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
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.

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.

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.

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.
INFORMATION SYSTEMS CONCENTRATION

What classes are involved?
- Below is a flow chart for Information Systems along with when these courses are most frequently offered. BUS 391 in the Business Administration curriculum will give you a good idea of what to expect with Information Systems. Review http://www.cob.calpoly.edu/advising/concentrations/ for more information about required courses, including elective options.

![Flow chart of required courses for Information Systems (IS) Concentration]

**Required courses for Information Systems (IS) Concentration***

- BUS 391: Intro to MIS
- BUS 392: Business Application Development
- BUS 393: Database Systems
- BUS 394: System Analysis & Design
- BUS 395: System Design & Implementation

**Recommended sequence:**

<table>
<thead>
<tr>
<th>Freshman or Sophomore year</th>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 391</td>
<td>BUS 392* &amp; 393*</td>
<td>BUS 394*</td>
<td>BUS 395*</td>
</tr>
</tbody>
</table>

*Students are also required to take two additional IS electives to complete the concentration.**

BUS 393, 394, and 395 are usually offered once a year. BUS 392 is usually offered twice a year. Students may start the BUS 393-394-395 with any class. The recommendation is to start with BUS 393.

Typical Job Titles (Cal Poly recent graduates)
- Application Developer
- Information Technology Analyst
- IT Audit Staff
- Software Engineer
- Programmer
- IS Associate
- Project Manager
- Software Quality Assurance
- Applications Analyst

Salary Information
**Career Services’ Graduate Survey for Cal Poly recent grads:**
- 2010-2011—Median Salary—$58,000
INFORMATION SYSTEMS CONCENTRATION

Preparation

- 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.

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
- 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 Jobs for the New Millennium; Your Bright Future in Information Technology