WORKFORCE/CAREER PREPARATION

Agenda

• Major does not necessarily equal career
• More than just a degree, experience is critical
• Silicon Valley environment
• Skills employers seek, how to get them
• How you can help
• Opportunities in Business, Engineering and Science
Choosing a major and preparing for a career are not the same process.

- Major does not usually determine career path
- 50 - 80% of U.S. Workforce...
- Often career doesn’t have to be determined before major
- Transferable skills
- 34% of Fortune 500...
More than just a degree

More influential than major?

- Experiential education
- Networking
- Campus involvement
- Leadership experience
- Initiative/Innovation
A SILICON VALLEY PERSPECTIVE ON SKILLS

• A rapidly changing work environment dependent on creative thinking and the ability to problem-solve independently
• Global companies that work on projects around the world
• Demonstrate leadership capabilities
• New grads hit the ground running
TOP SKILLS & QUALITIES EMPLOYER SEEK

- Teamwork
- Decision making and problem solving skills
- Communication skills (written and verbal)
- Planning and organizing skills
- Obtain and process information
- Analytical skills
- Technical knowledge
- Interpersonal skills

Source: Job Outlook 2014, National Association of Colleges and Employers
WHERE ARE STUDENTS ACQUIRING THESE SKILLS?

• Group projects
• Class presentations
• Participation in student organizations and leadership activities
• Part-time jobs
• Internships
• Athletics, team sports or other co-curricular activities
COMMUNICATION

Ability to write and speak comfortably
Communicate effectively with customers

Examples:

- Write a press release or article for school paper
- Join toastmasters
- Get at PT job with interaction with public
- Volunteer for a campus event
- Perform at open microphone events
- Join a club and get involved
PROBLEM SOLVING & CRITICAL THINKING

Think on your feet, solve problems
Evaluate and organize information

Examples:
• Actively participate in class discussions
• Join the debate or speech team
• Compete in campus competitions (SVIC)
• Join a book club discussion group
• Writing research papers
• Become a member of a committee
LEADERSHIP

Assume responsibility, Encourage others, Manage projects

Examples:

• Leadership role in class projects
• Become a peer mentor, tutor, new student leader
• Take charge in a group activity or initiate a new program or service on campus
• Officer position in a student club
• Volunteer in campus student leadership programs, conferences or events
TEAMWORK & COLLABORATION

Ability to work with others and work in teams
Demonstrate a “fit” with companies team

Examples:
• Be active contributor in class projects
• Part-time jobs: server, retail, campus jobs
• Join a student organization
• Be involved in campus, local, or state politics
• Volunteer on/off campus
EXAMPLES FROM RECENT GRADS

Student Organization: SAE International
Formula Hybrid Society of Automotive Engineers Vehicle
• Part of SJSU’s first senior project team to enter SAE Formula Hybrid Vehicle competition.
• Acted as the lead in charge of all aspects of the engine on Powertrain.
• Designed and fabricated engine’s electronic throttle actuator mounting bracket and fuel tank.
• Created fuel tank fabrication drawings and CAD models of various vehicle components utilizing Pro/Engineer.
• Organized progress reports and presenting updates to peers using PowerPoint.
• Scheduled and led meetings for Engine Team on Powertrain.
• Contacted and interacted with vendors for sponsorships and purchasing vehicle components.

Class Project: Accounting Information Systems
AIS Analysis and Proposal, San Jose State University
Led a group of five in analyzing a company’s accounting information system and internal controls.
Constructed system flowcharts for current and proposed accounting information system.
Made recommendations of additional preventative, detective, and corrective controls.
Collaborated with my team to prepare a cost/benefit analysis of our proposals
Presented the analysis in a PowerPoint presentation to a group of 40 people, Grade: A
NEXT STEPS: HOW YOU CAN HELP

• **Assessment**
  • Students often do not know how to identify their skills. Help them to discover what those might be.
  • Build awareness as an in class assessment using the NACE Top 10 List

• **Discussion**
  • Help them to understand how their skills apply to both immediate and long range academic and career goals.
  • Is there a skill they would like to develop? Brainstorm on different resources at your campus or in their lives they can utilize.

• **Resources**
  • **O-Net**: The O*NET program is the nation's primary source of occupational information and is sponsored by the U.S. Dept of Labor. [http://www.onetonline.org/skills/](http://www.onetonline.org/skills/)
  • **What can I do with this major?** Univ of Tennessee via SJSU Career Center
  • **SJSU Career Center Assessment Resources**
Opportunities for Engineering Majors

- Software Developer
- Computer Systems Analyst
- Web Developer
- Information Security Analyst
- Database Administrator
- Civil Engineer
- Mechanical Engineer
- IT Manager
- Computer Programmer
- Computer Systems Administrator

Opportunities for Business Majors

- Market Research Analyst
- Operations Research Analyst
- Accountant
- Financial Advisor
- Business Operations Manager
- Bookkeeping, Accounting and Audit Clerk
- Marketing Manager
- Financial Manager
- Meeting, Convention and Event Planner
- Compliance Officer

Opportunities for Science Majors

- Medical Scientist
- Biological Technicians
- Medical and Clinical Lab Technologist & Technicians
- Biochemists and Biophysicists
- Biomedical Engineers
- Microbiologists
- Epidemiologists
- R&D and Process Development Scientists
- Regulatory AQ/QC Biomanufacturing Specialists
- Bioproduction Operations

Source: U.S. Bureau of Labor Statistics
Thank you!

Questions?
Alumni Panel

- Gustavo Cardenas, Mechanical Engineering
- Ciara Chua, Accounting Information Systems
- Ashley Love, Electrical Engineering
- Melissa Lombardo, Biological Sciences
- Jimmy Sigona, Management Information Systems