Envision your future in Engineering
Envision your future in ENGINEERING
Table of Contents

Introduction by Heidi Sherick

Profiles: Undergraduate Students
  Mandi Durch .................................................. 1
  Danielle Erickson ............................................... 2
  Hilary Fabich .................................................. 3
  Jordan Kennedy ............................................... 4
  Cynthia Knox .................................................. 5
  Kelsey Miller .................................................. 6
  Sarah Mondl ................................................... 7
  Tessa Mosdal .................................................. 8
  Brittani Nickol ................................................ 9
  Olivia Poettmann ............................................. 10
  Erin Ryan ..................................................... 11
  Kathryn Schipf ............................................... 12
  Kaysha Young ............................................... 13

Profiles: Graduate Students
  Angela DiFronzo .............................................. 14
  Sarah Lukes .................................................. 15
  Natasha Mallette ............................................. 16
  Tonya Miller .................................................. 17
  Ari Staven ..................................................... 18

Profiles: Faculty
  Jennifer Brown ............................................... 19
  Anne Camper .................................................. 20
  Sarah Codd ................................................... 21
  Penny Knoll .................................................. 22
  Whitney Lutey ................................................ 23
  Abigail Richards ............................................. 24
  Mandy Rutherford ............................................ 25
  Laura Stanley ................................................ 26
Introduction

It is my pleasure to serve as the Director of EMPower, an organization that has been in place for almost three decades. EMPower is dedicated to fostering the academic and personal success of minority and women students in the College of Engineering at Montana State University. It is an honor to lead the efforts of support and inclusion of women in the College of Engineering at Montana State University. As of fall semester 2011, there are 373 women studying engineering, engineering technology and computer science in our programs. This constitutes almost 16% of our total student population.

The purpose of this publication is to CELEBRATE our successes and highlight outstanding women associated with MSU’s College of Engineering—some have overcome great challenges and adversity. I hope that their compelling stories will inspire you and motivate you to think about studying engineering, computer science, or construction or to persist in your program. As you read about a woman’s experience of overcoming health issues, involving herself in extracurricular activities, being an intern, studying abroad, or juggling family responsibilities, KNOW that anything is possible.

I am in awe of these women and am truly humbled to be associated with such phenomenal people. I appreciate their willingness to share their stories. There is great power in “lifting as you climb.” I hope each of you will take time to celebrate your own success, as well as join in the celebration of women around you. Your impact and influence on the future of women in engineering, computing and construction, and on the future of our society cannot be overstated.

With great pride,

Heidi M. Sherick

Heidi Sherick
Assistant Dean for Undergraduate Programs and Diversity
Mandi Durch

Major: Chemical Engineering  
Year: Junior

My name is Mandi Durch and I am a junior in Chemical and Biological Engineering. I am from a small town in South Dakota and graduated with only 25 students.

I started off my engineering career by traveling abroad to Europe to study physics. I was chosen as a Davis Bahcall Scholar. This scholarship selects 10 college freshmen to travel to Switzerland and Italy to visit various national laboratories, including the Gran Sasso Laboratory. After traveling, we went to Princeton University to take a physics course for the remaining portion of the summer.

I came into my freshman year of Chemical Engineering with no prior calculus experience and overcame the challenge of Calculus I and II by studying non-stop.

After my freshman year in Chemical Engineering, I was a summer intern at the Deep Underground Science and Engineering Laboratory where I worked with geological engineers, chemical engineers, and civil engineers.

During my sophomore year, I started working in the Medical Biofilm Laboratory as a research assistant. I worked in the MBL all summer. This semester I was chosen as a USP scholar, which allows me to perform my own experiment that I designed. Next summer, I will be interning for Reckitt Benckiser in New Jersey.

What is your favorite type of music?
My favorite kind of music is pop/rap. I love any song that Gavin DeGraw sings!!

