

Liberal Arts and Science – Mathematics/Science (A.S.)

Curriculum Code: 0645

Semester Hours Required for Graduation: 61

PROGRAM GOALS:

This program prepares students for transfer to complete work for a bachelor's degree in mathematics, science, and related fields, such as engineering, medicine, chiropractic, physical therapy, and laboratory technology. Columbia-Greene maintains transfer agreements with many four-year colleges, which may apply to graduates of this program. Students should work closely with their academic advisor to determine an overall course sequence and choice of electives to help ensure articulation with a specific transfer college.

PROGRAM LEARNING OUTCOMES:

- Demonstrate the knowledge and application of technology supporting mathematical and scientific concepts.
- Demonstrate the ability to construct and interpret graphs, tables, and schematics.
- Articulate observations using mathematical and scientific terminology.
- Apply mathematical models and the scientific method to analyze and solve concrete problems.

ACADEMIC PREPARATION:

It is highly recommended that the following criteria be met to begin this program, and it is REQUIRED by the completion of 24 credits:

12th-grade reading level is required. Placement test scores must indicate readiness to begin EN 101-Composition.

Competency in Pre-Algebra or Pre-Statistics is required.

High School Regent's level science courses in Biology, Chemistry and/or Physics are highly recommended.

LIBERAL ARTS REQUIREMENTS

30 Semester Hours

EN 101	Composition	3
EN 102	Composition and Literature	3
HU ELE	Humanities Elective <i>or</i>	
SL ELE	Social Science Elective	3
MA ELE	Mathematics Electives	7
SC ELE	Lab Science Electives	8
SL ELE	Social Science Electives	6

PROGRAM REQUIREMENTS

31 Semester Hours

CE 101	College Experience	1
CI 105	Computer Applications <i>or</i>	
CI 110	Advanced Computer Applications <i>or</i>	
CS 118	Computer & Programming Theory <i>or</i>	
CS 134	Computer and Informatics Science I (4)	3
GN ELE	General Electives	12
MA ELE	Mathematics Electives <i>or</i>	
SC ELE	Lab Science Electives	8
SC ELE	Lab Science Electives	7
Minimum Credits		61

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SUGGESTED PROGRAM SEQUENCE

1st Semester

CE 101	College Experience	1
CI 105	Computer Applications <i>or</i>	
CI 110	Advanced Computer Applications <i>or</i>	
CS 118	Computer & Programming Theory <i>or</i>	
CS 134	Computer and Informatics Science I (4)	3
EN 101	Composition	3
MA ELE	Mathematics Elective	3
SC ELE	Lab Science Elective	4
Total		14

2nd Semester

EN 102	Composition and Literature	3
HU ELE	Humanities Elective	
	<i>or</i>	
SL ELE	Social Science Elective	3
MA ELE	Mathematics Elective	4
SC ELE	Lab Science Elective	4
Total		14

3rd Semester

GN ELE	General Electives	6
SC ELE	Lab Science Elective	3
SL ELE	Social Science Elective	3
MA ELE	Mathematics Elective	
	<i>or</i>	
SC ELE	Lab Science Elective	4
Total		16

4th Semester

GN ELE	General Electives	6
SC ELE	Lab Science Elective	4
SL ELE	Social Science Elective	3
MA ELE	Mathematics Elective	
	<i>or</i>	
SC ELE	Lab Science Elective	4
Total		17

Transfer opportunities include but are not limited to: University at Albany-SUNY, College of Saint Rose, Siena College, SUNY New Paltz, Clarkson University, SUNY Stonybrook, SUNY College of Environmental Science and Forestry, SUNY Plattsburgh, Rensselaer Polytechnic Institute, Albany College of Pharmacy, SUNY Oneonta, SUNY Oswego.