INFORMATION SYSTEMS CONCENTRATION

Overview of Information Systems

Everyone who works in business, from someone who pays the bills to the person who hires and fires, uses information systems. For example, a supermarket could use a computer database to keep track of which products sell best. A music store could use a database to sell CDs over the Internet. Information Systems give you an education in computer databases, networks, computer security, and more. They serve as a bridge between the technical and management communities within an organization. Getting a concentration in Information Systems provides you with marketable skills upon graduation. Students with Information Systems earn the highest entry level salary positions upon graduation.

Sample Job Functions and Descriptions for Information Systems Professionals:

Applications Analysts determine which software programs users need. In order to know what kind of programs are required, they speak with the people who will be using them, and analyze the current programs and systems being used in order to design and plan new systems to implement. They must be good at communicating not only in computer languages, but with program users as well. They not only research and develop the programs, but write up descriptions of them and prepare manuals, help screens, or explain the new systems in person to users.

IT Auditors help organizations comply with legislation, making sure they are keeping data and records secure. These auditors don't actually implement any fixes; they just offer an independent review of the situation**.** An IT audit is basically the process of collecting and evaluating evidence of an organization's information systems, practices, and operations. IT auditors look not only at physical controls as a security auditor would, but they also look at business and financial controls within an organization.

Project Managers develop requirements, budgets, and schedules for their firms' information technology projects. They coordinate projects from development through implementation, working with internal and external clients, vendors, consultants, and computer specialists. These managers are increasingly involved in projects that upgrade the information security of an organization.

Information Technology (IT) Directors manage computing resources for their organizations. They often work under the Chief Information Officer and plan and direct the work of subordinate information technology employees. These managers ensure the availability, continuity, and security of data and information technology services in their organizations.

Skills and Abilities

You should have a genuine interest in working with computers and good communication skills. This position may require you to be the link between technology and people who don't understand it as well as you do. It is also important to possess self-discipline and stamina to work on your own when necessary.

What classes are involved?

Below is a link provided for you by the Office of the Registrar. This link will take you to a webpage to determine Flow Charts and Curriculum Sheets for your declared major and concentration.

- The *Flow Chart* and *Curriculum* Links will provide you information about your 4-Year Academic Flowchart for Information Systems along with pre-requisites needed for each course. Review http://www.cob.calpoly.edu/advising/majors-concentrations/ for more information about course requirements for the Information Systems Concentration.

Access to Information Systems Concentration Flowchart and Curriculum:
http://dots-util.calpoly.edu/mymap.php

1. Input your Catalog Year
2. Input your Major
3. Input your Concentration

Typical Job Titles (Cal Poly recent graduates)

- Applications Analyst
- Information Technology Analyst
- IT Audit Staff
- Software Engineer
- IS Associate
- Project Manager
- Software Quality Assurance
- Programmer Application Developer

Salary Information

Career Services' Graduate Survey for Cal Poly recent grads:

2014-2015 - Median Salary - $68,000
2013-2014 - Median Salary - $65,000

Access Career Services' Graduate Status Reports:
http://careerservices.calpoly.edu/content/student/gsr_report

Preparation
- Find information about the Information Systems concentration at
http://www.cob.calpoly.edu/advising/majors-concentrations/

- More specific information on the Information Systems can be found at http://www.cob.calpoly.edu/academic/management/information-systems/
- Check out Career Services' Graduate Survey- lists employers, job titles, and salary information of recent Cal Poly graduates divided by major/concentration - https://www.careers.calpoly.edu/search.php
- Information Systems Association (ISA) - isa.calpoly.edu - Meet people in your concentration, network with employers, and get involved to build your resume.

Senior Project Options
- The courses required for the Information Systems Concentration focus on Database System Analysis and Design, System Implementation, and Business development. These courses allow Senior Project Options to be broad and applied to each student's educational career at Cal Poly.
- To view more information specific to Senior Projects, view Professor Barry Floyd's General Information Sheet: http://www.calpoly.edu/~bfloyd/seniorprojectoverview.htm

Career Research Resources
- www.careerservices.calpoly.edu – Cal Poly Career Services - career planning links, job listing links, career information and help
- MustangJOBS – On your portal account, find local part-time job, internship, and career postings for Cal Poly students, in addition to information on employers who recruit Information Systems students
- www.careeroverview.com - Comprehensive career and job search resource guide. Includes career descriptions.
- http://www.bls.gov/oco/ocos258.htm - Department of Labor and Statistics information about Information Systems
- Career Books available in the Career Resource Center at Career Services (Bldg. 124, Room 117): *Careers in Business; Careers in Management Consulting; The Best Computer Jobs in America; Careers in Information Technology; Information Technology Careers - The Hottest Hobs for the New Millennium; Your Bright Future in Information Technology*