Computational Science involves an emphasis on applied mathematics with the computational and computer programming skills necessary to solve practical problems. These skills are in high demand in the private sector and in government employment. Study in computational science prepares students to enter a career in industry, government, or business immediately upon graduation or to enter graduate school in computational science, or related areas of applied mathematics such as statistics, management science, operations research, actuarial science or computational biology. The major is designed to allow the student flexibility in choosing a minor area of study as an application of the computational and mathematical skills learned in Department courses. Suggested minors range from the sciences (physics, chemistry, computer science or biology) to business management to art/media communications.

**Associated Job Titles:**
- Actuary
- Aerospace Engineer
- Auditor
- Mathematician
- Physician
- Navigator
- Operations Research Analyst
- Psychometrician
- Teacher
- College Professor
- Statistician
- Meteorologist
- Nuclear Scientist
- Surveyor
- Geologist
- Hydrologist

**Associated Skills:**
- Understanding of mathematical theories
- Ability to make sound judgments
- Ability to solve quantitative problems
- Proficiency in writing, speaking, and memorization
- Ability to organize, analyze and interpret mathematical data
- Ability to conduct and explain scientific research
- Proficiency in the use of computers and computer programming
- Ability to work alone and concentrate for long periods of time

**Associated Personal Qualities:**
- Persistence
- Patience
- Detail-Oriented
- Intellectual
- Scientific
- Achievement oriented
- Self-discipline
- Analytical thinker
- Thoroughness
- Appreciation for mathematical theories
- Logical
- Capacity for precision

**Career Library Resources:**
- Great Jobs for Math Majors
- Peterson’s Opportunities in Health and Science
- Opportunities in Business Management
- Peterson’s Job Opportunities in Engineering & Computer Science
- Peterson’s Job Opportunities in Business
- Opportunities in Education
- America’s Guide to Federal Jobs
- 10 Steps to a Federal Job
- What Color Is Your Parachute?
- Career Planning Today

**Majoring in the Rest of Your Life**
- Do What You Are
- Encyclopedia of Careers and Vocational Guidance
- The Enhanced Guide for Occupational Exploration
- The Dictionary of Occupational Titles
- The Occupational Outlook Handbook
- FOCUS Computer Guidance System

**Places To Contact For More Information:**
- National Center for Supercomputing Applications
  605 E. Springfield Avenue
  Champaign, IL 61820
- National Science Foundation
  4201 Wilson Boulevard
  Arlington, Virginia 22230
- Conference Board of the Mathematical Sciences
  1529 18th Street NW
  Washington, DC 20036
- Society for Industrial and Applied Mathematics
  3600 University Science Center
  Philadelphia, PA 19104

**Websites To Visit:**
- www.ncsa.uiuc.edu
- www.nhse.org/cse_edu.html
- http://computer.org
- www.nsf.gov
- www.paci.org
- www.siam.org

**Professors To Contact For More Information:**
- Dr. Dave Coulliette
- Professor Laura Harrington
- Dr. Duk-Hyung Lee
- Dr. Towanna Roller
- Professor Delmar Searls

**Nearby Employers:**
- LEXMARK International, Inc.
  740 W. New Circle Rd 232-3263
- Jessamine County School System
  501 E. Maple St. Nicholasville 885-4179
- Fayette County Public Schools
  701 E. Main St. 281-0100
- Link-Belt Construction
  2651 Palumbo Dr. 263-5200
- Yazaki North America
  1312 Russell Cave 281-6410

*Addresses listed are located in the Lexington, Kentucky area unless otherwise noted.

**Alumni Contacts:**
Schedule an appointment with Career Services to conduct a tailored search for alumni working in the fields associated with this major.

**Note:** For specific information concerning course requirements of this major, please pick up a major sheet at the Registrar’s Office located in the Administration building.