Why did you choose engineering?
I chose engineering because of my grandpa’s history in engineering. He was a geological engineer and he encouraged me to give engineering a shot.

Who are your role models and why?
It may be cliche, but my mom is my role model. She is a single mom who finds the time to work and support my brother and me. I have learned so much from her and she has supported me through everything.

What is most helpful to you in balancing your academic goals with family relationships and personal interests?
I try to treat school like a regular 9-5 job. Even if I don’t have class at 9, I go to school anyway and do school or work in the research lab. I always try to get everything done by 5. This always leaves time for the gym, a phone call with my mom, and some time with my friends.

What is the best advice you ever used?
The best advice I have ever used was to try to become more outgoing. I have had numerous people tell me that I need to be more outgoing, but it didn’t sink in until I came to college. I have opened up and become far less shy, and it has had a very positive effect on my life.
Danielle Erickson

Major: Chemical Engineering
Year: Freshman

Modern life is wholly dependent on engineering. It is everywhere and it is always changing. This, in particular, attracts me to chemical and biological engineering. I hope that in this field I can combine my knowledge and skills in chemistry and math, two subjects which particularly interest me, and work in an area which is both diverse and exciting. While I anticipate a challenging and demanding career, I also expect it to be personally rewarding.

I first encountered engineering in June 2007 working part-time for a local firm. At Water and Environmental Technologies, I poured carbon wax molds in aid of the development of SepticNET, an innovative septic nutrient elimination technology. While working as a summer secretary at Water and Environmental Technologies, I was inspired by the prospect of a job which would enable me to shape the world around me and make a difference in people’s lives.

In July 2008 I was selected to participate in a month-long medical-based conference at the University of California at Berkeley. During this conference, I was able to view an actual brain surgery procedure, as well as tour the Gladstone Institute, one of the leading facilities in biomedical research in the country. My participation in this conference undoubtedly focused and enhanced my enthusiasm for chemical and biological engineering.

During my senior year in high school, I was one of three students selected to install computer-based advanced math programs in the local grade schools. I also volunteered for an exceptional program called Special Riders in which I aided in the rehabilitation of special needs children. Helping others is something I hope to continue throughout my engineering career.

I look forward to my future with great anticipation. Through my experiences, I am already beginning to appreciate the diversity that chemical and biological engineering offers, and I hope to build on this by securing a work placement this summer as well as a research position related to my degree.
Major: Chemical Engineering
Year: Senior

I had the opportunity to start research as a freshman at MSU. By my sophomore year, I was working independently on a research project using nuclear magnetic resonance (NMR) to study gels. This gave me the opportunity to work hours that fit into my school schedule. The summer after my junior year I was selected by my lab to travel to Sweden to learn a new technique which I have now implemented in the NMR lab at MSU. I worked with a PhD student in Sweden to learn to make a core-shell colloidal suspension useful with NMR techniques. The summer after my senior year, I had the opportunity to do research at Harvard University. I was able to use the knowledge I had gained during my experiences at MSU to excel in research studying cells, specifically a filament in cells in which a mutation is known to cause cataracts. With the help of my advisors I have written successful proposals to both USP and INBRE. The funding from these grants has helped me to support myself financially during my degree.

Outside of research, I have been an active member of Engineers Without Borders. I had the opportunity to spend four weeks in Kenya over the winter break, surveying land to design a water pipeline that is currently in production. This pipeline will bring water to primary schools and health clinics.

I was also a part of the MSU symphony for three years as the pianist. I performed in Thailand, Singapore, and Vietnam during the orchestras tour in 2009. I developed an outreach program for the NMR lab using hands on demonstrations to portray concepts of magnetism and fluid dynamics. I have been involved in outreach programs, such as MAP and Expanding Your Horizons, promoting math and science to Native American high school students and middle school girls.

I will be receiving an honors degree with highest distinction when I graduate in December 2011.

