Information Technology

The Information Technology (IT) major involves more creativity than you might think. Students prepare for careers as technology design and management professionals, learning to integrate hardware, software, network components, and other technology into information systems.

The program offers a balance of theoretical knowledge and practical, hands-on experience. Students develop critical thinking and communication skills, as well as an appreciation for the social implications of computing. They graduate with an ability to devise creative IT solutions that empower scientists, artists, inventors, and organizations.

Professional Prep

IT majors gain hands-on experience with installation, configuration, maintenance, and security. They can use up to 12 credit hours on industry-approved certification courses that improve their marketability. The program prepares students to become effective, confident professionals with outstanding problem-solving skills and an ability to work well within diverse groups.

Faculty

The department maintains a very low student to faculty ratio (about 10 to 1), so students enjoy a lot of direct interaction with their professors. Faculty come from many academic backgrounds — not only computing but also areas such as applied physics and mathematics. Some of the current areas of research include networking with application to virtual machine migration; data mining with application in both information and homeland security; development of methods to use image-based biomarkers to assess breast cancer risks; digital compression with application in video transmission over low-bandwidth media; and specialized domains in scientific computing.

Research and Experience

IT majors have excellent opportunities to engage in internships and get research training in many different fields. Recent students have interned with developers in the commercial sector, federal agencies such as the Department of Transportation and the National Science Foundation, and scientific institutions such as NASA and Oak Ridge National Labs. Students also have opportunities to secure cooperative work-study arrangements that last a year or run through the summer and fall semesters.