This Guide is intended for the use of students who plan on transferring from St. Charles Community College (SCCC) with a completed Associate of Arts to the University of Missouri – St. Louis (UMSL) to pursue a Bachelor of Science in Physics.

The Bachelor of Science in Physics degree offers emphasis options in the following areas: General Physics, Astrophysics, Biophysics, and Engineering Physics. Unless specified below, the courses recommended in this guide will be applicable to all of these emphases. For more information on UMSL’s Bachelor of Science in Physics, please visit our online Course Catalog.

The following are the requirements of the SCC Associate of Arts degree program as they are recommended for students intending to continue on into UMSL’s Bachelor of Science in Physics. Completing these requirements as they are recommended here will maximize the transferability of a student’s coursework toward their UMSL Bachelors degree. Further details of this Associates degree program, as well as comprehensive lists of courses that satisfy each General Education component, may be found within the SCC course catalog or may be obtained through a SCC advisor.

This guide is intended for use under advisement of a SCC Academic Advisor or UMSL Transfer Specialist and is not considered to be substitution of such advisement.

GENERAL EDUCATION – CORE 42

Communications – Written & Oral 9 hours required
- ENG 101 English Composition I (MOTR ENGL 100) (3)
- ENG 102 English Composition II (MOTR ENGL 200) (3)
- COM 101 Oral Communication (MOTR COMM 100) (3)

Mathematical Sciences 3 hours required
- MAT 171 Pre-Calculus Mathematics (MOTR MATH 150) (6)

Social and Behavioral Sciences 9 hours required
- Complete 1 of the following courses (Civics Requirement)
  - HIS 101 U.S. History to 1877 (MOTR HIST 101) (3)
  - HIS 102 U.S. History since 1877 (MOTR HIST 102) (3)
  - POL 101 American Government (MOTR POSC 101) (3)
- Complete 2 additional courses in Social and Behavioral Sciences from MOTR list

The information in this Transfer Guide is in accordance with the published 2020-2021 Course Catalogs of both UMSL and SCCC.
ASSOCIATE OF ARTS
TO A
BACHELOR OF SCIENCE IN PHYSICS

Humanities and Fine Arts  9 hours required
☐ PHL 201 World Religions (MOTR RELG 100) (3) *fulfills UMSL’s cultural diversity requirement
☐ Complete 2 additional courses in Humanities and Fine Arts from MOTR list

Life and Physical Sciences  7 hours minimum required, must include 1 lab
☐ CHM 115 General Chemistry I (MOTR CHEM 150L) (5)
☐ PHY 250 Engineering Physics I (MOTR PHYS 200L) (5)

CORE 42 ELECTIVE(S) (MOTR COURSES TO REACH 42 CREDIT HOURS
*None if guide is followed

REQUIRED ELECTIVES for AA-General Transfer Studies (60 hours minimum)
☐ CHM 116 General Chemistry II (5)
☐ MAT 180 Calculus and Analytic Geometry I (5)
☐ MAT 230 Calculus and Analytic Geometry II (5)
☐ MAT 240 Calculus and Analytic Geometry III (5)
☐ MAT 250 Differential Equations (3)
☐ PHY 251 Engineering Physics II (5)

Declaring the Physics Major at UMSL
**Students seeking to major in physics are first designated as ‘pre-physics majors’ until they have completed both PHYSICS 2111 and PHYSICS 2112 or equivalent courses. Upon successful completion of PHYSICS 2111 and PHYSICS 2112 with grades of C- or better, students will be allowed to declare physics as their major. Each of these courses must be completed successfully within two attempts.

For questions about this Transfer Guide, please contact the Office of Admissions at 314-516-5451

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