

UNIVERSITY OF MISSOURI-ST. LOUIS
AND
SOUTHWESTERN ILLINOIS COLLEGE

ASSOCIATE IN SCIENCE LEADING TO BACHELOR OF SCIENCE IN

PHYSICS (General Physics Option)

FIRST SEMESTER

SWIC

ENG 101 Rhetoric & Comp I (3) *Approved Elective*
 *MATH 203 An Geo & Calc I (5) *Math 1800*
 Social Science (3) *Gen Ed*
 Humanities (3) *Gen Ed*
 SPCH 151 Fund of Pub Speak (3) *Com 1040*

Hours: (17)

UMSL Equiv.

SECOND SEMESTER

SWIC

ENG 102 Rhetoric & Comp II (3) *Eng 1100*
 HLTH 151 Health (2)
 MATH 204 An Geo & Calc II (4) *Math 1900*
 PHYS 204 Engin. Phys (Mech) (4) *Phys 2111*
 POLS 150 Intro to Americ Gov (3) *Pol Sci 1100*

Hours: (16)

UMSL Equiv.

THIRD SEMESTER

SWIC

PHYS 205 Engineering Phys II (4) *Phys 2112*
 MATH 205 An Geo & Calc III (4) *Math 2000*
 Humanities (fine arts) (3) *Gen Ed*
 MATH 170 Computer Science (4) *CS 1250*

Hours: (15)

UMSL Equiv.

FOURTH SEMESTER

SWIC

CHEM 105 General Chem I (5) *Chem 1111*
 Soc Science/Non-west Culture (3) *Gen Ed/CD*
 Humanities (general) (3) *Gen Ed*
 Life Science (4) *Gen Ed*

Hours: (15)

UMSL Equiv.

FIFTH SEMESTER

UMSL

ENG 3100 Advanced Expository Writing (3)
 PHYS 1099 Windows on Physics (1)
 PHYS 3200 Mathemat. Method of Theoretical Phys (3)
 PHYS 3231 Introduction to Modern Physics (3)
 CHEM 1121 General Chemistry II (5)
 MATH 2020 Differential Equations (3)

Hours: (18)

SIXTH SEMESTER

UMSL

PHYS 3221 Mechanics (3)
 PHYS 3223 Electricity & Magnetism (3)
 MATH 2450 Elementary Linear Algebra (3)
 Mathematics or CS Elective (3)
 ASTRON 1050 or 1051 (3)

Hours: (15)

SEVENTH SEMESTER

UMSL

PHYS 4331 Introduction to Quantum Mechanics (3)
 PHYS 4310 Modern Electronics (3)
 **Physics Elective (3)
 MATH 4030 Applied Mathematics **or**
 MATH 4230 Numerical Analysis I (3)

Hours: (12)

EIGHTH SEMESTER

UMSL

PHYS 4341 Thermal & Statistical Physics (3)
 PHYS 4311 Advanced Lab (3)
 PHYS 4323 Modern Optics (3)
 **Physics Electives (6)

Hours: (15)

NOTE: See back of page for additional information.

DEGREE NOTES:

* Students begin their Math Sequence based on results of SWIC Math Placement Test.

** Courses to be selected in consultation with student's UM- St. Louis faculty advisor.

Minimum of 120 hours required for the BS in Physics

Students completing an AA/AS degree from SWIC that includes the IAI approved general education core will be allowed transfer credit of more than 64 hours only if the additional lower division credits are applicable to the baccalaureate degree or are prerequisites for upper division courses in the major.

Maximum of 60 hours may transfer without AA/AS degrees

Please seek advisement from your SWIC Counselor for assurance of completion of the Associate Degree

Students living in the Illinois counties of Madison, Monroe, St. Clair, and Jersey are eligible for the in-state tuition rate.

CONTACT INFORMATION:

NOTE: IT IS IMPORTANT TO CONTACT THE UM-ST. LOUIS TRANSFER COORDINATOR EACH SEMESTER

Maya Scruggs, UM-St. Louis Transfer Coordinator, 225 MSC, 314-516-5873 or mms966@umsl.edu

For additional information, contact Ta Pai Cheng in the UM-St. Louis Physics Department, 503J Benton Hall, 314-516-5931 or tpcheng@umsl.edu.