebra with Abstract Vector Spaces | 2 |
| Social Sciences | | |
| Any SS | | 9 |
| Field of Study | | |
| MATH 2551 | Multivariable Calculus | 4 |
| MATH 2552 | Differential Equations | 4 |
| CHEM 1310 | Principles of General Chemistry for Engineers or CHEM 1201 Chemical Principles I | 4 |
| PHYS 2213 | Introduction to Modern Physics | 3 |
| Any PHYS 2XXX not specified or MATH 2106 | | 3 |
| Upper-Level Physics | | |
| PHYS 3120 | Computational Physics | 3 |
| PHYS 3122 | Electrostatics and Magnetostatics | 3 |
| PHYS 3123 | Electrodynamics | 3 |
| PHYS 3141 | Thermodynamics | 3 |
| PHYS 3143 | Quantum Mechanics I | 3 |
| PHYS 3201 | Classical Mechanics I | 3 |
| PHYS 3208 | Modern Optics Laboratory | 3 |

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| PHYS 3209 | Electronics I | 3 |
| PHYS 4321 | Advanced Laboratory I | 3 |
| PHYS 4604 | Professional Development | 1 |
| PHYS 4605 | Scientific Communication | 1 |

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|--|--|------------|
| Physics or Technical Electives | | |
| Any PHYS or Technical Electives ^{2,3,4} | | 15 |
| Free Electives | | |
| Free Electives | | 15 |
| Total Credit Hours | | 122 |

Student must have 2.0 in all PHYS classes 3000-level or higher

Pass-fail only allowed for Free Electives.

¹ If PHYS 2231 is taken, extra hour goes towards Physics or Technical Electives

² Any PHYS course, CHEM 3411, CHEM 3412, CHEM 3511, EAS 2750, EAS 4300, EAS 4430, MATH 2106, MATH 3215, MATH 3235, MATH 4320, MATH 4347, MATH 4348, MATH 4581, NRE 3301, NRE 4610

³ Maximum of six credit hours below 3000-level

⁴ Maximum of nine credit hours of PHYS 2699 or PHYS 4699

⁵ If PHYS 2232 is taken, extra hour goes toward Physics Electives