IS/IT CAREER EXPO

PROGRAM

Thursday, February 28
THANK YOU

Thank you to our Kent State University event sponsors, participating employers and planning committee for your partnership!

EVENT SPONSORS

[Images of event sponsors]

CIS CAREER EXPLORATION AND IS/IT EXPO PLANNING COMMITTEE

Andy Weyand, Career Services Office, College of Business Administration
Alyssa Hall, Career Exploration and Development
Paige Forbush, MISA Student Representative
Drew Sellers, Center for Information Systems

PARTICIPATING EMPLOYERS

[Images of participating employers]
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions to Ask</td>
<td>5</td>
</tr>
<tr>
<td>Big Data /Analytics</td>
<td>6</td>
</tr>
<tr>
<td>IT Security</td>
<td>6</td>
</tr>
<tr>
<td>IT Leadership/Project Management</td>
<td>7</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>7</td>
</tr>
<tr>
<td>Software Development</td>
<td>8</td>
</tr>
<tr>
<td>Help Desk</td>
<td>PC Support</td>
</tr>
<tr>
<td>Your Major in IT</td>
<td>9</td>
</tr>
<tr>
<td>Your Minor in IT</td>
<td>10</td>
</tr>
<tr>
<td>Student Organizations</td>
<td>11</td>
</tr>
<tr>
<td>Career and Major Exploration Resources</td>
<td>12</td>
</tr>
</tbody>
</table>
HOW TO USE THIS PASSPORT

The IS/IT Expo will provide an overview of IT career paths. IT is not just about building computers, creating mobile applications and staring at a computer screen all day. IT has many critical functions within almost every company, all of which recruit IT graduates with knowledge that is vital, valuable and highly sought after.

**Network** with your peers, meet IT professionals and learn the different roles IT plays in business;

**Visit** the “Destination Tables” to have your passport stamped at each functional area of IT represented;

**Collect** informational materials and “souvenirs;”

**Connect** with the “Information Stations;” student organizations, faculty and advising to become actively engaged in your major/career field.
Questions to ask

• What are important characteristics for being a good IT employee?
• What “surprises” can I expect on my first IT job?
• I find IT interesting but I don’t program. Can I still have a career in IT?
• I love programming and working on my own. Can I have a successful IT career?
• As a new IT employee can I ask questions, or will everyone expect me to know everything?
• What is a typical IT career path?
• Why are communication skills important for someone in IT?
• What factors made you select a career in IT?
• What would you do differently to better prepare for an IT career?
• What are the most important skills for a successful career in IT?
• What do you like best about your IT career?
• What networking groups do you recommend for meeting industry peers and leaders?
BIG DATA/ANALYTICS

How do we use data to make important business decisions?

**Common Job Titles:**
Business Analyst, Systems Analyst, Data Analyst

**Program Description:**
Translate large stores of raw data into information that can be analyzed and used to make important decisions. Typically uses various software tools to aid in this process and normally requires critical thinking skills to recognize patterns.

**Five-year-out Salary Range:**
$55,000 to $110,000*

SOFTWARE DEVELOPMENT

How do we design, test and code software?

**Common Job Titles:**
Software Developer, Quality Assurance, Solutions Engineer

**Program Description:**
Use programming languages to build software to solve business problems. These jobs typically involve a significant amount of technical knowledge with programming and testing software.

**Five-year-out Salary Range:**
$65,000 to $100,000*

*Note on Salary Ranges provided under each functional area: Information from BLS.gov. Current high demand for Security and Big Data is driving salaries very high. This will continue for 5-10 years but as the supply of people increases, the high salaries will moderate.*
HELP DESK/PC SUPPORT

How do we support our employees’ IT issues?

Common Job Titles:
Security Analyst, Access Management

Program Description:
Design, monitor and implement creative ways to protect the company from security breaches. This could include monitoring firewalls, enforcing company policies, checking system/network traffic logs and recognizing patterns in data.

Five-year-out Salary Range:
$52,000 to $70,000*

IT SECURITY

How can we protect our business from threats?

