

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

Begin Campus: World Campus, University Park

End Campus: World Campus, University Park

Program Description

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

This associate degree major is structured to prepare graduates for immediate and continuing employment opportunities in the broad disciplines of information science and technology. This includes positions such as application programmers, associate systems designers, network managers, web designers and administrators, or information systems support specialists. Specifically, the major is designed to ensure a thorough knowledge of information systems and includes extensive practice using contemporary technologies in the creation, organization, storage, analysis, evaluation, communication, and transmission of information. The major fosters communications, interpersonal, and group interaction skills through appropriate collaborative and active learning projects and experiences. Technical material covers the structure of database systems, web and multimedia systems, and considerations in the design of information systems. Team projects in most courses, a required internship, and a second-year capstone experience provide additional, focused venues for involving students in the cutting-edge issues and technologies in the field.

The Associate of Science in IST degree will be offered at multiple campuses within the Penn State system of colleges and campuses. Note that not all options will be available at all locations.

Baccalaureate Option

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

This option provides maximum articulation with the baccalaureate degree. Students who complete this option will meet all lower division requirements for the baccalaureate degree. This is not the case with the remaining options, although the degree of articulation is quite high for all associate degree options.

Generalized Business Option

Available at the following campuses: Berks, DuBois, Hazleton, Mont Alto, New Kensington, Scranton, University Park, World Campus, York

This option enables students to specialize in the general business areas of accounting, marketing, and management.

Individualized Option

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

This option enables students to work closely with an adviser to develop a plan of study that meets the dual objectives of allowing a flexible academic program and providing breadth of technical specialization. An example would be a program where a student would take some of the courses listed in the Web Administration option and the remainder in the Software option.

Networking Option

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

This option prepares graduates for positions as entry-level computer network administrators. Students take courses in personal computer hardware, networking essentials, and network administration.

Entrance to Major

Students must have a minimum 2.0 GPA to change to this Associate degree after admission to the University.

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	4-7
Requirements for the Major	44-46

9-12 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; 6 credits of GWS courses. The Baccalaureate Option also includes 3 credits of GS courses to equal a total of 12 credits that double count; the General Business Option also includes 0-3 credits of GS courses to equal 9-12 credits that double count.

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 baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (<http://bulletins.psu.edu/undergraduate/general-education/associate-degree-general-education-program/>) section of the Bulletin and consult your academic adviser.

Foundations (grade of C or better is required.)

- 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

Foundations or Knowledge Domains

- A General Education course selected from GWS, GQ, GN, GA, GH, or GS, and may include Integrative Studies (Inter-domain or Linked) courses: 3 credits

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.

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 (<http://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.

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 (<http://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		
CAS 100B	Effective Speech	3
ENGL 15	Rhetoric and Composition	3
<i>Prescribed Courses: Require a grade of C or better</i>		
CMPSC 101	Introduction to Programming	3
IST 110	Information, People and Technology	3
IST 111S	Seminar in Information Sciences and Technology	1
IST 210	Organization of Data	3
IST 220	Networking and Telecommunications	3
IST 250	Introduction to Web Design and Development	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

Additional Courses: Require a grade of C or better

IST 295A	Distributed Team Project	1
or IST 295B	IST Internship	

Requirements for the Option

Select an option 15-17

Requirements for the Option

Baccalaureate Option (17 credits)

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

Code	Title	Credits
Prescribed Courses		
ECON 102	Introductory Microeconomic Analysis and Policy	3
STAT 200	Elementary Statistics	4

Prescribed Courses: Require a grade of C or better

IST 230	Language, Logic, and Discrete Mathematics	6
& IST 240	and Introduction to Computer Languages	

Additional Courses

MATH 110	Techniques of Calculus I	4
or MATH 140	Calculus With Analytic Geometry I	

Generalized Business Option (15-16 credits)

Available at the following campuses: Berks, DuBois, Hazleton, Mont Alto, New Kensington, Scranton, University Park, World Campus, York

