

IIT School of Applied Technology

About the School

The School of Applied Technology offers programs in industrial technology and management, information technology and management, and professional development. SAT's graduate and undergraduate programs couple technology with management and emphasize practical application, innovation, and collaboration with industry.

The primary objective of SAT's educational programs is to prepare students for leadership positions in fields that require a broad knowledge of current and emerging technologies, operational trends, and strategic planning. As students work through the curriculum, they gain valuable insights into both theoretical concepts and applied knowledge from instructors who are experts in their respective fields. Additional challenges through student projects, presentations to professional groups, and internships push students to reach further, develop their abilities to work with others, communicate their ideas, and formulate creative solutions to real-world problems.

All SAT degree programs allow students to pursue coursework pertinent to their educational and career goals. A variety of specializations are available, allowing in-depth study of topics of particular interest, as are interprofessional projects, which typically allow students to address topics outside their established curriculum.

The degree programs offered by the school are available to both full-time and part-time students, who may choose to take classes at IIT's Rice Campus in Wheaton, Main Campus in Chicago, and online.

Dean: C. Robert Carlson

Divisions of Study and Research

SAT faculty and students work with industry partners on projects sponsored by companies such as Alcatel-Lucent, AT&T, A. Finkl & Sons, Cisco, Colson Associates, CompTIA, the Department of Homeland Security, Exelon, the FBI, IBM, KPMG, Microsoft, Motorola, Nortel, Tellabs, Verizon, W. W. Grainger, and others. Areas of research, development, and test activities include:

Software Applications and Development Techniques

 Development and application of the Testing Maturity Model, which is recognized as an international standard for software testing management, classification techniques for cataloging software patterns, automated processes for software development and effort estimation, and the Design Process Improvement Model

Communication Networks

- Development and testing of various communication protocol standards
- Creation and behavioral analysis of different types
 of communication networks (VOIP, wireless, etc.)
- Interoperability testing, and network performance analysis and testing
- Emergency network protocol techniques, issues, and vulnerability analysis

Information Security and Forensics

- Development and analysis of techniques for data encryption, theft, detection, and prevention
- Analysis of firewall techniques, network security vulnerabilities, stenographic techniques, and forensic procedures
- Review of information and network security policy issues, and business continuity management
- Development of security auditing techniques

Industrial Analysis and Assessments

 Product development, organizational assessments, process improvements, comparative analyses, value stream analyses, and implementation strategies pertaining to manufacturing, service industries, supply-chain operations, energy alternatives, and other industry-related activities

Technology Innovation

 Development of innovation capability assessment models, assessment processes, and cognitive or behavioral innovation techniques

Projects and Collaborations

- Each year, SAT hosts the Netsecure: IT Security and Forensics Conference and Expo and the VoIP Conference and Expo. These intensive events bring together hundreds of professionals for lively discussion and debate on a variety of contemporary industry topics and issues. Speakers and participants represent local, regional, national, and international firms, organizations, and universities.
- The IT Security and Forensics Laboratory develops and supports an experimental environment for cyber-security and digital forensic training, collaboration, evaluation, and research. The lab is equipped with multiple forensic workstations targeted to be compliant with National Institute of Standards and Technology standards, and equipped to investigate multiple interface media. Various toolkits and analysis utilities are utilized to study digital forensic techniques.
- Established in 2004, the Voice-over Internet Protocol Laboratory is a venue where industry and academia collaborate in research, development, and test activities that advance the goals of both. As a teaching tool, the lab helps students to develop hands-on expertise analyzing the operation and performance of VoIP networks, a broadband application that allows phone service to operate over the Internet. Students and faculty produced a patent-pending security device that prevents hackers from using the virtual port that supports VoIP calls.
- Since 1976, the Manufacturing Productivity Center has linked industry with the technology leadership of IIT, with the goal of improved productivity and competitiveness. MPC experts have assisted clients on projects related to all aspects of the manufacturing environment, including developing a plan for semiautomated assembly, mentoring senior management, and improving plant layout to increase efficiency.



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Academic Degrees

Information Technology and Management (certificate, B.S., M.S.) Industrial Technology and Operations (M.S.) Industrial Technology and Management (B.S.) Computer and Network Security Technologies (graduate-level certificate)

Contact Information

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Professional Development Programs

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ABOUT IIT

Founded in 1890, Illinois Institute of Technology is a private, Ph.D.-granting university that awards degrees in engineering, the sciences, architecture, law, design, psychology, humanities, and business. IIT's interprofessional, technology-focused curriculum is designed to provide distinctive and relevant education in an environment of scientific, technological, and professional knowledge creation and innovation.