Common Job Titles:
Security Analyst, Access Management

Program Description:
Design, monitor and implement creative ways to protect the company from security breaches. This could include monitoring firewalls, enforcing company policies, checking system/network traffic logs and recognizing patterns in data.

Five-year-out Salary Range:
$55,000 to $90,000*
**INFRASTRUCTURE**

How do network, server and other infrastructure technology work together to support the day-to-day operation of the organization?

**Common Job Titles:**
Network Engineer, Storage Engineer, Mainframe Engineer, Data Center Technician

**Program Description:**
Execute day-to-day transactions with accuracy and timeliness while maintaining the health of various software/hardware tools. This includes storage, internet equipment, servers, cables and complex programs that monitor the health of the entire system.

**Five-year-out salary range:**
$65,000 to $100,000*

**IT LEADERSHIP/PROJECT MANAGEMENT**

What important IT-related decisions are needed to support the business and its strategic goals?

**Common Job Titles:**
Project Manager, Lead Developer, Chief Information Officer, Chief Technology Officer

**Program Description:**
Program Description: Create and implement change to guide the direction of an IT project or company. These individuals set schedules, monitor projects, manage IT staff and are responsible for making decisions on how to allocate the organization’s limited time and resources effectively. Project managers could benefit from obtaining a professional certification to sharpen their skills.

**Fifteen-year-out Salary Range:**
$130,000+ for C-Suite
$75,000+ for project managers
MAJOR IN IT

Computer Science (CS)
College of Arts and Sciences

Common Job Titles:
Computer Scientists, Software Engineer, Software Developer, Network Engineer, Data Scientist, Robotic Engineer, Cyber Security Specialist, Database Administrator, Application Developer, Multimedia and Web Developer, Systems Analysis, Systems Engineer, Game Programmer, Data Analyst

Program Description:
The Bachelor of Science degree in Computer Science is intended to teach students how to understand, design and build complex computer systems. They study computing hardware, software, networking, database and algorithms. The CS program provides students with a strong foundation in theory and practice to become knowledgeable, creative and responsible professionals, and become lifelong learners in this rapidly-evolving field, able to create and implement the latest computing ideas and technologies for the betterment of society.

The Computer Science major includes the following optional concentrations:

Data Engineering concentration prepares students to perform the data analysis and modeling needed by organizations and to process structured, semi-structured and unstructured data using statistical and semantic analysis techniques to meet their employers' needs.

Game Programming concentration provides students with a solid understanding of the algorithms, techniques and software used to construct interactive virtual environments. Students work in teams with content specialists and artists to develop the teamwork skills required in this multidisciplinary field, which includes a range of opportunities, from the game industry to education to training design.

Information Security concentration introduces a wide range of security and privacy domains that can be useful for students, and prepares them to meet the security needs of industry and government. Students learn about information security concepts and systems programming. They practice how to become secure programmers. They learn cryptography and understand network security attacks and how to protect computer assets. They are also introduced to the exciting fields of digital forensics and privacy-aware models.

Robotics and Embedded Systems concentration prepares students to work with devices that combine hardware and software. Such devices include robots and most high-tech mechanical devices like cars, planes, farm equipment and construction equipment.
Digital Sciences
School of Digital Sciences

Common Job Titles:
Analyst, Software Developer, UXD, Web Designer/Developer, Network Engineer

Program Description:
The Bachelor of Science degree in Digital Sciences is designed to provide students with the ability to adapt and succeed in a rapidly-changing digital world. The program provides a broad overview of digital technologies, often from multiple points of view. For example, a student may study the content and visual layout of a web page with a journalism professor and later study the programming aspects of a web page with a business professor. A course with an architect adds more material on design, and a course with a computer scientist adds additional programming skills. This multidisciplinary skill set adds the flexibility needed for many of today’s careers. Students in the Digital Sciences program have skills in Python, Web Programming, Project Management, Database Management and Human Computer Interaction.

The Digital Sciences major includes the following optional concentrations:

**Digital Systems Analysis** concentration focuses on the business data and software applications needed by an organization and the planning and management of a computer information system to meet those needs.