Kelly Gorham, Montana State University

What is your favorite type of music?
I like any type of music that I can sing loudly to in the car or the shower. One of my favorite singer-songwriters is Antje Duvekot because her very clever lyrics paint a unique picture of the world we live in.

Why did you choose engineering?
A high school counselor suggested that I study engineering. I hadn’t given it much thought prior to that because I had always planned to study music. However, I am grateful that I accepted his suggestion because I have found so many wonderful opportunities through the program.

Who are your role models and why?
Many people have influenced my life, but the most prominent influence in my current path has been from my research advisors. Both Dr. Seymour and Dr. Codd have helped me understand the opportunities available to me through research and have helped guide my decision to pursue a Ph.D.

What is most helpful to you in balancing your academic goals with family relationships and personal interests?
It is incredibly important to have fun, engage in relationships, and pursue personal interests. I always keep my academic goals in mind, but some of my most productive hours have come after a day of skiing or a rehearsal with my band.
Who is your favorite singer?
Adele.

Why did you choose engineering?
I was inspired to go into engineering because of my high school biology teacher, who suggested that I would make a good engineer after I advanced on to the State Science Fair for my project concerning the effectiveness of windbreaks.

Who are your heroes or role models and why?
I am inspired in large part by my immediate family, not necessarily to be exactly like them, but by the work ethic they demonstrate. My father is a rancher, my mother is a teacher and my sister is a pharmacist, all very different professions. However, the degree to which they devote themselves to what they do is inspiring.

What is most helpful to you in balancing your academic goals with family relationships and personal interests?
Balance is something I wish I were better at. It always comes down to priorities in the end. I usually have a mental monologue sounding something like, “School before work. Homework before sleep. Sleep before fun.”

What is the best advice you ever used?
Don’t be afraid to work.
Cynthia Knox

Major: Computer Science
Year: Junior

My family and I moved to Montana in 2004 to follow a job opportunity within my company (at the time-Electronic Data Systems, now, Hewlett-Packard). I am married and have two kids—one is in the Air Force in Delaware, and the other is graduating from Bozeman High next year. I have been employed by HP (formerly EDS) for almost 30 years! I started out at General Motors at Environmental Activities in the Warren Tech Center when I was 16, as a high school co-op student as a copy machine operator. At the time, they were installing one of the very first local area networks with Xerox personal computers and workstations (Xerox’s mouse and windowing technology — before Microsoft). I was hired on to General Motors as an assistant system administrator on their LAN as a college co-op. I really enjoyed learning the technology. I found that I was learning more and on newer technology than I was at school, so I quit school (something that has always haunted me). My second job was in Philadelphia installing and customizing AT&T 3B2 minicomputers at GMAC Mortgage branch offices across the country. I taught myself how to write a small UNIX script to send out mortgage updates overnight (which we were doing manually). Since then, I was hooked. I ended up moving back to Michigan. I got married, had two kids, and was too busy to finish school. Now, almost an empty-nester, I’m ready to complete my degree — something I’ve always wanted to do!

What is your favorite type of music or who is your favorite band/singer?
The artist with the most songs that I like was John Denver, with Rocky Mountain High, Leaving on a Jet Plane, or, of course, Wild Montana Skies!

What inspired you to choose computer science?
General Motors. They hired me as a college co-op when they installed one of the very first local area networks. I got to take home a cp/m-based IBM computer (complete with 8 inch floppy drive!) over Christmas break back in 1981 or ‘82. It was sure thrilling at the time!

Who are your heroes or role models, and why?
I don’t have one hero or role model. For me, everyone has something about them that I find inspiring.

What is the best advice you ever used?
My dad said, “Get an education. It’s something no one can ever take away from you.”
Why did you choose engineering?
I have always enjoyed math and science but was drawn to the problem-solving aspects of engineering.

Who are your heroes or role models and why?
I have many role models, which include teachers, professors, coaches, and most importantly, my parents. I admire those educators who not only spark an interest in their students but also provide a challenging learning environment. I look up to my various athletic coaches who have taught me the importance of teamwork and sportsmanship. Lastly, I admire and thank my parents for providing an environment that encouraged independence, responsibility and compassion.

