FULTON MONTGOMERY COMMUNITY COLLEGE: COMPUTER SCIENCE A.S.
THE COLLEGE OF SAINT ROSE: COMPUTER SCIENCE B.S.

DEGREE REQUIREMENTS

SAINT ROSE REQUIREMENTS:

I. LIBERAL EDUCATION REQUIREMENTS (41 cr.):

L01: Comm. through Reading, Writing, Speaking & Listening (4 cr.)
ENG 105 Expository Writing, Oral Communication & Research Techniques

L02: Study of Language (3 cr.)
Foreign Language, American Sign Language, Linguistics, Or Philosophy of Language

L03: Historical Knowledge, Analysis, and Perspective (3 cr.)
History

L04: Artistic Knowledge and Interpretation: Literature (4 cr.)
Literature

L05: Artistic Knowledge and Interpretation (3 cr.)
Art, Music, Communications, and Drama

L06: Philosophical, Spiritual, or Theological Inquiry (3 cr.)
Philosophy or Religious Studies

L07: Mathematical Reasoning (3 cr.)
Mathematics

L08: Information Technology (3 cr.)
Computers

L09: Scientific Knowledge and Inquiry (4 cr.)
Laboratory Science (Biology, Chemistry, Physics or Earth Science)

L10: Behavioral and Social Sciences 1 (3 cr.)
Economics, Political Science or Business

L11: Behavioral and Social Sciences 2 (3 cr.)
Psychology, Sociology, and Social Work

L12: Wellness and Physical Fitness (2 cr.)
Physical Education

L13: Further Disciplinary Study (3 cr.)
A second liberal education course in a same discipline as a previously taken course.

II. GENERAL ELECTIVES:

FULTON MONTGOMERY EQUIVALENCIES:

ENG 103 English I (3) AND
ENG 104 English II (3)

Foreign Language Elective (3) Note 1

History Elective (3) Note 1

Literature Elective (3) Note 1

Fine Arts Elective (3) Note 1

Philosophy Elective (3) Note 1

MAT 170 Calculus I (4)

CIS 116 Computer Science I (3)

Lab Science Elective (3-4)

Econ., Political Science, or Bus. Elective (3)

PSY 101 Intro to Psychology (3)

Physical Education Elective (2)

MAT 173 Discrete Mathematics (4)

CIS 110 Spreadsheets/Database for Prof (3)
### III. Major Requirements (61 cr.):

#### Major in Computer Science:
- CSC 202 Introduction to C++ (4)
- CSC 252 Problem Solving w/Java (4)
- CSC 302 Data Structures (4)
- CSC 321 Database Management (4)
- CSC 332 Microcomputers Arch. & Programming (3)
- CSC 431 Algorithms (3)
- CSC 432 Operating Systems (3)
- CSC 433 Programming Languages (3)
- CSC 434 Software Engineering (3)
- CSC 3xx-4xx Computer Science Elective (4)
- CSC 3xx-4xx Computer Science Elective (4)
- CSC 3xx-4xx Computer Science Elective (4)
- CSC 3xx-4xx Computer Science Elective (4)
- MAT 190 Calculus 1 (4)
- MAT 191 Calculus 2 (4)
- MAT 184 Elementary Statistics (4)
- MAT 295 Discrete Math Structures (3)

#### Fulton Montgomery Course Equivalencies:
- CIS 116 Computer Science I (3)
- CIS 126 Computer Science II (3)
- CIS 256 Data Structures (3)
- CIS 160 Database Design & Programming (3)
- CIS 240 Hardware Concepts (3)
- CIS 241 Networking Concepts (3)
- CIS 250 Project Management (3)
- MAT 170 Calculus I (4)
- MAT 175 Calculus II (4)
- MAT 125- Statistics (3) **Note 1**
- MAT 173 Discrete Mathematics (4)

### Notes for Fulton Montgomery - The College of Saint Rose Cybersecurity Agreement:

1. 70 is the maximum number of credits allowed for transfer into The College of Saint Rose. All possible electives are listed in this agreement and the student, along with his/her advisor, should select the most appropriate courses to complete his/her degree while not unnecessarily exceeding the number of credits required for the A.S. degree.
2. A letter grade of C- or higher in each course is required for transfer into The College of Saint Rose. Any completed coursework with a grade lower than a C- will not be transferred.
3. This document is valid until the time which either party changes their respective program. At which point review/revision will be required.
4. The College of Saint Rose Transfer Equivalency Database and/or catalog should be consulted to ensure that selected coursework will fulfill the appropriate Liberal Education Requirements as designated by the “L0” next to the course credits.
5. The Transfer Equivalency Database is the most current tool to utilize when determining the transferability of credits into The College of Saint Rose. The Transfer Equivalency Database can be accessed by visiting the link below:

