

## *Sight Seeing Tours*

### **Bidwell Mansion Gadget Tour**

Tour the historic Bidwell Mansion to see what types of instruments were used in daily life during the 1800s.

### **Sierra Nevada Brewery Engineering Tour**

#### **Taproom Lunch**

Tour the Sierra Nevada Brewery to see how beer is made, and manufactured. Discover how each different type of engineer and computer scientist is necessary for the design process of a successful brewery.

#### Taproom Banquet Menu:

##### *Southwest Grilled Chicken Sandwich*

Fajita marinated, almond wood grilled chicken breast topped with roasted Anaheim Chile and Monterey jack cheese and served on a sesame seed bun with chipotle aioli, green leaf, tomatoes and red onion.

##### *Fish & Chips*

Lingcod dipped in Sierra Nevada's own Pale Ale batter and fried to a crispy golden brown. Paired with Cajun fries, creamy tartar sauce and fresh made Cole slaw.

##### *Taproom Cheddar Cheese Burger*

Wood grilled, one-third pound of Sierra Nevada aged ground beef topped with cheddar cheese. Served on a house made sesame seed bun with lettuce, tomatoes, pickle, red onion and special Sierra Nevada sauce. Accompanied by Cajun fries.

##### *Chicken Caesar Salad*

Hearts of romaine lettuce, shaved Parmesan cheese and garlic herb croutons, tossed with house made Caesar dressing and topped with a sliced, grilled, chicken breast.

## *Society of Women Engineers Track*

### **Lynda Grindstaff, Region A Collegiate Interests Representative**

#### Technical Presentation Competition and OSS Awards

This workshop is targeted for SWE Student Section members who would like to know more about what it takes to create a successful entry in the SWE National Technical Presentation Competition (TPC) and Outstanding Student Section Awards (OSS) Competition. This workshop will cover the entry requirements of both competitions, due dates, judges scoring, and hints and tips for creating a successful entry. Any individual SWE member may compete in TPC where OSS is a competition between SWE Student Sections within the same size category. Both competitions provide national recognition for the winners, and TPC provides monetary awards for the individual winning recipients.

Lynda Grindstaff has been the Region A Collegiate Interests Representative (position previously called Region A Student Coordinator) for 5 years now and has previously judged both the TPC and OSS competitions.

### **Virginia Squire, Region Conference Liaison**

#### How to Host a Regional Conference

**WE COULD DO THAT!**

What does it take to host a Region conference?

What does the host section have to gain?

How to package a bid.

What does the Region Council look for when evaluating bids?

What does a Region Conference have to have/ what's negotiable?

What help is available?

### **Lucy Hsu, NVIDIA**

### **Ipsheeta Furtado,**

#### **Moderators:**

**Gloria Montano**

**Julie Randall**

#### Different Perspectives on Why Diversity is Important

Diversity is not just cultural background or gender – it is what some companies are using to tune in to their customer's needs, and what some universities are using to develop students that are more likely to succeed in the work environment upon graduation. From the corporate environment to the student perspective, hear about the benefits of having a diverse group. This panel discussion will cover best practices, successful outreach programs and communication tips from a panel of diversity experts.

### **Susan Strom**

#### Learning Leadership Styles

Is leadership an action, or a position? In this session we will discuss our individual leadership capabilities and learn to capitalize on our understanding ourselves, each other, and human nature to be better leaders. Both professional and student members are encouraged to attend as SWE professional and collegiate leadership coaches will be present to provide both perspectives.

### **Esther Heller**

### **Charlene Martin**

#### Strategies for Improving Section Income

How does your section find the funds it needs to meet its goals? Fund Development is much more than writing letters. Done right, it can help you achieve more section aspirations. This session will cover the funding cycle and provide useful strategies for your own section. Both professional and student members are encouraged to attend as SWE

professional and collegiate leadership coaches will be present to provide both perspectives.

**Siddika Demir**  
Region A Meeting

**Kara Bymers**  
Student Section Meeting

We will be covering the following:

RCR Elections  
RCNE Elections  
Regional Banquet to be held in May  
Annual and Financial Reports  
Next year's Regional Conference  
Region Awards

### *Technical Track*

**Uma Balaji**  
RF Design

**Sadie McEvoy**  
Engineers Without Borders

The presidents of the Sacramento Valley Professional Chapter and the Chico State Student Chapter of Engineers Without Borders (EWB) offer an introduction to the organization and its activities in SWE's Region A. In this presentation, we will discuss:

- ❖ The background and mission of EWB
- ❖ The importance of engineering aid programs
- ❖ Examples of EWB projects
- ❖ Chapters and projects in SWE's Region A

We will provide a brief review of Engineers Without Borders, followed by presentations of Chico and Sacramento's current projects and close with an information and question-answer session. In our discussions, an emphasis will be placed on the need for balance both between our careers and volunteer service, as well as between developed and developing communities.

The featured projects will include Chico State's wastewater treatment system in Tela, Honduras, as well as, Sacramento's solar energy and construction project for a local homeless center and Sacramento's wastewater treatment system in Placencia, Belize.