What is most helpful to you in balancing your academic goals with family relationships and personal interests?
I have found that time management is the most important aspect of balancing school, work, family and other personal interests. I try to prioritize and make the best use of my time by making every minute count.

What is the best advice you ever used?
Don’t buy anything with a credit card that you don’t have the cash to pay for. Don’t wait for tomorrow to do things that can be done today.

Kelsey Miller
Major: Mechanical Engineering
Year: Senior

I grew up on a ranch in central Montana and graduated from Harlowton High School in 2002. I attended Carroll College for two years before transferring to the University of Montana. In 2007, I graduated from the University of Montana with a degree in Human Biology. I began working in a hospital and quickly realized the healthcare field was not for me. I decided that I would go back to college, but I wanted to spend time traveling first. After two years of working three jobs, I had saved enough money to spend a summer backpacking around Europe. I returned to Montana State University in 2009 to pursue a degree in Mechanical Engineering and joined Air Force ROTC. I will graduate in December 2012, commission as an officer and join the 86th Fighter Test Squadron at Eglin Air Force Base in Florida.
Sarah Mondl

Major: Computer Engineering
Year: Sophomore

I grew up in Anchorage, Alaska, and it is MSU’s emphasis on undergraduate research and the faculty’s passion for students that initially attracted me to this university. The professors here go out of their way to encourage students to pursue research and will often point you in the direction of your personal areas of interest.

It was through my professors that I initially learned about the RoboSub Team, where I was able to work on a project on a scale that I had never before been able to. I am now the Vice President of the RoboSub Club and have earned an Undergraduate Scholars Program grant that I am using to pursue research into unmanned underwater Computer Vision Systems under the direction of Hunter Lloyd. This has enabled me to travel to the Association of Unmanned Vehicles International’s annual RoboSub Competition in San Diego and gain hands on experience in applying what I’ve been learning to real world problems.

What is your favorite band?
State Radio.

Why did you choose engineering?
I chose to go into engineering because of the challenges in creating something that has everyday applications for millions of people.

Who are your heroes or role models and why?
My role models would have to be Neil DeGrasse Tyson and Carl Sagan because they helped to popularize science with the public and promote interest in engineering and space exploration.

What is most helpful to you in balancing your academic goals with family relationships and personal interests?
I always make sure to schedule in free time, no matter how much homework I have. That way I don’t burn out on my studies and have time to go out and enjoy the mountains around Bozeman.

What is the best advice you ever used?
The best advice I ever received was to always have a reason for everything you do.
What is your favorite type of music or who is your favorite band/singer?
I love listening to different types of music (except for rap) depending on my mood so my favorites are always changing.

Why did you choose engineering?
My parents, especially my father who is also an engineer, inspired me to pursue engineering.

Who are your heroes or role models and why?
I look to my parents and sisters for support, advice, and guidance. They have been the constant heroes in my life because they each overcome personal obstacles in their lives while they continue to be successful in their personal and professional lives.

What is most helpful to you in balancing your academic goals with family relationships and personal interests?
I balance my academics with family relationships and personal interests through exercising and making lists!

What is the best advice you ever used?
“Wherever you go, there you are.” (unknown) I’ve tried to live by this quote and enjoy each moment of my life.

Tessa Mosdal

Major: Civil Engineering
Year: Senior

I grew up in a family of three girls and all three of us fell into the stereotype of tomboys. It was not unusual for us to be outside all day, every day in the summers playing with mud, dirt, frogs, and worms.

In school, we all became interested in math and the sciences. My dad, who is a civil engineer, and my mom, a grade school teacher, further encouraged these interests.

