

Physics, B.S.

303-556-2454 North Classroom 3123

Catalog 12

This sheet applies to the 2012 (1hr)3 catalog *only*. It does not replace the full catalog or departmental advising sheets as official statements of requirements. Students with declared majors *must* work with a faculty advisor on course selection and sequencing to ensure a timely graduation.

General Studies	38-41 hrs	
Major courses	41	
Required ancillary courses	16	
Minor courses	18 min	
Electives	4-7 hours	
Total to graduate (min. 40 hrs upper division)	120 min	

Students who have reached junior standing (60 hrs) should request a CAPP (graduation compliance report) and review it with a faculty advisor.

***TO BE COMPLETED WITHIN FIRST 30 COLLEGE-LEVEL CREDIT HOURS**

Written Communication

- ___ ENG 1010 (3 hrs) Freshman English: The Essay*
 or ENG 1008/1009 (6 hrs.) Freshman Comp: The Essay Part I & II*
 ___ ENG 1020 (3 hrs) Freshman English: Anal., Rsrch. & Docum.
 (must be completed within 45 credit hours)

Quantitative Literacy*

- ___ MTH 1110 (4 hrs) or higher-level math

Oral Communication*

- ___ (3 hrs)

Arts and Humanities

- ___ (3 hrs)
 ___ (3 hrs)

Historical

- ___ (3 hrs)

Natural and Physical Sciences May not be PHY courses

- ___ CHE 1800 (4 hrs) *Recommended - see Physics Advisor*
 ___ CHE 1810 (4 hrs) + CHE 1850 (2hrs) *Recommended - see Physics Advisor*

Social and Behavioral Sciences I

- ___ (3 hrs)

Social and Behavioral Sciences II

- ___ (3 hrs)

Global Diversity may be satisfied within General Studies. May not be a PHY course.

- ___ (3 hrs)

- ___ **Multicultural Requirement** may be satisfied in Gen Studies, major, minor, or electives

MAJOR COURSES (Please see a Physics Faculty Advisor)

- ___ * PHY 2311 (4hrs) General Physics I
- ___ * PHY 2321 (1hr) General Physics I Lab
- ___ * PHY 2331 (4hrs) General Physics II
- ___ * PHY 2341 (1hr) General Physics II Lab
- ___ PHY 2711 (3hrs) Vibrations and Waves
- ___ PHY 2811 (4hrs) Modern Physics I
- ___ PHY 3011 (3hrs) Modern Physics II
- ___ PHY 3211 (4hrs) Analytical Mechanics
- ___ PHY 3411 (3hrs) Thermal Physics
- ___ PHY 3711 (2hrs) Physics Lab I
- ___ PHY 3811 (3hrs) Quantum Mechanics I
- ___ PHY 4331 (4hrs) Electricity and Magnetism
- ___ PHY 4611 (2hrs) Computational Physics I
- ___ PHY 4711 (2hrs) Advanced Physics I Lab
- ___ PHY 4921 (1hr) Physics Senior Seminar (Senior Experience)

*The following courses may be taken in substitution with the consent of the Physics department: PHY 2010 (4hrs), PHY 2020 (4hrs), PHY2030 (1hr), and PHY2040 (1hr).

NOTE: Most of the above courses have math prerequisites. Check prerequisites in the current MSU Denver catalog before registering for the above courses.

Required Ancillary Courses: *See catalog.mscd.edu for course prerequisites*

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| ___ MTH 1410 (4hrs) Calculus I | ___ MTH 2420 (4hrs) Calculus III |
| ___ MTH 2410 (4hrs) Calculus II | ___ MTH 3420 (4hrs) Differential Equations |

NOTES: C- or better required in all courses in the program. Students are encouraged by the Physics department to complete one year of general chemistry and one year of electronics. See Physics faculty advisor for details.

MINOR (required)

ELECTIVES