**Nick Repanich****Robotics? There's More to the Story!**

"Robotics" is quite a catchy word. For most of the public it conjures up images of either a machine that will run around their house and do chores, or a long row of big wieldy arms in a factory building widgets with nobody around. Indeed machine automation is everywhere in manufacturing environments, but most would be surprised to see the vast variety of machines beyond just robots that are in use making all sorts of products we use every day. In this seminar I will show attendees examples of various types of automated machines and some detail in the key functions that make them unique. I will cover the types of technologies an engineer would need to learn and enjoy to be successful as an intelligent machine designer.

**Seena Drapala****Project Management - Critical success factors**

Everyone has to learn personal time management but what about projects that involve cross-functional matrix teams! Now you are responsible for everything but have little direct control over the individuals critical to the successful completion of your project. Learn the tenants of project management; safety, quality, performance, timeliness, how they interact, and what is needed to create success! Whether your project is a team lab, senior design project, or a multi-million dollar project for your company these project management tenants are things everyone needs to learn.

**Teresa Kulesza****Structural Investigation of Distressed Buildings**

The structural design of a building is often pretty straightforward. You can specify materials, with required strengths. You can detail all of the connections. You have a required set of loads to complete the design, live loads (people), snow, wind, earthquake, etc. as required by the building code. However, the investigation of an existing building is quite different. Learn about dealing with existing building materials and their properties, computer modeling techniques for evaluating an existing structure, and methods to determining why a building or section of a building has failed or experienced excessive deflections. This presentation will include pictures of distressed buildings and an outline of how to establish the possible problems of distressed buildings.

***Career Skills Track*****Kristi Bennett****Human Resources****Susan Hubbard**

### Resume Workshop and Interviewing Skills

Targeted at individuals transitioning into the workforce, for either internships or new jobs.

### **Teresa Kulesza**

#### Toastmasters - A Place to Learn Effective Communication

Have you ever had to give a presentation where you were so nervous you could feel your voice shake the entire time? Or do you want to be an even better public speaker than you already are? This workshop will introduce you to an organization that will help you to become a more effective communicator. The workshop will be a mini toastmasters meeting, showcasing the components of a typical meeting including a prepared speech and impromptu speaking – where participants will be able to participate if interested. If you are interested in improving your communication skills this workshop will introduce you to a proven program.

### **Seena Drapala**

#### Salary Negotiations - How to be more effective!

Whether you are negotiating a salary for a new career or a promotion in your current field you need to be prepared. Having options always puts you in the best negotiating position. There is a lot of upfront work to be done to fully understand your options; prioritizing your wants, tabulating your accomplishments, defining your objectives, and understanding an employer's needs are just a few. Being a good listener and developing a good working relationship will make you an attractive candidate for the position. Being creative and exploring win/win alternatives will build better solutions to secure the best possible salary.

## *Balance Track*

### **Victoria McArthur**

#### Philanthropy in Action: Volunteerism in Your Community

### **Scott Roberts**

#### Physical Activity, Diet and Health: The Challenges of Living with Advances in Technology

The decline in necessary daily physical activity following the industrial revolution has decreased substantially and this sustained decrease is easily observable in our society today. Labor saving devices in work and leisure settings have made required physical activity virtually unnecessary for most adults. Projections for further decline in energy expenditure in the population due to continued decreases in daily required physical activity over the next two decades present perhaps the greatest threat to the health of our nation. Sedentary lifestyles, combined with gradual increases in total calories consumed each year are fueling the current epidemic of obesity and diabetes in the United States. While individual

productivity continues to rise in the U.S., leisure time, quality of life and health have tended to decline in most adults. Individuals must learn how to balance work and leisure time, ensuring adequate time to get sustained regular physical activity. In this presentation, the common barriers to physical activity will be explored and participants will have an opportunity to make an inventory of their knowledge, beliefs and actions regarding their health and physical activity habits. In addition, the latest scientific guidelines on “*how much exercise is enough*” will be discussed in detail.

**Elizabeth Renfro**

Women Who Run with Calculators, Strollers, Yoga Mats,... and Wolves

Professional women face many challenges, not the least of which is—in this era of greater freedom and opportunities for women—the pressure to be and do it all. What are the sources of these pressures? To what extent are they external, the realities of a professional world in which women still have to prove themselves in ways men don’t? To what extent are they simply the reality of unavoidable clashes faced by both sexes between the personal and professional worlds? And what do (can) women do to keep from burning themselves out? This interactive workshop will involve looking at both statistics and personal stories about women, work, home, and personal lives. It will also include trouble-shooting and sharing strategies women have developed to survive—and succeed.

**Joanne Greene**

**Jennifer Lasell**

**Tracey Mercer**

**Elizabeth Gillis Raley**

Balancing Motherhood and Career

**Cindy Abundabar**

From Books to Boardroom: Transitioning from Student to Professional

We have spent many years preparing ourselves for our careers. Choosing the right classes, being involved in student organizations, striving for the best projects while balancing a social life and for some a family life. Resume workshops, job fairs, and attending conferences helped us get our foot in the door. Interviews, on-site evaluations, and rigorous testing help find the job. Finally graduation and off into the real world... Now what?

