



COMPUTER SCIENCE TRANSFER • Associate in Science

BEDFORD CAMPUS - DAY

✓	COURSE #	COURSE TITLE	CREDITS	PREREQUISITES
_____	CSC 151	Programming I	4	CSC 101 or equivalent programming experience
_____	CSC 156	Linux Fundamentals	3	CSC 101 or NST 165 or CSC 151 or permission of instructor
_____	CSC 201	Computer Organization and Assembly Language	3	CSC 252 or permission of instructor
_____	CSC 252	Programming II	4	CSC 151 or ITC 155
_____	CSC 253	Programming III	3	CSC 252
_____	CSC 257	Data Structures	3	CSC 252, current enrollment in or completion of MAT 190 or higher placement
_____	MAT 185	Precalculus I for Science	4	MAT 100 with grade of C or better or placement by exam
_____	MAT 190	Precalculus II	3	MAT 180 or MAT 185 or MAT 189 with grade of C or better
_____	MAT 250	Discrete Mathematics	3	MAT 190 or placement by exam above MAT 190
_____	MAT 290	Calculus for Science I	4	MAT 185 and MAT 190 with grade of C or better or placement by exam above MAT 190
_____	MAT 291	Calculus for Science II	4	MAT 290 with grade of C or better
_____	PHY 171	Physics for Engineering and Science I	4	Successful completion of or concurrent enrollment in MAT 290
_____	PHY 172	Physics for Engineering and Science II	4	PHY 171, successful completion of or concurrent enrollment in MAT 291
_____	ENG 101	English Composition I	3	C- in ENG 071 or eligible for ENG 101 and placement above or successful completion of ENG 060
_____	ENG 102	English Composition II: An Introduction to Literature	3	ENG 101
_____	_____	Humanities Elective	3	
_____	_____	Behavioral Science Elective	3	
_____	_____	Social Science Elective	3	
_____	_____	General Education* or Approved Elective	<u>3</u>	
			64	

*If math, must be MAT 100 or above

Special Requirement for Computer Science Transfer: MAT 060, MAT 065, MAT 070, MAT 075, MAT 077 and MAT 080 will not satisfy any requirements in this program. It is essential for students to work closely with their academic advisor for proper course sequencing. Additional coursework may be required based on college placement testing.

Program Description:

The Computer Science Transfer Associate in Science degree program provides the technical and general education courses necessary for transfer to bachelor's degree programs in computer science or related disciplines. Programming knowledge and training in problem solving and analysis is stressed.

A considerable amount of hands-on computer experience is incorporated into the curriculum. Academic advisors work closely with students to assist them with course planning in accordance with their intended baccalaureate major and transfer institution.

Career and Transfer Outlook:

Career opportunities are open to students who transfer to a baccalaureate degree-granting institution and complete a bachelor's degree. Upon completion of a baccalaureate degree, students in computer science qualify for positions such as: software engineer, applications engineer, computer engineer, operating system programmer/analyst, programmer and quality assurance engineer.

Helpful Hints:

Students should plan on taking mathematics courses immediately and continue taking math courses until all math requirements are fulfilled. Students who have not had any prior computer programming experience must take Introduction to Computer Science (CSC 101) prior to taking Programming I (CSC 151). Students who place into or below MAT 080 on the college placement tests are encouraged to take Exploring Technology (ITC 100).

Program Outcomes:

Graduates of the Computer Science Transfer program are prepared to:

- Apply fundamental concepts of programming languages and software development to solve a diverse array of problems and recognize these concepts in different languages;
- Communicate clearly, accurately and succinctly through written and verbal means;
- Work effectively with others to design, develop, evaluate and present solutions to business and software engineering problems;
- Analyze a problem, gather appropriate data, and use logic to solve, predict and analyze results for relevance, accuracy and consistency;
- Recognize solution patterns of common problems and apply them to new challenges.