The Information Systems (IS) undergraduate major is for students who want to design and implement effective solutions to meet organizational, societal, and management needs for information and decision support. Computer based information systems facilitate, enable and often define the relationships between corporations and consumers, buyers and suppliers, businesses of all sizes, social networks, and citizens and their governments. Understanding these relationships and effectively addressing the collection, flow, and distribution of information is vital to running a modern organization, enterprise, or government agency.

Selected Career Directions and Resources

- **Database Administration: Development, Installation, Upgrading, and Management**
  - The League of Professional System Administrators: www.lopsa.org
  - Institute for the Certification of Computing Professionals: www.iccp.org

- **Web Administration: Design, Programming/Development, System Administration, and Analysis**
  - The Information Association for the Information Age: www.asis.org
  - International Webmasters Association: www.iwanet.org

- **Technical Support: Hardware, Software, Technical Writing, and Sales**
  - Internet Society: www.internetsociety.org
  - Association for Computing Machinery: www.acm.org

**Work Environment**

Most large companies have computer and information systems managers. The largest concentration of IT managers work for computer systems design and related services firms. Most IT managers work full time. More than 90 percent of computer and information systems managers work 40 hours a week or more.

**Possible Job Titles**

- Hardware Engineer
- Software Developer
- Programmer
- System Administrator
- Systems Analyst
- Information Systems Administrator
- Database Administrator
- Risk Management Administrator
- Information Security Analyst
Selected Skills

Interacting with Customers
Establishing and Maintaining Interpersonal Information
Interacting with Computers
Obtaining Information and Interpreting the Meaning
Keeping Up-to-Date Technically and Applying New Knowledge
Designing and Developing New Applications, Ideas, Relationships, and Products

Salary and Employment Trends
Since wages change rapidly year after year, the following links will be helpful in identifying median wages and employment trends:

ONET Online: www.onetonline.org
Occupational Outlook Handbook: www.bls.gov/ooh

Job Outlook
IS graduates continue to be in high demand in the information-age workplace. There has been a strong job market for IS students in recent years, and national trends indicate that this is likely to continue.

Further Education
IS students are well prepared to pursue graduate work in a wide range of fields. For students interested in master’s degree-level graduate work at Carnegie Mellon, there are many possibilities, including accelerated Masters degree programs in Information Systems Management, Human Computer Interaction, Information Security Policy and Management, Engineering Technology and Innovation Management, and Business Administration.