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In today’s global environment, the study of IST is about educating the next generation of leaders in this digital world. By working on real-world problems provided by industry, government, and nongovernment organizations, IST graduates can understand how people, technology, and information unite to respond to and solve problems. Our IST graduates are motivated by the interdependence between the human enterprise and vast flows of information with which they engage, whether they are designing and implementing health care solutions in rural Africa, repairing computers damaged by hurricanes on the U.S. Gulf Coast, or protecting sensitive computer networks from intrusion.

Regardless of your level of experience or education, our goal is to provide you with skills you can immediately use across a variety of fields and industries. As you look to advance your current career or explore new career opportunities, I invite you to consider Penn State’s online degrees and certificate in information sciences and technology.

—Dr. Peter Forster
Executive Director of Online Education
College of Information Sciences and Technology
Penn State’s online information sciences and technology (IST) programs combine IT and management knowledge that can be applied to any industry. You get the high-quality education Penn State is known for, delivered conveniently online so that you can take courses anytime, anywhere—allowing you to continue to meet your personal and professional commitments while gaining knowledge that can be immediately applied to your current job.

- Master of Professional Studies in Information Sciences
- Bachelor of Science in Information Sciences and Technology
- Associate in Science in Information Sciences and Technology
- Certificate in Information Sciences and Technology

The IST portfolio is designed so that most of the credits you earn in the certificate program in IST or the associate degree program in IST can be applied toward the bachelor’s degree program, if you choose to continue your education. Entry into the bachelor’s or associate degree programs, however, is not contingent on completing the certificate. The same holds true for the bachelor’s degree; you are not required to complete the associate degree before enrolling in the bachelor’s degree program.

**Penn State on Your Résumé**

No matter which program you choose, your courses will be taught by Penn State faculty. You will receive the same support as students in our traditional IST programs, and the credentials you earn will be the same as those earned from one of Penn State’s other colleges or campuses.
Master of Professional Studies in Information Sciences

The MPS in IS is an innovative online degree program designed for professionals and organizational leaders who want to take on greater responsibility in managing an organization’s cyber-security by maintaining the confidentiality, integrity, and accessibility of information, efficiently utilizing information to support decision making, and for people who want to transition into a computer information sciences career.

Information Assurance and Decision Support

The MPS in IS combines foundational courses with courses specific to information assurance and decision support (IADS).

Graduates with this option can work in various occupations, including:

- intel analysis
- information assurance engineering
- catastrophe risk analysis
- computer systems security analysis
- information security/digital forensics
- systems integration

The MPS in IS can provide students with a well-rounded background in the foundations of IS, network management and security, and data and knowledge management. Depending on the elective course work you select, you may be able to earn a postbaccalaureate certificate in information systems security while pursuing your MPS degree.
Curriculum—Master of Professional Studies in Information Sciences

This 33-credit degree program can be completed in twenty-four months, or less, on a part-time basis. The online courses are highly interactive and collaborative, allowing you to build strong ties with other students and gain perspectives from other disciplines and industries.

Course Work

In addition to the core courses, there are 12 required credits and 9 elective credits needed to satisfy the requirements for the degree.

Information Assurance and Decision Support courses include:

IST 515—Information Security and Assurance (3 credits)

IST 555—Intelligent Agents and Distributed Decision Making (3 credits)

STAT 897D—Applied Data Mining and Statistical Learning (3 credits)

IST 885—Introduction to Multisensor Data Fusion (3 credits)

Electives for the MPS degree include courses in web security and privacy, and computer and cyber forensics.
As the IT field continues to change and evolve, it takes more than just experience to open doors to new opportunities; it takes a respected education from an accredited university. If you’re serious about moving ahead in your current position, changing fields altogether, and improving your earning potential, getting a bachelor of science degree in IST is a great way to prepare for that next step. And with Penn State on your résumé, you can be confident that employers will give you a second look.

Apply What You Are Learning—Today

The bachelor of science degree program in IST is designed to provide you with the skill set you need for a successful career in the global marketplace. The program can help you enhance your knowledge of core information technologies and prepare you to apply that knowledge in a practical setting. Through a combination of independent study and team projects with fellow students, you can build an understanding of how information technologies are used and how they support organizational functions, project management, teamwork, problem solving, and presentation skills.
Penn State’s 125-credit bachelor of science degree program in IST is designed to prepare you to use information technology to realize a variety of system-based goals (e.g., reliability, accessibility, and efficiency). The degree focuses on helping you to develop the skill set needed for integrating information technology into different systems to maximize and enhance system performance.

**Course Work**

The emphasis is on providing you with the frameworks needed to use information technology as a system attribute as well as a set of application-oriented experiences and skills. The Integration and Application option is more of a balanced blend of technology and people skills.

