

Physics B.A. Curriculum for Students Entering from 2015

MCS First Year Core

These introductory courses must be completed during the first year, with the exception that one of the first two courses may be delayed.

- 03-121: Modern Biology
- 09-105: Introduction to Modern Chemistry I
- 21-120: Differential and Integral Calculus
- 21-122: Integration, Diff. Eq., and Approx.
- 38-101: EUREKA: Discovery & Its Impact
- 76-101: Interpretation and Argument
- 99-101 / -102 / -103: Computing @ CMU

MCS Upperclass Core

These courses provide non-technical breadth, both in and out of the classroom. Permissible electives are listed in the MCS course catalog.

- 38-110: Engage in Service
- 38-220: Engage in the Arts
- 38-230: Engage in Wellness: Inward
- 38-301: MCS Junior Seminar
- 38-330: Engage in Wellness: Outward
- 38-430: Engage in Wellness: Forward
- Cultural/Global Understanding Elective
- Non-Technical Elective
- Non-Technical Elective
- Non-Technical Elective
- Non-Technical Elective

Physics Core

All Physics majors take these Physics and Mathematics courses to prepare for individualized tracks of study, including four colloquium courses.

- 33-121: Physics I for Science Students
33-151: Matter and Interactions I
- 33-142: Physics II for Eng. or Physics
33-152: Matter and Interactions II
- 33-104: Experimental Physics
- 15-110: Principles of Computing
15-112: Fund. of Computing & CS
- 33-201: Physics Sophomore Colloquium I
- 33-211: Physics III: Modern Essentials
- 33-231: Physical Analysis
- 33-202: Physics Sophomore Colloquium II
- 33-228: Electronics I
- 33-232: Mathematical Methods of Physics
- 33-234: Quantum Physics
- 21-259: Calculus in Three Dimensions
- 33-301: Physics Upperclass Colloquium I
- 33-331: Physical Mechanics I
- 33-338: Int. Electricity and Magnetism I
- 33-341: Thermal Physics I
- 33-302: Physics Upperclass Colloquium II
- 33-340: Modern Physics Laboratory

Physics and Free Electives

Compared to the B.S., the B.A. replaces 6 Physics, Mathematics, and Technical Electives with Free Electives, allowing intensive study outside STEM.

- Qualifying Physics Elective
- Qualifying Physics Elective
- Free Elective
- Free Elective
- Free Elective
- Free Elective
- Free Elective
- Free Elective
- Free Elective
- Free Elective
- Free Elective

Note: Free electives are to satisfy the 360 unit requirement.

Key

- : Required Course
- : Select One Course
- : Any Course