

Mathematics

This program leads to an A.S. degree in Mathematics. The primary goal of the program is to prepare students for transfer to a baccalaureate program in mathematics. This curriculum provides freshman and sophomore level courses in both continuous and discrete mathematics.

STUDENT LEARNING OUTCOMES:

Upon completion of this program graduates will be able to:

- Communicate mathematical ideas.
- Construct mathematical proofs.
- Analyze and solve mathematical problems.
- Construct recursive procedures to perform complex tasks.
- Learn and apply algorithms.
- Transfer courses to a baccalaureate program in math or science.

PROGRAM ENTRY REQUIREMENTS:

This program is open to interested students who have demonstrated readiness for English 101 and Math 171, either by passing the appropriate placement test or by meeting the prerequisites for the course. Selected math and English courses are available for those not meeting entrance requirements. An educational plan leading to acceptance into the program will be developed for each applicant who does not meet the entrance requirements.

PROGRAM OF STUDY AND GRADUATION REQUIREMENTS:

To qualify for the A.S. degree in Mathematics, students must complete a minimum of 63 credit hours as prescribed and attain a grade point average of 2.0 ("C" average).

Since science requirements vary at transfer institutions, students are advised to check requirements at transfer institutions before choosing science electives.

MATHEMATICS

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
FIRST SEMESTER			
MATH 171 – Calculus I	MATH 162	4	Mathematics, Tech Comp
ENGL 101 – English Composition I		3	ENGL 101
MATH 163 – Discrete Math I	MATH 161	4	Tech Comp
Lab Science Elective		4	Natural Science
SECOND SEMESTER			
MATH 172 – Calculus II	MATH 171	4	Tech Comp
MATH 263 – Discrete Math II	MATH 163	4	Tech Comp
ENGL 102 – English Composition II	ENGL 101	3	ENGL 102, Info Lit
Lab Science Elective		4	Natural Science
THIRD SEMESTER			
MATH 270 – Linear Algebra	MATH 171, 172	4	
CSCI 111 – Programming and Algorithm Development I	MATH 161	4	Tech Comp
Social Science Elective		3	Social Sciences
Lab Science Elective		4	
FOURTH SEMESTER			
MATH 271 – Calculus III	MATH 172, 270	4	
CSCI 112 – Programming and Algorithm Development II	CSCI 111	4	Tech Comp
Humanities Elective		3	Humanities
Social Science Elective		3	
MATH 272 – Differential Equations	MATH 172, 270	4	
MINIMUM CREDITS NEEDED TO GRADUATE		63	

General Education Requirements

All General Education requirements are met through required courses (as indicated above) except for the Writing Intensive requirement, the Interpretive Studies requirement and the American/Global Diversity requirement. Therefore, in order to graduate, students in this program must choose one course that is designated Writing Intensive, one course that is designated Interpretive Studies and one course that is designated American/Global Diversity. The same course may be used to fulfill more than one of these requirements. A list of courses that fulfill these requirements and a more detailed explanation of the College's general education requirements appear elsewhere in this Catalog and on www.ccp.edu.

For More Information Contact:

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