My journey through academia and corporate America was not a typical voyage. I had a similar flight plan to that of my peers, but had many deviations along the way. By sharing my adventure, I hope you gain insight into your own journey.

## *Recreation Track*

### **Trish Hamar**

#### Ballroom Dance

Learn the basics of Salsa ballroom dancing. This includes posture, proper etiquette, how to find the rhythm, and how to move.

### **Brenda McLaughlin**

#### How to Throw a Wine and Cheese Party (\$15.00)

Throwing a Wine and Cheese Party is a simple, casual way to entertain friends, family and unexpected company any time of year. And wine and cheese are a perfect combination, bringing out the best in each other. At least 3 wines and cheese combinations will be tasted, and hand out sheets will be provided.

### **Katy Bogosian**

#### Cake Decorating (\$10.00)

Learn the Wilton method of Cake Decorating. People participating in this workshop will learn how to properly make a shell border, as well as mini rosettes. Students will leave with a decorating bag, one tip, and a small cake, which they decorated. Hand out sheets containing icing and cake information will be provided. Technique will be covered, as well as two different types of icing.

## *Laboratory Tours*

Founded in 1887, California State University, Chico is the second oldest campus in the California State University system. John and Annie Bidwell, founders of the city of Chico, donated eight acres of cherry orchard for the original college. They then called the Northern Branch of the State Normal School.

The Bidwell legacy includes 2250 acres of City Park along the banks of the Big Chico Creek, which rushes down from the Sierra Nevada through Bidwell Park, and then winds through the Chico State campus. On the campus grounds, 200 species of flora change dramatically with each season, despite Chico's mild winter climate. The open spaces, landscaped lawns and gardens, benches and picnic tables, and outdoor art give the campus its park-like setting.

The Civil Engineering Department is housed in the Herbert F. Langdon Engineering Center. The College of Engineering, Computer Science and Technology is housed in the O'Connell Technology Center. These buildings provide future engineers with well-equipped educational laboratories, classrooms, computer facilities, and faculty offices.

### **Civil Engineering Tour**

The civil engineering program offers students a broad education that prepares them for a professional career in civil engineering, for graduate study, or other professional career paths. The degree options include emphasis in structures, wastewater treatment, transportation, land development, and water resources/environment. In addition to its excellent technical component, the program stresses written and oral communication skills, and instills a sense of good citizenship, community service, and ethical responsibility. This tour is an exclusive chance to experience the life of a Chico State Civil Engineer!

Tour includes: American Society of Civil Engineers (ASCE) Study Lounge, Fluids Mechanics Lab, CE Computing Lab, Concrete/Soil Lab

### **Mechanical Engineering Tour**

The Mechanical Engineering Program includes study of applied mechanics, fluid-thermal systems, and automation. The graduate is prepared to analyze and design complex mechanical systems involving all three areas. The degree is a general one with two electives, which allow for a modest degree of specialization. A great opportunity to visit the facilities that turn students into mechanical engineers!

Tour includes: American Society of Mechanical Engineers (ASME) Lounge Thermal Fluids Lab, Material Testing Lab, Computer Aided Design Lab Design Workshop

### **Mechatronic Engineering Tour**

Mechatronics is the study of the design of "intelligent" systems and products in which mechanization and control requiring sensing, actuation, and computation are combined to achieve improved product quality and performance. CSU, Chico is the only university in the nation with this program! Take this tour and see why Mechatronics is the career of the future!

Tour includes: Mechatronics/Intelligent Systems Lab, Computer Aided Design Lab, Intelligent Ground Vehicle Project, Institute of Electrical and Electronics Engineers Study Lounge

### **Manufacturing Technology Tour**

The Manufacturing Technology Program blends metals manufacturing, polymers manufacturing, and automation with business and management. It prepares students for a variety of manufacturing careers ranging from management of manufacturing facilities to research and development to technical sales. Here's your chance to visit the manufacturing labs and experience the definition of hands-on curriculum.

Tour includes: Materials Removal Lab, Material Joining and Metal Casting Lab, Computer Aided Manufacturing Lab, Polymers Manufacturing Lab

### **Electrical Engineering Tour**

Electrical engineering students gain hands-on laboratory experiences with many types of advanced computer and electronic equipment, as well as an understanding of fundamental and advanced electrical and computer engineering science. Undergraduate students prepare themselves for professional work in a wide variety of high growth areas including computer hardware and software design, embedded microprocessor systems, electromagnetics and electro-optics, control systems, digital signal processing and analog and digital electronics. Check out the facilities that electrical engineers come to love!

Tour includes: Institute of Electrical and Electronics Engineers Study Lounge, Advanced Electronics Lab, Robotics and Controls Lab, Circuits Lab, Digital Signal Processing Lab