[HTTP://WWW.STROSE.EDU/OFFICESANDRESOURCES/REGISTRAR/TRANSFEREQUIVALENCY](http://www.strose.edu/officesandresources/registrar/transfer equivalency)
Contacts:
The College of Saint Rose:
Rachael French- Associate Director:
Transfer Enrollment & Articulations
(518) 485-3387

SIGNATURES:
The College of Saint Rose

[Signature]
John Avitabile
Department Chair of Computer Science

[Signature]
Ian MacDonald
Interim Dean, School of Math and Science

[Signature]
Steven Ralston
Provost/Vice President for Academic Affairs

Fulton Montgomery Community College:
Andrea Sclibner
Education & Career Planning Specialist
(518) 736-3622 ext. 8161

Fulton Montgomery Community College

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Martin Waffle
Department Chair of Computer Science

[Signature]
Diana Putnam
Dean of Academic Affairs

[Signature]
Greg Truceninger
Provost/Vice President for Academic Affairs

September 2018
**PLEASE KNOW:** This is an **EXAMPLE** of a plan that a student may follow when transferring from FMCC to The College of Saint Rose for a BS in Computer Science. All students must work with advisors at both institutions to ensure satisfactory progress toward the completion of these programs.

<table>
<thead>
<tr>
<th>Year 2 (Fulton Montgomery Community College)</th>
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<tbody>
<tr>
<td>ENG 103: English I (3)</td>
<td>ENG 104: English II (3)</td>
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<tr>
<td>CIS 110: Spreadsheets/Databases for Prof (3)</td>
<td>CIS 126: Computer Science II (3)</td>
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<td>CIS 116: Computer Science I (3)</td>
<td>CIS 160: Database Design &amp; Programming (3)</td>
</tr>
<tr>
<td>MAT 170: Calculus I (4)</td>
<td>CIS 240: Hardware Concepts (3)</td>
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<tr>
<td>History Elective (3)</td>
<td>MAT 171: Calculus II (4)</td>
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<td><strong>TOTAL: 16 sh</strong></td>
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<tr>
<td>CIS 256- Data Structures (3)</td>
<td>CIS 250: Project Management (3)</td>
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<td>CIS 241: Networking Concepts (3)</td>
<td>MAT 173: Discrete Mathematics (4)</td>
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<td>Foreign Language Elective (3)</td>
<td>Literature Elective (3)</td>
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<td>PSY 101: General Psychology (3)</td>
<td>Lab Science Elective (3-4)</td>
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<tr>
<td>Fine Arts Elective (3)</td>
<td>General Education Selection (3)</td>
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<tr>
<td>Physical Education or Wellness Education (1)</td>
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<td><strong>TOTAL: 16 sh</strong></td>
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<tr>
<th>Year 3 (The College of Saint Rose)</th>
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<tr>
<td>Semester 5</td>
<td>Semester 6</td>
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<tr>
<td>CSC 433 Programming Languages (3)</td>
<td>CSC 332: Microcomp Arch. &amp; Prgm (3)</td>
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<td>MAT 184: Elementary Statistics (4)</td>
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<tr>
<th>Year 4 (The College of Saint Rose)</th>
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<tbody>
<tr>
<td>Semester 7</td>
<td>Semester 8</td>
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<tr>
<td>CSC 432: Operating Systems (3)</td>
<td>CSC 434: Software Engineering (3)</td>
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<td>CSC 3xx-4xx: Computer Science Elective (3-4)</td>
<td>General Elective (3)</td>
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<td><strong>TOTAL: 12-13 sh</strong></td>
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**TOTAL CREDITS: 122 sh**

**NOTES**

*General Elective requirement in last semester varies depending on number of credits needed to reach 122 overall. It may be 1-3 credits total.

** CSC Elective will be required to reach 47 credits of CSC coursework overall

Some courses are offered Fall or Spring only, work with an advisor to ensure proper course sequencing