Code	Title	Credits
Additional Courses		

Select 15 credits in consultation with the adviser from the following list: 15

ACCTG 151	Introductory Financial Accounting I	
ACCTG 152	Introductory Financial Accounting II	
ACCTG 211	Financial and Managerial Accounting for Decision Making	
BA 250	Small Business Management	
ECON 102	Introductory Microeconomic Analysis and Policy	
or ECON 104	Introductory Macroeconomic Analysis and Policy	
or ECON 14	Principles of Economics	
MATH 21	College Algebra I	
or MATH 22	College Algebra II and Analytic Geometry	
or MATH 26	Plane Trigonometry	
or MATH 37	Finite Mathematics	
MGMT 100	Survey of Management	
MGMT 321	Leadership and Motivation	
MGMT 341	Human Resource Management	
MKTG 220	Introduction to Selling Techniques	
MKTG 221	Contemporary American Marketing	
MKTG 310	Public Relations and Marketing	
MKTG 327	Retailing	

Individualized Option (15 credits)

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

Code	Title	Credits
Supporting Courses and Related Areas		
<i>Supporting Courses and Related Areas: Require a grade of C or better</i>		
	Select 15 credits in consultation with an adviser that follow a coherent theme in information sciences and technology with a grade of C or better required for all IST courses.	15

Networking Option (15 credits)

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

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

Additional Courses

Select one of the following:		3
MATH 21	College Algebra I	
MATH 22	College Algebra II and Analytic Geometry	
MATH 26	Plane Trigonometry	
MATH 37	Finite Mathematics	

Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/>)

University Park

Undergraduate Academic Advising Center

E103 Westgate Building
University Park, PA 16802
814-865-8947
advising@ist.psu.edu

Berks

Tricia Clark

Program Coordinator, Instructor
Gaige 211
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DuBois

Jason Long

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1 College Place
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Hazleton

Barbara Brazon

Assistant Teaching Professor of Information Sciences and Technology
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Mont Alto

Paul Bart

Lecturer, IST
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Scranton

Debra Smarkusky

Associate Professor
212F Dawson
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Wilkes-Barre

Wei-Fan Chen

Program Co-Coordinator, IST
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World Campus

Undergraduate Academic Advising

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advising@outreach.psu.edu

York

William Cantor

Assistant Teaching Professor in IST
226 Grumbacher Building (GISTC)
York, PA 17403
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wpc2@psu.edu

Contact

University Park

COLLEGE OF INFORMATION SCIENCES AND TECHNOLOGY
E397 Westgate Building
University Park, PA 16802

814-865-8947

<https://ist.psu.edu/about/contact> (<https://ist.psu.edu/about/contact/>)

Berks

EBC DIVISION

Gaige Building

Reading, PA 19610

610-396-6349

tkc3@psu.edu

<http://berks.psu.edu/associate-information-sciences-and-technology>
(<http://berks.psu.edu/associate-information-sciences-and-technology/>)

DuBois

1 College Place

DuBois, PA 16823

814-372-3000

jel115@psu.edu

<http://dubois.psu.edu/ist> (<http://dubois.psu.edu/ist/>)

Hazleton

Kostos 117

Hazleton, PA 18202

570-450-3089

bxb30@psu.edu

<http://hazleton.psu.edu/associate-science-information-sciences-technology>
(<http://hazleton.psu.edu/associate-science-information-sciences-technology/>)

Mont Alto

6 Bookstore Building

Mont Alto, PA 17237

717-749-6241

pjb159@psu.edu

<https://montalto.psu.edu/academics/associate/associate-information-sciences-and-technology-degree>
(<https://montalto.psu.edu/academics/associate/associate-information-sciences-and-technology-degree/>)

Scranton

212F Dawson

Dunmore, PA 18512

570-963-2593

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<http://worthingtonscranton.psu.edu/information-sciences-and-technology>
(<http://worthingtonscranton.psu.edu/information-sciences-and-technology/>)

Wilkes-Barre

44 University Drive

Dallas, PA 18612

570-675-9142

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<http://wilkesbarre.psu.edu/academics/ist/associate-degrees>
(<http://wilkesbarre.psu.edu/academics/ist/associate-degrees/>)

World Campus

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E397 Westgate Building

University Park, PA 16802

814-865-8947

<https://ist.psu.edu/about/contact> (<https://ist.psu.edu/about/contact/>)

<https://www.worldcampus.psu.edu/degrees-and-certificates/information-sciences-and-technology-associates/overview>
(<https://www.worldcampus.psu.edu/degrees-and-certificates/information-sciences-and-technology-associates/overview/>)

York

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717-771-4143

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<http://york.psu.edu/academics/baccalaureate/information-sciences-and-technology>
(<http://york.psu.edu/academics/baccalaureate/information-sciences-and-technology/>)