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

**Begin Campus:** Berks

**End Campus:** Berks

## 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** | | |
| *Prescribed Courses: Require a grade of C or better* | | |
| 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 | Effective Writing: Technical Writing | 3 |
| or ENGL 202D | Effective Writing: Business Writing | |
| *Additional Courses: Require a grade of C or better* | | |
| IST 250 | Introduction to Web Design and Development | 3 |
| or IST 256 | Programming for the Web | |
| 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. | | 0-1 |
| **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** | | |
| *Additional Courses: Require a grade of C or better* | | |
| 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-required. Examples of specific themes include: Web Development, Psychology, Usability. | | 12 |

### 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: [1] | | 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 a 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.