I quickly became the one most fascinated with math and with solving problems. So instead of listening to bedtime stories before going to sleep, my dad would give me a story problem before tucking me into bed. In the morning, I would run downstairs to rattle off the right answer to the math problem. Although this routine faded as I became older, my love for math did not.

I am currently in my fourth year in the Civil Engineering program and love what I am learning in classes. In the future, I hope to pass on my love for math to my daughters just like my dad did for me.
Brittani Nickol

Major: Industrial Engineering
Year: Sophomore

Before I was old enough to talk, I bled blue and gold. My entire extended family are diehard Bobcat alumni and fans, so I have been cheering on the Cats my whole life. I’m a second generation Bobcat and have had ten other family members attend MSU, with several in the engineering program. After careful consideration as to what career path I should follow, I chose Montana State for its engineering program and extracurricular activities.

MSU-Bozeman has given me endless opportunities in every aspect of my life. Although the course load is challenging, there are plenty of resources on campus that offer assistance whenever I need help.

In addition to pursuing my engineering degree, I have been encouraged to continue with my other passions. I have loved to sing from an early age and am now a member of the MSU Chorale, where I merge my voice with both music majors and non-majors. I am expanding on my musical background by taking a guitar class. I’m also a member of my church choir and I help at a high school youth group. As a member of one of the sororities on campus, I participate in many philanthropic and social events with members of the Greek system. In addition to Women in Engineering, I am an active participant in other clubs, such as Engineering Ambassadors and the Institute of Industrial Engineers, as well as the University Honors College.

MSU has given me a chance to continue choosing what best complements my education. This has allowed me to keep a healthy balance in my life and keep my college experience unique!

Why did you choose engineering?
When I was in high school, I knew I wanted to have a career where I worked with people. My cousin was a student at MSU at the time and introduced me to Industrial Engineering. The more I learned about it, the more drawn to it I felt. After coming to MSU Friday and to Shadow an Engineer, I knew that the engineering program was the place for me.

Who are your heroes or role models and why?
My biggest role models have always been my mom and cousin. Both have unbelievable organization skills. They have great time management skills and always get everything done that they set out to do. It is something I have always admired in them, so I try my best to use the skills that they have taught me. Plus, they have always unconditionally supported me, which has helped me excel my whole life.

What is the best advice you ever used?
Two pieces: Don’t be afraid to ask questions and be organized. These have been staples of my college career and have helped me be successful more than anything else. If I have my priorities laid out, I can make well-informed decisions. If I don’t understand something, asking for help is the best way to assure that I am getting the most out of my college education.
Olivia Poettmann

Major: Civil Engineering-Bioresources
Year: Junior

My journey to become an engineer began fall 2008. The 2008-2009 school year went very smoothly. The following year, however, during Christmas break 2009, I was diagnosed with leukemia and was crushed to discover that I wouldn’t be returning to school the following spring semester. After seven months of chemo treatments, I was officially in remission and extremely excited to return to Bozeman and continue working towards my career as an engineer. I anxiously registered for a full load of classes for the fall semester of 2010. However, two-week periods of more chemo treatments every three months made being a full-time student impossible for me. For 15 days of each semester, I find myself bedridden and unable to eat most days. With two years of periodic treatments, instead of giving up, I decided I would try to manage a smaller load of around eight credits per semester.

Now, with only one semester left of treatment, I have become very good at managing my time and staying on top of my studies, despite being sick. It takes a lot of hard work and help from my professors to make up two weeks of class.
The life of an engineering student doesn’t always allow for conducting undergraduate research or studying abroad. However, I considered these experiences imperative in becoming both a well-rounded engineer and person. I believed that hard work would create these opportunities while confidence would give me the initiative to take them. My journey started when I was selected as one of MSU’s Presidential Scholars and given the opportunity to conduct two years worth of funded undergraduate research. I chose to join an interdisciplinary team to look at the swimming capabilities of westslope cutthroat trout in regard to the design and retrofit of hydraulic structures.

