

FOCUS AREA: COMPUTER SCIENCE

This focus area is intended for students who plan to major in Computer Science at a 4 year college or university, after completion of their associate's degree at St. Louis Community College. Your official degree that you will be pursuing at St. Louis Community College within this focus area is the Associate in Science - General STEM Transfer Studies (<https://catalog.stlcc.edu/programs/general-stem-transfer-studies-associate-science/#programrequirements>).

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Information on who is eligible for a waiver can be found on the STLCC website (<https://stlcc.edu/programs-academics/missouri-civics-exam.aspx>).

PLEASE NOTE: If you originally enrolled at STLCC prior to Fall 2024, you may need to view an archived catalog (<https://www.stlcc.edu/programs-academics/course-catalog/>) for your correct program requirements. Please speak with an advisor or the program coordinator for more information.

| Code | Title | Hours | Prerequisites | Milestones/Notes |
|-----------------------------|---|-----------|---|--|
| First Year | | | | |
| Fall | | | | |
| ENG 101 or 102 or 103 | College Composition I (MOTR ENGL 100) or College Composition II (MOTR ENGL 200) or Report Writing (MOTR ENGL 110) | 3 | Placement score or ENG 030 or ENG 070 with a grade of "C" or better or recommendation of department and Reading Proficiency or concurrent enrollment in RDG 079 | |
| MTH 210 | Analytic Geometry and Calculus I | 5 | MTH 185 or (MTH 160 or MTH 160S and MTH 170) with grades of "C" or better or satisfactory score on placement test and Reading Proficiency | |
| IS 167 | C++ Programming I | 4 | Reading Proficiency | |
| Elective | | 4 | | Students should review the academic requirements of their preferred 4-year transfer institution to select courses |
| | Credit Hours | 16 | | |
| Spring | | | | |
| Elective | | 4 | | MTH 220 is recommended. |
| Elective | | 4 | | IS 267 is recommended. |
| Elective | | 4 | | Students should review the academic requirements of their preferred 4-year transfer institution to select courses. |
| | Credit Hours | 12 | | |
| Second Year | | | | |
| Fall | | | | |
| Elective | | 5 | | MTH 230 or MTH 212 are recommended. |
| Elective | | 5 | | Students should review the academic requirements of their preferred 4-year transfer institution to select courses. |
| XXX xxx | MOTR Natural Science with Lab (http://catalog.stlcc.edu/general-education/) | 4 | | BIO 111, BIO 140, CHM 105, PHY 111, and PHY 122 are recommended. |
| Elective | | 4 | | Students should review the academic requirements of their preferred 4-year transfer institution to select courses. |
| | Credit Hours | 18 | | |
| Spring | | | | |
| XXX xxx | MOTR Natural Science with Lab (http://catalog.stlcc.edu/general-education/) | 3 | | |

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| Elective | | 4 | | Students should review the academic requirements of their preferred 4-year transfer institution to select courses. |
| Elective | | 4 | | Students should review the academic requirements of their preferred 4-year transfer institution to select courses. |
| XXX xxx | Social & Behavioral Sciences: Civics Requirement (http://catalog.stlcc.edu/general-education/) | | | |
| MCE 100 | Missouri Civics Examination | 0 | | |
| | Credit Hours | 11 | | |
| | Total Credit Hours | 57 | | |

*Click on the hyperlinked course number to view additional information about the course.

**Students completing a course that has been assigned a MOTR number may transfer that course to any public institution in Missouri. Those who complete CORE 42 requirements will have that verification on their transcript.

*** It is your responsibility to verify that the courses listed above will transfer to the four-year institution of your choice. Maximize your transfer credits/classes by meeting with an academic advisor.

This academic plan is a recommended sequence for this pathway. It serves as a **general guideline** to help you build a course schedule each term that supports your timely completion. The College has made every effort to ensure its accuracy. However, **the map is not a substitute for academic advisement —contact your advisor if you have any questions about your degree requirements.**

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complete a civics examination. Information on who is eligible for a waiver can be found on the STLCC website (<https://stlcc.edu/programs-academics/missouri-civics-exam.aspx>).

