NOVA | Northern Virginia Community College

A.S.
Associate of Science

BUILD YOUR WORLD
IN COMPUTER SCIENCE

NOVA is the Place for CS!

Communicating with computers has become an integral part of our lives. The **Computer Science (CS) A.S. degree** gives you the basic knowledge and skills to understand the structure and process of computers and also sets you up for a successful transfer to a four-year college to pursue a CS Bachelor's degree.

The CS Program

Offers a solid foundation into the science of computing as well as providing valuable insight in determining your area of focus and next steps. With courses like Computer Systems, Problem Solving and Programming, or Data Structures and Analysis of Algorithms, you'll gain the knowledge and exposure to guide your future.

Prepare for the Future

CS professionals are in high demand and essential to just about every modern business model. If a company relies on or produces computer technology, chances are there's an CS professional behind it all. NOVA has a growing list of four-year colleges accepting our CS A.S. degree for transfer. **Build your world in CS at NOVA today.**

A quick guide for students wondering if they should go into Computer Science or Information Technology (IT):
Computer Science is about *creating* - preferable for students who like math, algorithms, and abstraction layers.
IT is about *implementation* - good for students who enjoy more hands-on problem-solving directly with systems.

NOVA|IET
INFORMATION & ENGINEERING TECHNOLOGIES

For more info go to www.nvcc.edu/iet

WE DO **STEM**
SCIENCE • TECHNOLOGY • ENGINEERING • MATH

A.S. Degree Courses
(Associate of Science)

1st Semester — Credits **15**

			Credits
CSC	221	Introduction to Problem Solving and Programming	3
HIS	___	Elective ❶	3
MTH	167	PreCalculus with Trigonometry ❷ ❸	3
ENG	111	College Composition I	3
SDV	100	College Success Skills - **OR** -	
SDV	101	Orientation to (a Specific Discipline)	1

2nd Semester — Credits **14**

			Credits
CSC	222	Object Oriented Programming	4
ENG	112	College Composition II	3
MTH	263	Calculus I	4
___	___	Humanities/Fine Arts Elective ❹	3

3rd Semester — Credits **15**

			Credits
CSC	223	Data Structures and Analysis of Algorithms	4
CSC	208	Introduction to Discrete Structures - **OR** -	
MTH	228	Discrete Mathematics	3
MTH	264	Calculus II ❺	4
___	___	Physical or Life Science Elective w/ Lab ❻	4

4th Semester — Credits **16-18**

			Credits
CSC	205	Computer Organization - **OR** -	
CSC	215	Computer Systems - **OR** -	
MTH	265	Calculus III	3/4
___	___	Humanities/Fine Arts Elective ❹	3
___	___	Physical or Life Science Elective w/Lab ❼	4
___	___	Social/Behavioral Sciences Elective ❽	3
___	___	Technical Elective ❾	3/4

Total Credits: 60-62

❶ Select any HIS course listed under the social/behavioral science courses in General Education Electives. Elective should be selected with advice of a counselor or faculty advisor to meet the requirements of the transfer institution.

❷ If precalculus is needed, begin with MTH 167 (or MTH 161 and MTH 162). If placed out of precalculus, begin with MTH 263 and replace the precalculus credits with two electives from footnote #3 below that total five credits or more.

❸ May choose from the following list: CSC 205, CSC 208, CSC 215, MTH 265, MTH 266, MTH 288, PHY 201 or any science listed on footnote #6 and #7 below. Students should consult a faculty advisor and their transfer institution to select appropriate courses.

❹ See humanities/fine arts courses listed under General Education Electives. Students must choose courses from two of the three areas listed. Credit will not be applied if student takes two courses from the same area. Electives should be selected with advice of a counselor or academic advisor to meet requirements of the transfer institution.

❺ MTH 245 may be used for this requirement if the student's transfer institution requires it.

❻ Physical and life science elective must be selected from the following: BIO 101, CHM 111, PHY 241, GOL 105, or GOL 106.

❼ Physical and life science elective must be selected from the following: BIO 102, CHM 112, PHY 242, GOL 105, or GOL 106.

❽ See social/behavioral science courses listed under General Education Electives. Elective should be selected with advice of a counselor or faculty advisor to meet the requirements of the transfer institution.

❾ Approved technical elective courses: PHY 201, CSC 205, EGR 121, EGR 122, EGR 270, CST 100, CST 110, MTH 265, or MTH 266. Any science listed on footnote #6 and #7 above.

For More Info about NOVA's
Computer Science A.A.S. Degree go to www.nvcc.edu/iet

APPROVED PATHWAY

ADVANCE
A NOVA | MASON PARTNERSHIP