COLUMBIA-GREENE 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: Expository Writing, Oral Communication, Research Techniques (4 cr.)
ENG 105 (4)

L02: Study of Language (3 cr.)
Foreign Language, or American Sign 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: Mathematics (3 cr.)
Mathematics

L08: Computer Science (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.)
Anthropology, Criminal Justice, 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:

MINIMUM TOTAL HOURS REQUIRED: 122

COLUMBIA-GREENE EQUIVALENCIES:

EN 101 Composition (3) Note 1

Foreign Language Elective (3) Note 2

History Elective (3) Note 2

EN 102 Composition & Literature (3) Note 2

Fine Arts Elective (3) Note 2

Philosophy Elective (3) Note 2

MA 111 Pre-calculus (4)

CS 134 Computer Science & Informatics Science I (4)

Science with Lab Note 3

Social Science Elective (3) Note 2

Social Science Elective (3) Note 2

Physical Education Elective (2) Note 2 & 4

MAXIMUM CREDIT HOURS TRANSFERABLE: 62
III. MAJOR REQUIREMENTS (61 cr.):

**Major in Computer Science:**
- CSC 202 Introduction to Programming (4)
- CSC 205 Windows Programming I (4)
- CSC 252 Problem Solving with Java (4)
- CSC 302 Data Structures (4)
- CSC 321 Database Management (4)
- CSC 332 Microcomputer Architecture and Programming (3)
- CSC 431 Algorithms (3)
- CSC 432 Operating Systems (3)
- CSC 433 Programming Languages (3)
- CSC 434 Software Engineering (3)
- MAT 190 Calculus 1 (4)
- MAT 191 Calculus 2 (4)
- MAT 184 Elementary Statistics (4)
- or
- MAT 372 Introduction to Probability Theory (3)
- MAT 220 Foundations of Mathematics (3)
- or
- MAT 295 Discrete Math (3)

**CSC Electives from the following: (12 cr.)**
- CSC 305 Windows Programming 2 (4)
- CSC 311 Computer Graphics (3)
- CSC 317 Forensic Computing (3)
- CSC 342 Artificial Intelligence (3)
- CSC 344 Computer Networks (3)
- CSC 355 Internet Programming 1 (3)
- CSC 404 Animation and Rendering (3)
- CSC 405 Computer Game Design (3)
- CSC 414 Bioinformatics 1 (3)
- CSC 415 Bioinformatics 2 (3)
- CSC 444 Advanced Networking (3)
- CSC 451 Embedded Systems 1 (3)
- CSC 452 Embedded Systems 2 (3)
- CSC 455 Internet Programming 2 (3)
- CSC 453 Programming Mobile Devices (3)
- CSC 460 Search and Information Retrieval (3)

**Notes for Columbia-Greene Community College - The College of Saint Rose Computer Science Agreement:**
1) EN 101 Composition (3) will fulfill the L01 Liberal Education requirement.
2) 62 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. Students are encouraged to use their credits in General Electives at Columbia-Greene Community College to fulfill the 12 liberal education requirements at The College of Saint Rose.
3) To fulfill the L09 Liberal Education requirement, a student must complete a science course WITH a lab.
4) 2 credits in physical education are required to fulfill the L12 Physical Education requirement and 4 credits are the maximum allowed for transfer.
5) The student should use his/her Mathematics Electives at Columbia-Greene Community College to fulfill the mathematics requirements for the major (Calculus I, Calculus II and Statistics).
6) Students at Columbia-Greene CC should choose the computer science courses listed in this agreement as his/her Computer Science Electives, these include: CS 156, 203, 227 and 241.
7) The maximum number of credits allowed for transfer into Saint Rose is 62.
8) 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.
9) This document is valid until the time which either party changes their respective program. At which point review will be required.

* 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 Requirement as designated by the “L0” next to the course credits in the “LIBED” column: http://www.strose.edu/officesandresources/registrar/transfer equivalency
CONTACTS:
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SIGNATURES:
The College of Saint Rose

John Aulicino
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Richard Thompson
Dean, School of Math and Science

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Date
1/13/14

Hadi Salavatibar
Provost/Vice President for Academic Affairs

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Date
1/16/14

Columbia-Greene Community College

Phyllis Carito
Vice President/Dean of Academic Affairs

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Date
12/11/2013

James Campion
President

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