In addition to program-specific General Education and elective courses, you must complete the following courses to satisfy the requirements for the degree:

**CMPSC 101**—Introduction to C++ Programming (3 credits)

**IST 110**—Information, People, and Technology (3 credits)

**IST 111S**—Seminar in Information Sciences and Technology (1 credit)

**IST 210**—Organization of Data (4 credits)

**IST 220**—Networking and Telecommunications (3 credits)

**IST 230**—Language, Logic, and Discrete Mathematics (3 credits)

**IST 240**—Introduction to Computer Languages (3 credits)

**IST 301**—Information and Organizations (3 credits)

**IST 302**—IT Project Management (3 credits)

**IST 331**—Organization and Design of Information Systems: User and System Principles (3 credits)

**IST 402**—Emerging Issues and Technologies (3 credits)

**IST 420**—Fundamentals of Systems and Enterprise Integration (3 credits)

**IST 421**—Advanced Enterprise Integration: Technologies and Applications (3 credits)

**IST 440W**—Information Sciences and Technology Integration and Problem Solving (3 credits)

**IST 495**—Internship (1 credit)

**STAT 200**—Elementary Statistics (4 credits)
Associate in Science in Information Sciences and Technology

The 60-credit, online associate degree program in IST, designed for working professionals with little or no formal background in IT, can prepare you for positions ranging from computer support specialist and network administrator to application programmer and information systems support specialist. You can also learn to manage others and gain experience in the nontechnical aspects of organizations.

**Course Work**

The major is designed to help you gain 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.

Most of the credits you earn in the associate degree program in IST will also apply to the bachelor’s degree program in IST. Contact an adviser if you have any questions.

**Generalized Business Option**

This option, requiring 15 credits to complete, allows students to specialize in the general business areas of accounting, marketing, and management. It is designed to provide the foundational aspects of the business environment and to prepare graduates for immediate and ongoing employment opportunities or re-entry into the workplace.

**Individualized Option**

The 15-credit individualized option was developed as a way for students to use a variety of courses to meet the degree requirements while providing more specific specialization to meet their professional objectives. Students must work with their academic advisers to make sure the courses they want will apply to the degree.
Certificate in Information Sciences and Technology

This 13-credit online certificate program is designed to prepare you for an entry-level position in IT. You will cover a variety of relevant subjects, including data organization, the networking and telecommunications industries, new media, and how the World Wide Web uses emerging technologies. You can also learn how IT issues relate to broader business strategies.

Course Work

The courses in the certificate program in IST can also be applied toward the requirements for an associate degree in IST.

The following courses are common to all three undergraduate IST programs (for a complete list of course requirements, please check the specific program on the website):

| IST 110 — Information, People, and Technology (3 credits) |
| IST 210 — Organization of Data (4 credits) |
| IST 220 — Networking and Telecommunications (3 credits) |
Why Penn State?

Penn State has been serving students for more than 100 years through distance education and more than 10 years through online learning. We’ve used this experience to develop a nationally recognized support system for students who are geographically removed from campus.

▶ A High-Quality, Renowned Education

Through education, research, and outreach, Penn State responds to the Commonwealth, the nation, and the world’s changing economic and social needs. Our faculty and course designers develop our degrees and certificates specifically for the online adult learner, and you can expect our high-quality courses to fit into your busy schedule, providing immediate value to your career.

▶ A Reputation of Excellence

Penn State is regionally accredited by The Middle States Association of Colleges and Schools, with an outstanding reputation in research and teaching. The credits, transcripts, and diploma that you receive from Penn State’s online programs will be identical to those received from any Penn State campus.

▶ Learner and Technical Support Services

Without having to set foot on campus, you will have access to many of the same support services that residential students enjoy. Course scheduling and registration are available through the World Campus Student Services, and World Campus HelpDesk personnel are available to offer technical support.

▶ Library Services

You will be able to access one of the leading university research libraries in North America—Penn State’s University Libraries system, which holds 5 million volumes and 102,000 serials. You can search the online catalog and review databases as if you were sitting at a terminal in any Penn State library.

www.worldcampus.psu.edu/InfoSci
Begin Your Application Today

To begin taking courses, you need to submit the online application form for the program of your choice. To start the application process, visit www.worldcampus.psu.edu, choose your program of interest, and click on “Apply Now.”

To apply to the certificate, associate degree, or bachelor’s degree programs, you need to:
- complete the World Campus online application form
- be a high school graduate or have completed the GED

To apply to the master’s degree program, you must submit the following:
- a World Campus online application
- a statement of purpose—a personal statement
- letters of recommendation
- official GRE test scores*
- TOEFL or IELTS score (if applicable)
- official transcripts
- current résumé

*GRE requirement may be waived if you have five or more years of relevant work experience.

Note: Applicants to the master’s degree program must have received, from an accredited institution, a baccalaureate degree with requirements substantially equivalent to those at Penn State.

For more information about admission requirements, please visit the respective program website.

Did you know?

- Penn State credits and degrees earned online are identical to those earned on campus.
- Penn State World Campus has enrolled students from all fifty states and all seven continents.
- Our online courses involve frequent interactions between students and with instructors.
- Penn State is a provider in information security and assurance and has been designated as a National Center of Academic Excellence in Information Assurance Education by the National Security Agency and the U.S. Department of Homeland Security.
For More Information

Contact Us
pennstateonline@psu.edu
www.worldcampus.psu.edu
800-252-3592 (toll free within the United States)
814-865-5403 (local and international)
814-865-3290 Fax

Student Services Hours
(inquiries and registration)
8:00 a.m.–9:30 p.m. Monday–Thursday
8:00 a.m.–5:00 p.m. Friday
Closed Saturday and Sunday

Admissions Counseling Hours
8:00 a.m.–8:00 p.m. Monday–Thursday
8:00 a.m.–5:00 p.m. Friday
Closed Saturday and Sunday

Penn State World Campus
The Pennsylvania State University
128 Outreach Building
University Park PA 16802