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| Code | Title | Hours | Prerequisites | Milestones/Notes |
|---------------------------------------|--|-----------|---|---|
| First Year | | | | |
| Fall | | | | |
| ENG 101 | College Composition I (MOTR ENGL 100) | 3 | Placement score or ENG 030 or ENG 070 with a grade of "C" or better or recommendation of department and Reading Proficiency or concurrent enrollment in RDG 079 | This fulfills the written communications requirement. |
| COM 101 or 103 or 107 or 201 | Oral Communication I (MOTR COMM 100) or Small Group Communication (MOTR COMM 125) or Public Speaking (MOTR COMM 110) or Interpersonal Communication (MOTR COMM 120) | 3 | Concurrent enrollment in ENG 070 or Reading Proficiency | This fulfills part of the elective requirement. |
| MTH 210 | Analytic Geometry and Calculus I | 5 | MTH 185 or (MTH 160 or MTH 160S and MTH 170) with grades of "C" or better or satisfactory score on placement test and Reading Proficiency | This fulfills the mathematics requirement. |
| MOTR Foreign Language | | 4 | | This fulfills part of the elective requirement. |
| | Credit Hours | 15 | | |

| Spring | | | | |
|---|--|--------------|---|--|
| ENG 102 | College Composition II (MOTR ENGL 200) | 3 | ENG 101 with a minimum grade of "C" and Reading Proficiency | This fulfills part of the elective requirement. |
| XXX xxx | Social and Behavioral Science MOTR Elective (http://catalog.stlcc.edu/general-education/) | 3 | | This fulfills part of the elective requirement. |
| MTH 220 | Analytic Geometry and Calculus II | 5 | MTH 210 with a grade of "C" or better and Reading Proficiency | This fulfills part of the elective requirement. |
| MOTR Foreign Language | | 4 | | This fulfills part of the elective requirement. |
| Credit Hours | | 15 | | |
| Summer | | | | |
| MCE 100 | Missouri Civics Examination | 0 | | |
| HST 101 or 102 or 137 or 138 or PSC 101 | United States History to 1865 (MOTR HIST 101) or United States History from 1865 to the Present (MOTR HIST 102) or African American History through Reconstruction (MOTR HIST 101AA) or African American History from Reconstruction to the Present (MOTR HIST 102AA) or Introduction to American Politics (MOTR POSC 101) | 3 | Reading Proficiency or concurrent enrollment in RDG 079 | This fulfills the civics requirement. |
| Credit Hours | | 3 | | |
| Second Year | | | | |
| Fall | | | | |
| XXX xxx | MOTR Natural Science Elective | 4-5 | | Science courses must be from two different disciplines. See recommended courses listed below. |
| IS 167 | C++ Programming I | 4 | Reading Proficiency | This fulfills part of the elective requirement. |
| PHL 103 or ENG 231 | World Religions (MOTR RELG 100) or World Literature (MOTR LITR 200) | 3 | Reading Proficiency or concurrent enrollment in RDG 079 | This fulfills part of the elective requirement and satisfies UMSL's cultural diversity requirement. |
| MTH 215 | Linear Algebra | 3 | MTH 210 with a grade of "C" or better and Reading Proficiency | This fulfills part of the elective requirement. Foreign Language courses are required for all Bachelor of Arts degrees at UMSL. If a student intends to major in the Bachelor of Science in Biology, other options could be any MOTR Humanities or COM 107. Check with an advisor for the best option. |
| Credit Hours | | 14-15 | | |
| Spring | | | | |
| XXX xxx | MOTR Natural Science Elective | 4-5 | | Science courses must be from two different disciplines. See recommended courses listed below. |
| IS 267 | C++ Programming II | 4 | IS 167 with a minimum grade of "C" and Reading Proficiency | This fulfills part of the elective requirement. |

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| XXX xxx | MOTR Social and Behavioral Science Elective (http://catalog.stlcc.edu/general-education/) | 3 | | This fulfills part of the elective requirement. |
| Elective | | 3 | | See Advisor for recommendation. |
| | Credit Hours | 14-15 | | |
| | Total Credit Hours | 61-63 | | |

Natural Science Elective

| Code | Title | Credit Hours |
|-----------------------------|--|--------------|
| MOTR BIOL Discipline | | |
| BIO 110 | General Zoology (MOTR BIOL 100LZ) | 4 |
| BIO 111 | Introductory Biology I (MOTR BIOL 100L) | 4 |
| BIO 124 | General Botany I (MOTR BIOL 100LB) | 4 |
| BIO 140 | Principles of Biology I (MOTR BIOL 150L) | 5 |

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|-----------------------------|--|---|
| MOTR CHEM Discipline | | |
| CHM 105 | General Chemistry I (MOTR CHEM 150L) | 5 |
| MOTR PHYS Discipline | | |
| PHY 111 | College Physics I (MOTR PHYS 150L) | 4 |
| PHY 122 | Engineering Physics I (MOTR PHYS 200L) | 5 |
| PSI 125 | Introduction to Atmospheric Science (MOTR PHYS 110LAS) | 4 |

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