**Digital Systems Interaction** concentration focuses on the educational and interactive applications needed by an organization and the improvement of the user’s interaction with those applications. Digital Systems Management concentration focuses on the technical leadership needed by an organization and the management of the computer information system and infrastructure to support the goals of the business.

**Digital Systems Software Development** concentration focuses on the website and software applications needed by an organization and the design and maintenance of a user interface and software system to meet those needs.

**Digital Systems Telecommunication Networks** concentration focuses on the communication infrastructure needed by an organization and the design and management of a telecommunication system and computer network to meet those needs.
**Computer Information Systems (CIS)**
*College of Business Administration*

**Common Job Titles:**
*Software Developer, Computer Programmer, Systems Analyst, Web Developer, Website Designer, Business Intelligence Analyst, Cloud Systems Engineer (design, migrate, implement, maintain), Cloud Systems Network Administrator*

**Program Description:**
The Bachelor of Business Administration degree in Computer Information Systems provides students with a focus on the creation and supervision of the Computerized Information Systems (CIS) that are commonly used in organizations of all types and sizes. There is a primary emphasis on problem solving within systems development, the logic of state-of-the-art programming languages and methodologies, project management and business experience. A new emphasis starting in Fall 2019 is “Cloud Systems.” We will be teaching our students to help companies migrate to the cloud and take advantage of this platform for everything from running the basic aspects of an organization to using advanced Business Intelligence from Artificial Intelligence to Machine Learning.

---

**Computer Engineering Technology**
*College of Aeronautics and Engineering*

**Common Job Titles:**
*Network Engineer, Systems Administrator, Server Specialist*

**Program Description:**
The Bachelor of Science degree in Computer Engineering Technology provides students with the opportunity to study computer systems and software-hardware interface so that they are capable of analyzing the problems in the computer and networking industry and producing computer engineering, networking and software solutions. The major’s curriculum includes materials necessary for students to be eligible for industry certifications (e.g., Cisco, Dell, Juniper Networks) for career advancement. This program is ATMAE accredited.

Computer engineering technologists focus on hardware or software issues. When companies need custom applications and network systems designed, they call the computer engineering technologist. In this age of heavy computer usage, with companies using computers for a large variety of functions, the computer engineering technologist is invaluable in keeping equipment running, updating software, maintaining connectivity and interfacing with users.

Computer engineering technologists typically work for large companies, installing, testing, operating and maintaining the computer network ins. They may also find employment with companies that sell computers, at computer repair stores or at independent emergency repair facilities. Other common work locations include computer and peripheral manufacturing facilities, computer distribution facilities, computer research facilities and educational institutions.
MINOR IN IT

**Computer Science (CS)**  
*College of Arts and Sciences*

**Program Description:**  
The CS Minor is available in any field, from the natural and social sciences to humanities and business, allowing you to work with substantial computing and cyber systems. The CS Minor will complement any major, enabling you to manage the computing and cyber aspects of your profession.

**Digital Sciences (DS)**  
*School of Digital Sciences*

**Program Description:**  
The Digital Sciences minor is designed to complement a wide range of majors, including computer science, fashion, computer information systems, visual communication design, journalism and mass communication and communication studies.

The minor includes curriculum that focus on developing a content-rich website and on making a web page or software application easier to use. The minor also provides options for students to explore either societal or ethical issues involving technology; explore either design thinking or programming; and explore either security, project management, information management or enterprise architecture.

