

# Computer Science Transfer Degree

## COMPUTER SCIENCE DEPARTMENT

### Associate in Science (A.S.) Degree

The Computer Science Transfer program leads to the Associate of Science degree and prepares students to transfer to public and private four-year colleges and universities in computer science. Students study topics in computer science such as problem-solving, object-oriented programming using Java, and computer architecture. Calculus, natural science, social science, and humanities are also studied. In the past, many of our students have successfully transferred to the New Jersey Institute of Technology, Rutgers University and other public and private colleges and universities.

#### **What will students learn if they study Science Transfer?**

They concentrate on the theoretical and applied sciences, and mathematics. These studies prepare students to meet the challenges of advanced study in professional careers.

#### **Are there any requirements that must be satisfied before taking courses in my major?**

Algebra I is a prerequisite for all majors. Algebra II competency may be verified with a passing score on the College's placement test. Students must also have a grade of "C" or better in high school algebra II, geometry, laboratory chemistry and one additional year of laboratory science.

#### **Can Computer Science majors transfer to four-year colleges and universities?**

The Statewide Transfer Agreement for New Jersey ensures that students who earn an A.A. or A.S. degree at a community college will have those credits fully transferable to a New Jersey public four-year institution, will have completed half of the credits required for a basic four-year degree and will have completed all of the lower division general education requirements. In addition, articulation agreements with private institutions may provide similar transfer provisions. Students should discuss the transfer process with an advisor.

#### **How long will it take to complete this degree?**

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

#### **Questions?**

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## COMPUTER SCIENCE TRANSFER

### Associate in Science (A.S.) Degree - CSC.AS

*Below are required courses and recommended course groupings and sequences for program completion.  
Courses may have prerequisite and corequisite requirements. Check course descriptions for details.*

Courses	Credits	Requisites / Comments
<i>Semester I</i>		
CSC 161 Introduction to Computer Science Using Java	4	MAT 014 or appropriate score on College's placement test.
ENG 121 English Composition I	3	A passing score on the College's placement test or a grade of "C" or better in ENG 010.
MAT 131 Analytic Geometry and Calculus I	4	MAT 129, or MAT 129A/MAT 129B, or appropriate score on the College's placement test and/or satisfactory score on the diagnostic examination, or departmental approval.
OR		
MAT 131A Analytic Geometry and Calculus I (Part A)	2	MAT 129, or MAT 129A/MAT 129B, or appropriate score on the College's placement test and/or satisfactory core on the diagnostic examination, or departmental approval.
AND		
MAT 131B Analytic Geometry and Calculus I (Part B)	2	MAT 131A
___ ___ General Education Science Elective (GE MST)	4	Students should take science courses designated as general education that are numbered 117 or higher and should take a two-course sequence in the same science.
___ ___ Physical/Health Education Elective	1-3	
<hr/> <i>Semester II</i>		
CSC 162 Object Oriented Programming Using Java	4	CSC 161 and MAT 129 or MAT 129A
<b>ENG 122 English Composition II</b>	<b>3</b>	<b>A grade of "C" or better in ENG 121</b>
MAT 132 Analytic Geometry and Calculus II	4	MAT 131, MAT 131A/MAT 131B, or equivalent
___ ___ General Education Science Elective (GE MST)	4	Students should take science courses designated as general education that are numbered 117 or higher and should take a two-course sequence in the same science.
___ ___ <b>Technical Elective</b>	<b>3</b>	<b>CSC 116 or 200 level Computer Science or Science Elective</b>
<hr/> <i>Semester III</i>		
<b>CSC 263 Computer Organization and Architecture I</b>	<b>3</b>	<b>CSC 161</b>
CSC 236 Data Structures in Java	4	CSC 162, MAT 129 or MAT 129B
MAT 206 Introduction to Discrete Math	4	MAT 132 or approval of department chairperson
___ ___ General Education Social Science Elective (GE SS)	3	
<hr/> <i>Semester IV</i>		
<b>CSC 264 Computer Organization and Architecture II</b>	<b>3</b>	<b>CSC 263</b>
MAT 210 Linear Algebra	4	MAT 132
___ ___ General Education Social Science Elective (GE SS)	3	
OR		
___ ___ General Education Humanities Elective (GE HUM)	3	
<b>Total Credits: 61-63</b>		

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