

Information Technology Program

Program Description

The BS Information Technology (IT) program prepares individuals by providing a comprehensive knowledge and hands-on skills in a state-of-the-art information technology education. The IT program perpetuates Indiana State University's mission to educate students to become productive citizens and enhance the quality of life of the citizens of Indiana by preparing technical professionals for business and industry through a balanced curriculum.

Completion of the degree requirements for the bachelor's degree in Information Technology qualifies you for careers in: IT systems manager, IT specialist, project manager, database system manager, IT technical support professional, Software support specialist, Web systems manager, IT technology manager, Network engineer, IT security specialist.

The Institute of Electrical and Electronics Engineering, Computer Society (IEEE) and the Association for Computing Machinery (ACM) are the lead professional societies used in addition to CAC of ABET for developing program criteria, guiding program relevance, and making continuous improvement.

Program Educational Objectives: IT graduates from ISU are expected to demonstrate:

- PEO 1. **Technical competency** - Demonstrate technical proficiency by applying general and disciplinary reasoning and critical thinking to identify, analyze and solve problems.
- PEO 2. **Communication skills** - Demonstrate effective communication skills in both oral and written form to articulate technical knowledge, ideas, and proposals to peers, senior management, and other potentially diverse audience.
- PEO 3. **Managerial skills** - Demonstrate organizational and increasing levels of managerial skills in their chosen field.
- PEO 4. **Ethical, social and professional responsibility** - Demonstrate awareness of the impact, and professional, ethical and social responsibility of the practice of information technology in the state of Indiana and in a diversified world.
- PEO 5. **Teamwork mentality** - Demonstrate the ability to function effectively and think independently in a multi-disciplinary team environment.
- PEO 6. **Lifelong learning** - Demonstrate individual desire and commitment to remain technically current by engaging in continuous self-improvement and lifelong learning.

Student Outcomes: Specific IT program curriculum includes the core information technologies of human computer interaction, information management, programming, networking, web systems and technologies, information assurance and security, system administration and maintenance and system integration and system architecture. . **Students** at the time of graduation are prepared to demonstrate:

- SLO (a). An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline
- SLO (b). An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- SLO (c). An ability to design, implements, and evaluate a computer-based system, process, component, or program to meet desired needs
- SLO (d). An ability to function effectively on teams to accomplish a common goal
- SLO (e). An understanding of professional, ethical, legal, security and social issues and responsibilities
- SLO (f). An ability to communicate effectively with a range of audiences
- SLO (g). An ability to analyze the local and global impact of computing on individuals, organizations, and society
- SLO (h). Recognition of the need for and an ability to engage in continuing professional development
- SLO (i). An ability to use current techniques, skills, and tools necessary for computing practice.
- SLO (j). An ability to use and apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, and web systems and technologies.
- SLO (k). An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems.
- SLO (l). An ability to effectively integrate IT-based solutions into the user environment.
- SLO (m). An understanding of best practices and standards and their application.
- SLO (n). An ability to assist in the creation of an effective project plan.