

# INFORMATION TECHNOLOGY, A.S.

**Location(s):** AL, AN, LO, MA, NOL, WO  
**NOVA Code:** 3400

## Purpose

This curriculum is designed for persons who plan to transfer to a four-year college or university to complete a baccalaureate degree program in information technology.

## Transfer Information

Since four-year colleges can vary in their course and GPA requirements, please consult a counselor or academic advisor regarding specific requirements and course selection.

## Recommended Preparation

Satisfactory completion of the following high school units or equivalent:  
 4 units of English; 4 units of mathematics (Algebra I-II, geometry and precalculus); 1 unit of laboratory science; and 1 unit of social studies.

## Two Years

Course	Title	Credits
<b>1st Semester</b>		
ENG 111	College Composition I	3
ITE 152	Introduction to Digital and Information Literacy and Computer Applications	3
MTH 161	PreCalculus I (or Higher) <sup>1</sup>	3
Select one of the following HIS Electives:		3
HIS 101	Western Civilizations Pre-1600 CE	
HIS 102	Western Civilizations Post-1600 CE	
HIS 111	World Civilizations Pre-1500 CE	
HIS 112	World Civilizations Post-1500 CE	
HIS 121	United States History to 1877	
HIS 122	United States History Since 1865	
SDV 101 or SDV 100	Orientation to: (Information Technology) or College Success Skills	1
Social/Behavioral Sciences Elective ( <a href="https://catalog.nvcc.edu/general-education-electives/#ge_soc_beh_sci_elec">https://catalog.nvcc.edu/general-education-electives/#ge_soc_beh_sci_elec</a> ) <sup>2</sup>		3
<b>Credits</b>		<b>16</b>
<b>2nd Semester</b>		
ENG 112	College Composition II	3
MTH 261	Applied Calculus I <sup>1</sup>	3
Technical Elective (p. 1)		3
Technical Elective (p. 1)		3
Technical Elective (p. 1)		3
<b>Credits</b>		<b>15</b>
<b>3rd Semester</b>		
CST 110	Introduction to Human Communication <sup>3</sup>	3
Select one of the following Programming Electives:		4
ITP 120	JAVA Programming I	
ITP 220	Java Programming II	
ITP 132	C++ Programming I	
ITP 150	Python Programming	
Humanities/Fine Arts Elective ( <a href="https://catalog.nvcc.edu/general-education-electives/#ge_hum_fa_elec">https://catalog.nvcc.edu/general-education-electives/#ge_hum_fa_elec</a> ) <sup>4</sup>		3
Physical or Life Science Elective w/Lab ( <a href="https://catalog.nvcc.edu/general-education-electives/#ge_phy_life_sci_elec">https://catalog.nvcc.edu/general-education-electives/#ge_phy_life_sci_elec</a> )		4
<b>Credits</b>		<b>14</b>

### 4th Semester

Humanities/Fine Arts Elective ( <a href="https://catalog.nvcc.edu/general-education-electives/#ge_hum_fa_elec">https://catalog.nvcc.edu/general-education-electives/#ge_hum_fa_elec</a> ) <sup>4</sup>	3
Physical or Life Science Elective w/Lab ( <a href="https://catalog.nvcc.edu/general-education-electives/#ge_phy_life_sci_elec">https://catalog.nvcc.edu/general-education-electives/#ge_phy_life_sci_elec</a> )	4
Social/Behavioral Sciences Elective ( <a href="https://catalog.nvcc.edu/general-education-electives/#ge_soc_beh_sci_elec">https://catalog.nvcc.edu/general-education-electives/#ge_soc_beh_sci_elec</a> ) <sup>2</sup>	3
Technical Elective (p. 1)	3
Technical Elective (p. 1)	3
<b>Credits</b>	<b>16</b>
<b>Total Credits</b>	<b>61</b>

Information Systems Technology programs must have Information Technology (ITD, ITE, ITN, ITP) courses no more than ten years old, as of the first day of the fall semester of the academic year in which they graduate, unless approved by the pathway dean.

- <sup>1</sup> Credit will not be awarded for both MTH 261 Applied Calculus I and MTH 263 Calculus I. Credit will not be awarded for both MTH 262 Applied Calculus II and MTH 264 Calculus II.
- <sup>2</sup> Select a class which is not a History course.
- <sup>3</sup> Students should consult an academic advisor to select the CST appropriate course, CST 100 Principles of Public Speaking, CST 110 Introduction to Human Communication, CST 126 Interpersonal Communication, and CST 229 Intercultural Communication.
- <sup>4</sup> Students must choose courses from two of the following three areas: Fine Arts, Humanities, and Literature. Credit will not be awarded for taking two courses from the same area.

## Technical Electives

Consult with an academic advisor and align elective choices with the intended transfer institution's requirements.

Code	Title	Credits
ACC 211	Principles of Accounting I	3
ACC 212	Principles of Accounting II	3
BUS 100	Introduction to Business	3
BUS 224	Business Statistics	3
ITD 132	Structured Query Language	3
ITD 140	Machine Learning I	3
ITD 145	Applied Data Science Techniques	3
ITD 240	Machine Learning II	3
ITD 245	Advanced Applied Data Science Techniques	3
ITD 256	Advanced Database Management	3
ITE 140	Spreadsheet Software	3
ITE 170	Multimedia Software	3
ITE 221	PC Hardware & O/S Architecture <sup>1</sup>	3
ITN 100	Intro to Telecommunications <sup>1</sup>	3
ITN 101	Introduction to Network Concepts <sup>1</sup>	3
ITN 106	Microcomputer Operating Systems	3
ITN 107	Pers. Computer Hardware & Troubleshooting <sup>1</sup>	3
ITN 170	LINUX System Administration <sup>1</sup>	3
ITN 171	UNIX I <sup>1</sup>	3
ITN 257	Cloud Computing: Infrastructure and Services	3
ITN 260	Network Security Basics	3
ITN 261	Network Attacks, Computer Crime, & Hacking	4
ITN 262	Network Comm, Security & Authentication	4

ITN 266	Network Security Layers	3
MTH 245	Statistics I	3
MTH 262	Applied Calculus II	3

<sup>1</sup> Credit will not be awarded for both ITN 100 Intro to Telecommunications and ITN 101 Introduction to Network Concepts, or ITN 170 LINUX System Administration and ITN 171 UNIX I, or ITE 221 PC Hardware & O/S Architecture and ITN 107 Pers. Computer Hardware & Troubleshooting.