

INFORMATION SCIENCES AND TECHNOLOGY, A.S. (INFORMATION SCIENCES AND TECHNOLOGY)

Begin Campus: World Campus

End Campus: World Campus

Degree Requirements

For the Associate in Science degree in Information Sciences and Technology, a minimum of 60 credits is required:

Requirement	Credits
General Education	21
Electives	0-5
Requirements for the Major	43-47

6-9 of the 21 credits for General Education are included in the Requirements for the Major. For all options, this includes: 3 credits of GQ courses; 3 credits of GWS courses; 0-3 credits of GS courses. (3 credits of GQ courses in Additional Courses includes MATH 21, MATH 22, MATH 110, SCM 200 or STAT 200) and 3 credits of GWS courses including ENGL 15 or CAS 100 which are Prescribed Courses. Students may also overlap 3 credits of GS if they select SRA 111 in Additional Courses for the Major or if they select ECON 102/ECON 104 in the Generalized Business Option Additional Courses.)

Requirements for the Major

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44>).

Common Requirements for the Major (All Options)

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better</i>		
CAS 100	Effective Speech	3
ENGL 15	Rhetoric and Composition	3
IST 140	Introduction to Application Development	3
IST 210	Organization of Data	3
IST 220	Networking and Telecommunications	3
IST 260W	Introduction to Systems Analysis and Design	3
Additional Courses		
ENGL 202C or ENGL 202D	Effective Writing: Technical Writing Effective Writing: Business Writing	3
<i>Additional Courses: Require a grade of C or better</i>		
IST 250 or IST 256	Introduction to Web Design and Development Programming for the Web	3
Select 3 credits from the following: ¹		3
CYBER 100	Computer Systems Literacy	
CYBER 100S	Computer Systems Literacy	

HCDD 113	Foundations of Human-Centered Design and Development	
HCDD 113S	Foundations of Human-Centered Design and Development FYS	
IST 110	Information, People and Technology	
SRA 111	Introduction to Security and Risk Analysis	
Select 1 credit from the following:		1
IST 295A	Distributed Team Project	
IST 295B	IST Internship	
IST 495	Internship	
Select 3-4 credits from the following:		3-4
MATH 21	College Algebra with Analytic Geometry with Applications I	
MATH 22	College Algebra With Analytic Geometry and Applications II	
MATH 26	Plane Trigonometry and Applications of Trigonometry	
MATH 110	Techniques of Calculus I	
MATH 140	Calculus With Analytic Geometry I	
SCM 200	Introduction to Statistics for Business	
STAT 200	Elementary Statistics	

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better

Any first-year seminar course. Students who complete CYBER 100S or HCDD 113S as additional courses do not have to schedule an additional first-year seminar.

Requirements for the Option

Requirements for the Option: Require a grade of C or better

Select an option 12-14

¹ Students planning to complete the Cybersecurity option must select CYBER 100/CYBER 100S. Courses may not double count with option requirements.

Requirements for the Option

Application Development Option (12 credits)

Available at the following campuses: Berks, Greater Allegheny, Hazleton, Mont Alto, Scranton, World Campus, York

Code	Title	Credits
Additional Courses		
<i>Additional Courses: Require a grade of C or better</i>		
Select 12 credits from the following:		12
IST 242	Intermediate & Object-Oriented Application Development	
IST 256	Programming for the Web ¹	
IST 261	Application Development Design Studio I	
IST 311	Object-Oriented Design and Software Applications	
HCDD 264	Design Practice in Human-Centered Design and Development	
or IST 331	Foundations of Human-Centered Design	

¹ IST 256 may count in the major requirements or the option, but may not double count toward both requirements.

Custom Option (12 credits)

Available at the following campuses: Berks, DuBois, Greater Allegheny, Hazleton, Mont Alto, Scranton, Wilkes-Barre, World Campus, York

Code	Title	Credits
Supporting Courses and Related Areas		
Supporting Courses and Related Areas: Require a grade of C or better		
Select 12 credits in consultation with an adviser. All courses are C-		12
required. Examples of specific themes include: Web Development, Psychology, Usability.		

Cybersecurity Option (12 credits)

Available at the following campuses: Berks, Greater Allegheny, Mont Alto, World Campus, York

Code	Title	Credits
Additional Courses		
Additional Courses: Require a grade of C or better		
Select 12 credits from the following:		12
CYBER 262	Cyber-Defense Studio	
IST 242	Intermediate & Object-Oriented Application Development	
SRA 111	Introduction to Security and Risk Analysis	
SRA 211	Threat of Terrorism and Crime	
SRA 221	Overview of Information Security	

¹ Courses may not double count with the major requirements.

Generalized Business Option (12-14 credits)

Available at the following campuses: Berks, DuBois, Greater Allegheny, Mont Alto, Scranton, World Campus, York

Code	Title	Credits
Additional Courses		
Additional Courses: Require a grade of C or better		
Select 12-14 credits from the following:		12-14
ACCTG 211	Financial and Managerial Accounting for Decision Making	
BA 243	Social, Legal, and Ethical Environment of Business	
or BLAW 243	Legal Environment of Business	
or BA 241	Legal Environment of Business	
& BA 242	and Social and Ethical Environment of Business	
BA 301	Finance	
or FIN 301	Corporation Finance	
BA 302	Supply Chains	
or SCM 301	Supply Chain Management	
BA 303	Marketing	
or MKTG 301	Principles of Marketing	
BA 304	Management and Organization	
or MGMT 301	Basic Management Concepts	
ECON 102	Introductory Microeconomic Analysis and Policy	
or ECON 104	Introductory Macroeconomic Analysis and Policy	

Networking Option (12 credits)

Available at the following campuses: DuBois, Mont Alto, World Campus

Code	Title	Credits
Prescribed Courses		
Prescribed Courses: Require a grade of C or better		
IST 225	PC Hardware Basics	3
IST 226	Networking Essentials	3
IST 227	Network Administration	3
IST 228	Advanced Network Administration	3

General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all associate degree students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (<https://bulletins.psu.edu/undergraduate/general-education/associate-degree-general-education-program/>) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

Foundations (grade of C or better is required and Inter-Domain courses do not meet this requirement.)

- Quantification (GQ): 3 credits
- Writing and Speaking (GWS): 3 credits

Knowledge Domains

- Arts (GA): 3 credits
- Humanities (GH): 3 credits
- Social and Behavioral Sciences (GS): 3 credits
- Natural Sciences (GN): 3 credits

Note: Up to six credits of Inter-Domain courses may be used for any Knowledge Domain requirement, but when a course may be used to satisfy more than one requirement, the credits from the course can be counted only once.

Exploration

- Any General Education course (including GHW and Inter-Domain): 3 credits

University Degree Requirements**Cultures Requirement**

3 credits of United States (US) or International (IL) cultures coursework are required and may satisfy other requirements

Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

Total Minimum Credits

A minimum of 60 degree credits must be earned for an associates degree. The requirements for some programs may exceed 60 credits. Students should consult with their college or department adviser for information on specific credit requirements.

Quality of Work

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

Limitations on Source and Time for Credit Acquisition

Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80>)). For more information, check the Suggested Academic Plan for your intended program.