At the end of my sophomore year, the timing seemed right to open the next door and study abroad. I found a program that suited me well, so I moved to Ireland to study in the Civil Engineering program at the University of Limerick.

I am currently taking courses through a Problem Based Learning (PBL) Integrated Project. This involves learning through both theory and practical application as we work in teams to design a proposed Ocean Research Centre. The PBL teaching method differs from the traditional method of presenting information that is utilized at MSU. Both approaches have their respective pros and cons, and I feel incredibly fortunate to be reaping the benefits from each.

Next year, I will be returning to MSU to finish my Civil Engineering and Honors degrees. My experience abroad will have provided me with the credentials to also obtain an International Engineering certificate.

What is your favorite type of music or who is your favorite band/singer?
I’ll listen to almost anything that has lyrics my friends and I can belt out in the car, but I’m partial to good ol’ country music.

Why did you choose engineering?
Raw math and science are great on their own, but applying those subjects to solve problems is what has always appealed to me. The chance to create tangible solutions to challenges that I personally found interesting was what inspired me to choose engineering.

Who are your heroes or role models and why?
My biggest role models in life have been my coaches. Whether I was playing a sport or at an FFA competition, each coach showed me individual support while helping the team reach a collective goal. I wouldn’t be the person I am today without their positive influences and I am always looking to impact others lives in such a manner.

What is the best advice you ever used?
The best advice I’ve ever used in life came on a necklace my parents once gave me: “Blaze a new trail”.
What is your favorite type of music or who is your favorite band/singer?
Country music, Eric Church.

What inspired you to choose engineering?
My sister and brother.

Who are your heroes or role models and why?
My sister and brother; they taught me a lot about balancing school, work, and extracurriculars.

What is most helpful to you in balancing your academic goals with family relationships and personal interests?
Writing everything—assignments, activities, meetings, work—in my Cat Tracker (an MSU calendar/day planner) and highlighting it by category. I am very lucky that most of my family lives close and visits Bozeman often to spend time with my cousins and me.

What is the best advice you ever used?
You shouldn’t take life too seriously; you’ll never get out alive.

Kathryn Schipf

Major: Mechanical Engineering; Aerospace and Math minors
Year: Senior

Being a Bobcat has been a long standing tradition in my family, beginning with my great-grandparents and continuing today with myself and my cousins. A more recent tradition in my family is studying engineering here at MSU. When deciding on my specific major I was significantly influenced by my two older siblings who have both graduated with degrees in engineering from MSU. They have been great role models all through my years in school.

While pursuing my degree, I have also become active on campus. I am involved in my sorority, Alpha Omicron Pi, as well as clubs such as the Student Alumni Association. I also greatly enjoyed serving as an Advocat for two years and an Orientation Leader. I find that I am most productive while I am constantly staying busy with school and extracurriculars.

I also had the opportunity to study abroad in Limerick, Ireland, for a semester. It was very interesting to experience a different system of academics and to meet other engineering students from a different part of the world. I was able to learn a lot about different cultures in Europe and about the influence of the United States on the rest of the world. I hope to use my study abroad experience to receive an International Engineering Certificate and even to possibly work as an engineer in another country someday.

“A busy life is a happy life,” and I have been very happy in the College of Engineering at MSU and look forward to my remaining time here.
As a single mother, I sought to find a career that would provide well for my child. Giving her the best life I can is my main priority. I decided that obtaining an engineering degree would be a great choice and with such a degree I would be able to give Rylan the type of lifestyle I wanted to.

On my first day of class in August 2008, Dr. David Miller said, “You were the kids that took apart the VCR when it broke, you were always curious about how everything worked.”

I was scared to death; that was NOT me, I was the person who shrugged her shoulders, threw it in the garbage, and bought a new one. I did not care what made up an object or how it worked, as long as it worked.

That night I called my mom and said “Mom, I think I picked the wrong career!” She told me to stick it out until the end of the semester, then I could choose another career.

