AVIATION
Public Safety Center • 417.625.9328

The Aviation Program is offered in affiliation with the Mizzou Aviation Company of Joplin, Missouri. Special fees above tuition are required for this course.

For additional information contact:
Dr. Tia M. Strait
Office: Public Safety Center 126
Phone: 417.625.3155
Email: strait-t@mssu.edu

Course Descriptions

**AV 0200**  (Demand)  5 hrs. cr.
Basic Pilot Training
An integrated course designed to meet ground school and flight training requirements for eligibility to take the Federal Aviation Administration examination for a Private Pilot Certificate. In addition to scheduled ground school classes, the course requires approximately 45 hours of dual and solo flight and check flight. Credit is awarded when the FAA certificate is obtained. Special fees and a third class medical certificate are required. Special fees for this course include plane rental and examiners test fee. Course grade is recorded as Pass or Fail.

COMPUTER INFORMATION SCIENCE
Plaster Hall 223 • 417.625.9383

Faculty Oakes - Head, Collins, Herr, Pinet, Schiavo, Tunnell

Mission
The Computer Information Science (CIS) Department provides opportunities for a broad undergraduate education in the many aspects of computer information technology. The program offers courses of instruction that develop a thorough understanding of current methods used in the design and implementation of computer based solutions.

**Fundamental Values:** Pursuant to the department’s educational mission, the faculty:
- Maintains the currency of the curriculum through ongoing research and consultation with industry representatives.
- Engages in professional development that allows its members to remain current in their fields and to provide technological leadership to the university community.
- Is committed to the success of its students, both during and after college.

**Program Goals:** The Computer Information Science program will produce graduates who:
- Understand and can utilize core information technologies.
- Can analyze, design and implement effective technology based solutions.
- Have requisite communication and quantitative skills.
- Work effectively as team members.
- Are committed to lifelong personal and professional development.
- Conduct themselves in an honorable and ethical manner.

**Curricula Options:** Within this context, the Department offers the following curricula options:
- Bachelor of Science in CIS–Information Technology
- Bachelor of Science in CIS–Information Systems
- Bachelor of Science in CIS–Computational Mathematics
- Bachelor of Science in CIS–Bioinformatics
- Bachelor of Science in CIS–Computer Forensics
- Bachelor of Science in CIS–Computer Technology
- Minor in CIS–Network Systems Administration
- Minor in CIS–Information Systems
- Minor in CIS–Website Administration
- Minor in CIS–Information Assurance and Security
- Associate of Science in CIS

The six Bachelor of Science in CIS alternatives prepare the student for graduate school or entry-level positions such as systems programmer, systems analyst, applications programmer, database administrator, bioinformatics specialist, computer forensics analyst, user support specialist, network administrator or website administrator.

**Information Technology and Information Systems** are distinguished by selected courses that develop the student’s understanding of an organization’s information requirements and procedures for designing and implementing an information system that will facilitate its management. The Information Systems option results in a minor in Business while Information Technology allows the most flexibility in selecting supporting courses.

Computational Mathematics meets the requirements for a double major in Computer Information Science and Mathematics. The student takes CIS and mathematics classes that develop an expertise in applied mathematics and the theoretical foundations of computer science. Such knowledge is required to design and implement computer solutions for a wide range of problems encountered in science and engineering.

**Bioinformatics** provides for a double major in Computer Information Science and Biology. Bioinformatics is an emerging discipline that is concerned with designing and implementing computational algorithms for managing, processing and analyzing databases of genetic sequences.

**Computer Forensics** fulfills the requirements for a double major in Computer Information Science and Criminal Justice Administration. Computer Forensics involves techniques for securing computer networks as a precaution against criminal threat. In addition, it includes the identification, extraction, preservation and documentation of computer evidence for the purpose of identifying and prosecuting perpetrators of computer-based crime.

The **Computer Technology** option not only meets the requirements for a Bachelor of Science in CIS, but also qualifies the student for an Associate of Science degree in Drafting and Design Engineering Technology (DDET).

A minor or associate of science provides the student pursuing some other major with a credential and expertise in computing, an enhancement that is becoming increasingly important in almost every area of science, education, business and the arts. The Network Systems Administration alternative is designed to provide the student with the knowledge base necessary for managing local/wide area computer networks, as well as being able to provide user support and training in the area of personal computer hardware and application software. The Website Administration curriculum focuses on the knowledge and skills needed to build and provide on-going support for effec-