

**ASSOCIATE IN SCIENCE  
TO A  
BACHELOR OF SCIENCE IN MATHEMATICS**



**UNIVERSITY OF MISSOURI – ST. LOUIS &  
SOUTHWESTERN ILLINOIS COLLEGE  
TRANSFER GUIDE**



This Guide is intended for the use of students who plan on transferring from Southwestern Illinois College (SWIC) with a completed Associate in Science to the University of Missouri – St. Louis (UMSL) to pursue a Bachelor of Science in Mathematics.

For more information on UMSL's Bachelor of Science in Mathematics, please visit our online [Course Catalog](#).

The following are the requirements of the SWIC Associate in Science degree program as they are recommended for students intending to continue on into UMSL's Bachelor of Science in Mathematics. 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 SWIC course catalog or may be obtained through a SWIC advisor.

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

**Communications                    9 Hours**

- ENG 101 Rhetoric & Composition I (3)
- ENG 102 Rhetoric & Composition II (3)
- SPCH 151 Fundamentals of Public Speaking (3)

1 Course of the following Humanities and Behavioral Science Courses must be selected to also satisfy both SWIC's Non-Western Culture requirement and UMSL's Cultural Diversity requirement chosen from:

- |  |                                     |
|--|-------------------------------------|
| ANTH 150 Cultural Anthropology (3)       | MUS 110 World Music (3)             |
| LIT 205 Lit of Non-Western Countries (3) | PHIL 155 Non-Western Philosophy (3) |

**General Humanities            3 Hours**

- Complete 1 course in General Humanities: \_\_\_\_\_

**Humanities - Fine Arts        3 Hours**

- Complete 1 course in Humanities - Fine Arts: \_\_\_\_\_

**Social Science                    3 Hours**

- ECON 201 Principles of Economics I (Macro) (3)

**Behavioral Science            3 Hours**

- Complete 1 course in Behavioral Science: \_\_\_\_\_

**Mathematics                    10 Hours**

- MATH 203 Analytic Geometry & Calculus I (5)
- MATH 204 Analytic Geometry & Calculus II (5)

**Life Science                    4 Hours**

- BIOL 108 General Ecology (4)

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**Physical Science 4-5 Hours**

- Complete 1 of the following courses:
  - CHEM 105 General Chemistry I (5)
  - PHYS 204 Physics - Mechanics (4)

**Additional Science 4-5 Hours**

- Complete 1 of the following courses:
  - CHEM 106 General Chemistry II (5)
  - PHYS 205 Physics - Heat, Elec & Magnetism (4)

**Additional Math or Science 5 Hours**

- MATH 205 Analytic Geometry & Calculus III (5)**

**Human Well-Being 2 Hours**

- HRO 150 Fundamentals of Nutrition (2)

**Electives 13-14 Hours**

A student must complete enough Elective Coursework to reach 64 Total Hours:

- MATH 112 College Algebra (4)
- MATH 114 Trigonometry (3)
- MATH 290 Differential Equations (3)**
- Complete 1 of the following courses:**
  - CIS 250 C++ Programming I (3)
  - MATH 170 Computer Science I - C++ (4)
  - MATH 210 Computer Programming for Engineers (3)

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Students that plan to transfer to UMSL to pursue a Bachelor of Science in Mathematics but do not wish to complete an Associates degree at SWIC should focus on completing the **Highlighted Courses** above in conjunction with those outlined in the [SWIC General Education Transfer Guide](#).

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For any questions regarding this guide please contact the UMSL Office of Transfer Services at (314) 516-5162.