**Computer Engineering Technology**  
*College of Aeronautics and Engineering*

**Program Description:**  
The Computer Engineering Technology minor provides the foundation for students to study the design of network systems, telecommunications systems, networking hardware and computer hardware engineering and architecture technologies. Students will have the opportunity to conceptualize, develop and analyze requirements and engineering specifications for practical systems.
STUDENT ORGANIZATIONS

Management and Information Systems Association
College of Business Administration
The Management of Information Systems Association (MISA) is a professional organization for Kent State students who are interested in Information Technology in the business world. We give students the opportunity to learn about today’s IT topics, explore IT business opportunities and network with business professionals.
President: Paige Forbush, pforbush@kent.edu
Website: http://misa.bsa.kent.edu/
Social Media: Kent State MISA (Facebook), @KentStateMISA (Twitter), Kent State MISA (LinkedIn)

Xtreme Bots
College of Aeronautics and Engineering
The Xtreme bots team is a group of students who brainstorm, design and then create/build robots to take into battle against other teams at various “battle bots” competitions. The team meets once a week at the College of Aeronautics and Engineering. With the help of a machine shop and other donors, most materials and needed supplies are donated to the team. The team competes in the battle bots competition in Dayton, Ohio annually.
President: Brigid Kearns
Website: https://www.kent.edu/csi/student-organizations/kent-state-xtreme-bots

Robotics Club
College of Aeronautics and Engineering
Competitive Robotics Team that hosts and competes in mining competitions centered around space mining. The team earned third place in mining at the ninth Annual NASA Robotic Mining Competition in Florida in May 2018.
President: Michael Parker, mparke23@kent.edu
Website: https://www.kentstaterobotics.com
Social Media: Kent State Robotics (Facebook), @KentStateRobo (Twitter), @ksurobo (Instagram)

HacKSU
College of Arts and Sciences
HacKSU is a student organization at Kent State University focused on learning and utilizing contemporary technologies. We are a very diverse community, spanning multiple majors from Fashion Design to Zoology and are open to students of any skill level. Everyone is welcome because HacKSU teaches anyone, regardless of skill level or major, how to code.
President: Benjamin Holland, bhollan5@kent.edu
Website: http://hacksu.cs.kent.edu
Social Media: Hacksu (Facebook), @_hacksu (Twitter), @hacksu (Instagram)

Digital Scientists
School of Digital Sciences
The Digital Scientists student group is a group of students who are getting together to learn, connect, have fun and grow. The group gets to decide what activities it would like to pursue and what identity it wants to develop. It’s new so YOU will be a big part of determining where the group goes. Examples of things the group can do: Study nights, Game nights, Create a conference on campus, Invite speakers and companies in to talk about DS-related careers, Take field trips to companies and events (the group previously went to NYC to the Uncubed conference, job fair and start-up field trip!)
Website: https://www.kent.edu/digital-scientists
Social Media: KentDSCI (Facebook)
Still deciding on your major? Need career advising to help you make a decision? Perhaps you have solidified your major, but would you like to know more about available career paths?

**University College**
Career Exploration and Development
Schwartz Center 261
www.kent.edu/career

**College of Business Administration**
Career Services Office
BSA A309
www.kent.edu/business/careers

**Need to discuss curriculum requirements or officially change your major?**

**University College**
University Advising Contacts
Varies per college/campus
www.kent.edu/advising/
college-advising-contacts

**College of Business Administration**
Undergraduate Program Office
BSA 107
www.kent.edu/business/current-students#advising
There are myriad online resources to help you in your career and major decision making, as well as search for jobs and internships.

**Handshake**
Kent State University’s free career and event management system. Your one stop shop for internships/co-ops, full-time positions, and on campus student employment searches, as well as on recruiting events and career workshops.
https://kent.joinhandshake.com

**Focus2**
This resource provides a free assessment to deliver a customized list of possible career aspirations. A deeper understanding of yourself will give you the confidence needed to make informed decisions about your education at Kent State University.
http://www.kent.edu/career/explore-careers-majors-focus-2

**Occupational Outlook Handbook**
Learn about occupations, including job responsibilities, salaries, education required and the job outlook.
https://www.bls.gov/ooh/

**Glassdoor.com**
This resource provides salary and company information, self-reported from current and past employees. Utilize the portal on the College of Business Administration’s Career Services Office website to gain full access without creating an account or adding content.
www.kent.edu/business/careers/resources

*Note on Salary Ranges provided under each functional area:
Information from BLS.gov. Current high demand for Security and Big Data is driving salaries very high. This will continue for 5-10 years but as the supply of people increases, the high salaries will moderate.*