Team-Based Learning
Improving Children’s Lives
Using a Robotic Haptic System

Our faculty and students engage in innovative research that has an impact on our society and that is interdisciplinary for a deeper and meaningful hands-on learning experience.

An illustration of this transformative work is Dr. Norali Pernalete’s team of undergraduate student researchers, all of whom had a notable impact in the health sciences community through their innovative research in rehabilitation robotics and the creation of the Robotic Haptic System.

Dr. Pernalete is testing whether the haptic system can improve children’s eye-hand coordination and grip strength, which in turn would help with their handwriting and other activities. The team plans to work with children at Casa Colina Centers for Rehabilitation in Pomona, which offers therapy for people with disorders and injuries, including brain injuries, spinal cord injuries and strokes.

The research being conducted is not only providing learn-by-doing experiences, but also the opportunity to be part of a project that is positively impacting our local community.

By focusing my research on rehabilitation robotics, I hope to give students the chance to see how engineering can help people achieve a better quality of life.

We have one objective, one goal to achieve, and we work together. I think we all need to work together as a team to achieve the learning objectives.

- Dr. Norali Pernalete
Faculty Research Advisor
Be Creative. Be an Engineer.

Do You Want to Design the Future? As an Aerospace Engineer you will make travel faster, safer, and better for the environment. You can help design vehicles to explore other planets and outer space.

Are You Interested in Improving Quality of Life? Chemical & Materials Engineers design processes and materials for alternate energy, biomedical, and structural applications, and develop useful products such as food, medicine, and fuels.

Will You Create a Way to Help Protect the Environment? Civil Engineers design safer and more environmentally friendly roads, buildings, bridges, and water supply systems. Your work will help the lives of many others.

Are You Interested in Exploring Cutting-Edge Technology? Electrical & Computer Engineers design next generation smart phones, create software for early detection of tumors, and find new ways to transmit power.

Can You Picture Yourself Making a Difference in the World? As a graduate of Engineering Technology you will enhance manufacturing and construction processes, and improve electronics products that make a difference in people’s lives.

Do You Want To Create Solutions for a Global Workplace? Industrial & Manufacturing Engineers develop products and services that are greener, better, faster, and cheaper by improving the way people work in industry using leading-edge technology.

Will You Help to Develop Life-Saving Technologies? Mechanical Engineering graduates apply knowledge from energy systems, fluid flow, and machine design to develop artificial organs and alternative energy systems.

Why Employers Love Bronco Engineers

- Our students are well-qualified and prepared to enter the professional industry
- Our students are offered the opportunity to engage in undergraduate research that applies theory and practice
- Many of our students participate in paid industry internships
- Our learn-by-doing philosophy is an approach that makes our graduates extremely valuable in the job market
- Our students are equipped with up-to-date software knowledge and laboratory experience

10 Reasons Students Choose to Become a Bronco

- We graduate 1 out of every 14 engineers in California
- We offer over 40 engineering clubs representative of diverse interests
- Professors have industrial experience and incorporate industry perspective into curriculum
- Many of our college’s 61 laboratory suites operate 24/7 using electronic access control for students and faculty
- The College of Engineering offers a close, supportive community to help you succeed
- Classes are taught by professors, not graduate students
- Many scholarship opportunities for our diverse student population
- As a Bronco you will be part of the campus commitment to a green environment
- We offer 11 undergraduate majors, 4 minors, and 5 master’s high quality degree programs at a low cost
- Each year an impressive range of engineering employers come to Cal Poly Pomona’s Hi-Tech Career Fair to recruit our students

Cal Poly Pomona is widely recognized for its learn-by-doing philosophy. As a student you will enjoy a unique blend of theory and practice to solve problems in a lab setting today, while you prepare to solve real-world problems tomorrow.

Students have opportunities to apply their knowledge to hands-on projects, collaborate with faculty members on research, and participate in valuable internships and service-learning programs.

Aerospace Engineering students were among the only undergraduate teams in the nation to fly an NASA’s Reduced-Gravity aircraft for a spacecraft control experiment.

Challenges yourself, respect others in and out of the workplace, and you’ll open doors for opportunities you never imagined.

- Rebecca Ritt Rhoads

The College of Engineering graduates outstanding students who, through their hard work and dedication, become distinguished alumni that serve as role models for our students. Rebecca Ritt Rhoads earned her bachelor’s and master’s degrees in electrical engineering from Cal Poly Pomona and among her many accolades she is currently the Vice President and Chief Information Officer of Raytheon Company. Rewarding opportunities such as these await you in engineering.

Civil Engineering students celebrate after paddling the endurance course in the concrete canoe competition.