# APPLIED PHYSICS OPTION

This option is offered within the following major(s):

- Physics - College of Science (http://catalog.oregonstate.edu/college-departments/science/physics/physics-ba-bs-hba-hbs)

## Code | Title | Hours
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MTH 251 | *DIFFERENTIAL CALCULUS | 4
MTH 252 | INTEGRAL CALCULUS | 4
MTH 253 | INFINITE SERIES AND SEQUENCES | 4
or MTH 306 | MATRIX AND POWER SERIES METHODS | 4
MTH 254 | VECTOR CALCULUS I | 4
MTH 255 | VECTOR CALCULUS II | 4
MTH 256 | APPLIED DIFFERENTIAL EQUATIONS | 4
MTH 341 | LINEAR ALGEBRA I | 3
Chemistry
CH 231 & CH 261 | GENERAL CHEMISTRY and *LABORATORY FOR CHEMISTRY 231 | 5
CH 232 & CH 262 | GENERAL CHEMISTRY and *LABORATORY FOR CHEMISTRY 232 | 5
CH 233 & CH 263 | GENERAL CHEMISTRY and *LABORATORY FOR CHEMISTRY 233 | 5
Physics Core
PH 211 & PH 221 | *GENERAL PHYSICS WITH CALCULUS and RECITATION FOR PHYSICS 211 | 5
PH 212 & PH 222 | *GENERAL PHYSICS WITH CALCULUS and RECITATION FOR PHYSICS 212 | 5
PH 213 & PH 223 | *GENERAL PHYSICS WITH CALCULUS and RECITATION FOR PHYSICS 213 | 5
PH 315 | PHYSICS OF CONTEMPORARY CHALLENGES | 3
PH 335 | TECHNIQUES OF THEORETICAL MECHANICS | 3
PH 365 & PH 366 & PH 367 | COMPUTATIONAL PHYSICS LAB and COMPUTATIONAL PHYSICS LAB and COMPUTATIONAL PHYSICS LAB | 3
PH 411 | ELECTRONICS | 3
PH 422 | PARADIGMS IN PHYSICS: STATIC FIELDS | 3
PH 423 | PARADIGMS IN PHYSICS: ENERGY AND ENTROPY | 3
PH 424 | PARADIGMS IN PHYSICS: OSCILLATIONS AND WAVES | 3
PH 425 | PARADIGMS IN PHYSICS: QUANTUM FUNDAMENTALS | 3
PH 426 | PARADIGMS IN PHYSICS: CENTRAL FORCES | 3
PH 427 | PARADIGMS IN PHYSICS: PERIODIC SYSTEMS | 3
Senior-level Physics
PH 401 | RESEARCH | 3
PH 403 | *THESIS | 3
Select two of the following: 6
PH 431 | CAPSTONES IN PHYSICS: ELECTROMAGNETISM | 3
PH 441 | CAPSTONES IN PHYSICS: THERMAL AND STATISTICAL PHYSICS | 3
PH 451 | CAPSTONES IN PHYSICS: QUANTUM MECHANICS | 3
Applied Physics Electives

Select 15 credits

Total Hours 114

1. 15 credits of approved upper-division courses in physics or engineering at the 400 level or beyond, including at least one laboratory course, which form a coherent set. At least 8 of these credits must be in engineering.

* Baccalaureate Core Course (BCC)
^ Writing Intensive Course (WIC)

Option Code: 589