

SCHENECTADY COUNTY COMMUNITY COLLEGE
CURRICULUM WORKSHEET for AA and AS Programs

PROGRAM: MATHEMATICS AND SCIENCE, A.S.

HEGIS # 5649

SCCC Program Code # 78

PROGRAM REQUIREMENTS	CR	SUNY GEN ED CATEGORY*	SATISFIES LIBERAL ARTS AND SCIENCES (YES)**
First Year Seminar	1		
Science Sequence (a)	4	Natural Sciences and Scientific Reasoning	Yes
Science Sequence (a)	4	Natural Sciences and Scientific Reasoning	Yes
ENG 123 College Composition	3	Communication: Written and Oral; Information Literacy	Yes
ENG 124 Literature and Writing	3	Humanities; Critical Thinking and Reasoning	Yes
MAT 180 Calculus I	4	Mathematics and Quantitative Reasoning	Yes
MAT 181 Calculus II	4	Mathematics and Quantitative Reasoning	Yes
MAT Restricted Elective (b)	3-4		Yes
MAT Restricted Elective (b)	3-4		
Restricted Elective (b, c, or d)	3-5		
Restricted Elective (b, c, or d)	3-5		Yes
Diversity: Equity, Inclusion, and Social Justice SUNY General Education Elective	3	Diversity Equity, Inclusion & Social Justice	Yes
Science Elective (c)	4		Yes
Science Elective (c) or CIS Elective (d)	3-4		
CIS Restricted Elective (d)	3-4		
Social Sciences SUNY General Education Elective	3	Social Sciences	Yes
The Arts OR World Languages SUNY General Education Elective	3	The Arts OR World Languages	Yes
Liberal Arts and Science Elective (e)	3-5		Yes
World History SUNY General Education Elective	3	World History and Global Awareness; Humanities; Social Science	Yes
Minimum Credit Hours	60	Total Gen. Ed. Knowledge and Skill Credits: 34	Total LAS Credits:38-48
		Total Gen. Ed. Knowledge and Skill Areas: 8	

*At least 7 distinct knowledge and skill areas are required: Communication, DEISJ, Mathematics, Natural Sciences, and at least 3 more; also required are both core competencies of Critical Thinking and Information Literacy.

**Must add up to at least 30 credits. Additional Comments: Please refer to the footnotes on the reverse side.

MATHEMATICS AND SCIENCE AS

		FIRST YEAR			
Fall Semester		CR	Spring Semester		CR
	Science Sequence (a)	4		Science Sequence(a)	4
ENG 123	College Composition	3	ENG 124	Literature and Writing	3
FYS 100	First Year Seminar	1	MAT 180	Calculus I	4
	Diversity: Equity, Inclusion, and Social Justice	3		The Arts OR World Languages SUNY General Education Elective	3
	MAT Restricted Elective (b)	3-4		Social Science SUNY General Education Elective	3
	CIS Restricted Elective (d)	3-4			
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		TOTAL 17-19		TOTAL 17	

		SECOND YEAR			
Fall Semester		CR	Spring Semester		CR
	Science Elective	4		Science or CIS elective (c or d)	3-4
MAT 181	Calculus II	4			
	Restricted Elective (b, c, or d)	3-5		Restricted Elective (b, c, or d)	3-5
	World History SUNY General Education Elective	3		MAT Restricted Elective(b)	3-4
				Liberal Arts and Science Elective (e)	3
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		TOTAL 14-16		TOTAL 12-16	

Minimum Credit Hours required for degree: 60-70

NOTES:

- (a) **Science Sequence** aligned with SUNY transfer paths:
Math majors should take one sequence of either PHY 221-222 or CHM 121-122 and at least two of MAT 240, MAT 242, MAT 222. MAT 210 might transfer – check with transfer institution.
Physics majors should take PHY 221-222, PHY 223, CHM 121-122 (Students needing MAT 167 in the first fall semester might need to postpone PHY 221 due to the MAT 180 corequisite.)
Chemistry majors should take CHM 121-122 and CHM 228-229, PHY 221-222
- (b) **Mathematics Electives:** MAT 147, MAT 167 (if taken as a prerequisite to MAT 180), MAT 210, MAT 222, MAT 240, MAT 242
- (c) **Math or Lab Science Electives:** Any of (b) above, BIO 141-142, BIO 203, BIO 241, BIO 261, CHM 228-229, PHY 223. (CHM 121, CHM 122, PHY 221, PHY 222 may be taken as science electives if not used as science sequence courses)
- (d) **CIS Electives:** CIS 129, CIS 133, 134, 229, 237, 246. Students taking one of CIS 129, 133, 134, and both of CIS 240 and CIS 249 may qualify for the Computer Repair and Networking Certificate if they also take CIS 110 and CIS 111.
- (e) Students need to consider the transferability of the course to particular colleges.