Computer Programming, Associate in Applied Science

Many students are not interested in transferability, but rather mobility into the job market, with the career goal of a programmer. This degree strongly emphasizes programming and includes Java, C++ and Visual Basic. These are languages routinely used by computer programmers. Students will be well prepared for entry-level positions in programming or computer operations.

For additional program information, contact department chair, Dr. Otto Hernandez, at (609)343-4978 or herande@atlanticcape.edu.

Upon completion of this program students will be able to:

- Develop computer programming in Visual Basic, C++, Oracle SQL and Java;
- Investigate information systems with respect to their existence and develop needed informational improvements within an organization;
- Perform basic managerial functions such as organizing, staffing, directing, planning and controlling;
- Use a microcomputer for functional and analytical purposes;
- Describe various positions of employment in the informational technology profession;
- Communicate effectively in both written and oral form.

(*CPRO-Fall* 2022)

General Education Courses

When a course is not specified, refer to the list of approved General Education courses.

Communication

Course #	Title	Credits
ENGL101	Composition I	3
ENGL230	Technical Writing	3

Mathematics-Science-Technology

Course #	Title	Credits
	Choose: MATH121-Applications of Mathematics or MATH220-Statistical Methods (4 credits)	4
	General Education Science Course (4 credits)	4
CISM125	Introduction to Computers	3

Humanities

Course #	Title	Credits
	Choose: ARTS108, PHIL102, PHIL105, PHIL110 or PHIL111 (3 credits)	3

Program Requirements

Course #	Title	Credits
CISM130	Using PC Operating Systems	4
CISM135	Computer Programming-C++	4
CISM143	Introduction to Project Management	3
CISM154	Computer Programming-Java	4
CISM159	Intermediate Programming-C++	4
CISM160	Systems Analysis and Design	3
CISM167	Programming in Oracle SQL	3
CISM174	Computer Programming-Visual Basic	4
CISM254	Advanced Computer Programming-Java	4

Program Electives

Choose a Concentration:

(Students are strongly encouraged to meet with their faculty advisor to make a choice)

Computer Programming Concentration

Course #	Title	Credits
	Choose: CISM142-Help Desk Support or CISM162-Microsoft Excel (3 credits)	3
	Choose: CISM270-iPhone Programming or CISM271-Android Programming (4 credits)	4

Database Design and Development Concentration

Course #	Title	Credits
CISM164	Microsoft Access	3
CISM170	Database Design Using Oracle	3
CISM280	Capstone Portfolio	1
	Total Credits	**60**

Recommended Sequence of Courses

Computer Programming Concentration - First Semester

Course #	Title	Credits
CISM125	Introduction to Computers	3
ENGL101	Composition I	3
	Choose: MATH121-Applications of Mathematics or MATH220-Statistical Methods (4 credits)	4
	General Education Science Course (4 credits)	4

Computer Programming Concentration - Second Semester

Course #	Title	Credits
CISM130	Using PC Operating Systems	4
CISM135	Computer Programming-C++	4
CISM154	Computer Programming-Java	4
	Choose: CISM142-Help Desk Support or CISM162-Microsoft Excel (3 credits)	3
	Choose: ARTS108, PHIL102, PHIL105, PHIL110 or PHIL111 (3 credits)	3

Computer Programming Concentration - Third Semester

Course #	Title	Credits
CISM159	Intermediate Programming-C++	4
CISM160	Systems Analysis and Design	3
CISM167	Programming in Oracle SQL	3
CISM254	Advanced Computer Programming-Java	4

Computer Programming Concentration - Fourth Semester

Course #	Title	Credits
CISM143	Introduction to Project Management	3
CISM174	Computer Programming-Visual Basic	4
	Choose: CISM270-iPhone Programming or CISM271-Android Programming (4 credits)	4
ENGL230	Technical Writing	3

Database Design and Development Concentration - First Semester

Course #	Title	Credits
CISM125	Introduction to Computers	3
ENGL101	Composition I	3
	Choose: MATH121-Applications of Mathematics or MATH220-Statistical Methods (4 credits)	4
	General Education Science Course (4 credits)	4

Database Design and Development Concentration - Second Semester

Course #	Title	Credits
CISM130	Using PC Operating Systems	4
CISM135	Computer Programming-C++	4
CISM154	Computer Programming-Java	4
CISM164	Microsoft Access	3
	Choose: ARTS108, PHIL102, PHIL105, PHIL110 or PHIL111 (3 credits)	3

Database Design and Development Concentration - Third Semester

Course #	Title	Credits
CISM159	Intermediate Programming-C++	4
CISM160	Systems Analysis and Design	3
CISM167	Programming in Oracle SQL	3
CISM254	Advanced Computer Programming-Java	4

Database Design and Development Concentration - Fourth Semester

Course #	Title	Credits
CISM143	Introduction to Project Management	3
CISM170	Database Design Using Oracle	3
CISM174	Computer Programming-Visual Basic	4
CISM280	Capstone Portfolio	1
ENGL230	Technical Writing	3