



CAREERS

With an Associate Degree

- Computer Programmer
- Computer Support Specialist
- Mobile Application Developer
- Data Engineer
- Web Developer

With a Bachelor's Degree

- Systems Analyst
- Software Engineer
- Data Scientist
- Machine Learning Engineer

CONTACT INFORMATION

Information Technologies Department

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www.ccm.edu/academics/divdep/bmet/department-of-informationtechnologies/

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WHAT YOU WILL LEARN

Computer Science is a dynamic and exciting field. It provides you with the power to solve today's most pressing problems in fields like healthcare, the environment, education and entertainment. See where Computer Science can take you.

CCM Computer Science students learn how to:

- Design and write a program to solve a problem
- Create a website or other app
- Work with others, lead a team and develop a project plan
- Consider ethical questions regarding technological impacts on society
- Understand the inner-workings of a computer

Our Computer Science program follows industry curriculum standards and is designed to transfer seamlessly to bachelor-level Computer Science programs.

CAREERS

Computer Science is useful for any career or industry that requires technology - which means just about anything. Pair your other interests with Computer Science and use it to get the job of your dreams. The demand for computer scientists with bachelor's degrees is great. For some, working immediately after receiving an associate degree is the goal. With an associate degree you can become a:

- Computer programmer - write and test code general software applications
- Computer support specialist - provide help to computer users and organizations
- Mobile application developer - design and develop code for mobile devices

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- Data engineer - manage the data collected and stored by a business
- Web developer - create interactive websites

The average salary for early-career workers with an associate degree in computer science is \$40,600 per year, with a projected mid-career salary of \$83,700 annually, according to the 2019 PayScale College Salary Report.

If you transfer to a four-year program and receive a bachelor's degree you can become a:

- Systems analyst - plan and design solutions to business problems that use technology
- Software engineer - design software solutions to problems
- Data scientist - collect, clean and process data to analyze situations and make predictions
- Machine learning engineer- create models of a part of our world and train computers to learn about them and predict the future

According to PayScale's 2019 College Salary Report, computer science bachelor degree graduates earned an average early career salary of \$72,300 and a mid-career salary of \$114,700.

WHY STUDY COMPUTER SCIENCE AT CCM

There are many reasons why you should study Computer Science at CCM:

- Seamless transfer to nearby bachelor-level institutions
- Active learning classrooms where you work in teams to solve problems
- Small class sizes so you get individual attention from faculty
- A diverse faculty and student body
- Extra-curricular activities including clubs, conferences, and fun events that allow you to get to know others in your field and learn outside of the classroom
- Faculty with industry experience to give you a real-world understanding of the computing field
- Supportive environment with free tutoring and faculty office hours
- Flexible terms and class schedules that fit into your busy life
- Internship opportunities

WHERE YOU CAN GO

The majority of our Computer Science graduates attend nearby New Jersey public and private institutions including Rutgers, NJIT, Montclair, William Patterson, Ramapo, Fairleigh Dickinson and Stevens Institute of Technology. Other students have recently transferred to out-of-state schools such as University of Maryland, Towson, Rensselaer Polytechnic Institute, Amherst College and Columbia University.

CURRICULUM

GENERAL EDUCATION FOUNDATION (35/36 CR)

COMMUNICATION (6 CR)

English Composition I	ENG 111	3
English Composition II	ENG 112	3

MATH/SCIENCE/TECHNOLOGY (12 CR)

Precalculus	MAT 123	4
Analytic Geometry and Calculus I	MAT 131	4
Analytic Geometry and Calculus II	MAT 132	4

SOCIAL SCIENCE (3 CR)

Choose from General Education list (Social Science)		3
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DIVERSITY (3 CR)

Choose from General Education course list (Diversity)		3
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HUMANITIES (3 CR)

Choose from General Education course list (Humanities)		3
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GENERAL EDUCATION (8/9 CR)

Laboratory Science Sequence		4
Laboratory Science Sequence		4/5

COMPUTER SCIENCE CORE (25 CR)

Computer Science I	CMP 128	3
Computer Science II (Java)	CMP 129	3
Computer Architecture and Assembly Language	CMP 230	3
Data Structures and Algorithms (CS III)	CMP 233	3
Software Engineering	CMP 280	3
Discrete Mathematics	MAT 225	4
CIS ELECTIVES*		6

TOTAL 60

Note: You must see a faculty advisor to plan your sequence of courses. For the most up-to-date listing of courses, see the Curriculum Checklist for this program on the CCM website at www.ccm.edu/checksheets.