I am so glad I took my mom’s advice. With Rylan as my motivation, I stuck with it and I am now a senior, double majoring in mechanical engineering and mechanical engineering technology; I love what I am doing. I know that I picked a field that will make me happy every single day of my life while providing a great quality of life for my daughter and for myself.

What is your favorite type of music?
I love listening to my child sing in the car when we are on a road trip. She already requests particular songs and knows every word. It melts my heart when she sings “Twinkle, Twinkle Little Star”!

Who are your role models and why?
My grandfather is an amazing man; he knows no strangers and is kind and friendly to everyone. My parents are the hardest working people I know. I hope that the work ethic they instilled in me will shine through so boldly that they can be proud of my accomplishments.

What is most helpful to you in balancing your academic goals with family relationships and personal interests?
The analogy of the jar, golf balls and sand. The jar represents my life; the golf balls are my family, friends, and personal interests; the sand is my homework and studying. If you fill the jar with golf balls, it is full. You then pour the sand on top of the golf balls, and the jar is still full. However, if you take out the golf balls and put the sand in first, there is no room for the golf balls. By remembering that I wouldn’t be where I am without my family and friends, I realize the importance of keeping those bonds strong. Having these strong bonds helps me when school work gets hard by giving me a good support system.

What is the best advice you ever used?
“To give anything less than your best is to sacrifice the gift” —Steve Prefontaine
I often get asked “How do you do it all?” My answer is planning, prioritizing, hard work, wanting it—and the only thing I can’t control—my husband’s support.

Women who “want it all” shouldn’t feel like they have to make a choice. They can do it all, too.

I earned my bachelor’s degree in Mechanical Engineering from Montana State University and spent most of my career at Ball Aerospace working on instruments like the Mars’ rovers and Kepler photometer. It was enjoyable, rewarding, and I love how my daughter looks at pictures in magazines and says, “Mommy helped build that.”

I continued to work full-time after having two children. Frequently, the demanding schedules required significant overtime. So, when the opportunity arose for my husband to take a job in Bozeman, I was happy to have more time with my family.

As much as I wanted to be a full-time mom, I also needed to continue to work and challenge myself. I pursued a passion of mine and started a new business—Infant Aquatics Bozeman. Watching my children and other toddlers and infants learn survival swimming in weeks, not years, was remarkable. When our family moved to Bozeman, I trained to become an IAS instructor and brought that valuable resource here.

As rewarding as it is to teach swimming to young children and after all I’ve learned about being a business owner, the roots of my career are still in engineering. I always enjoyed and wanted to return to school, so moving back to Bozeman played right into my plan for returning to MSU, where I’m currently studying for my master’s of science in ME.

Now that my research measurements are done, I need to draw this article to a close. It’s time to pick up my son from preschool, meet my daughter at Girl Scouts, get dinner, walk the dogs, put the kids to bed, and do homework. The day’s not over yet, I’m still having fun.
I have a particular interest in the combination of electrical and mechanical engineering, which I am pursuing with the microfabrication of miniature mirrors for imaging systems.

Microfabrication, or nanofabrication, is used for many electronics components because hundreds or thousands of devices can be made on a single wafer. This also gives the technology potential for cost-effective energy and health solutions in rural locations.

Last winter, I was selected to participate in the National Nanofabrication Infrastructure Network’s 2011 Winter School in Bangalore, India, with 12 other U.S. students. I attended a one-week intense nanofabrication course and then explored rural India near Dharmasthala. We visited several schools and investigated rural development needs. The Sri Kshetra Dharmasthala Rural Development Project (SKDRDP) showed us many of their current projects, including photovoltaic initiatives to get electricity to more homes and micro-finance programs to help local farmers become self-sufficient.

One particular experience was especially meaningful. The group of Indian and American professors and students led science demonstrations at a local high school. As we planned the event, differences in the two societies’ approaches to education were apparent. Both sides learned more about how each teaches science.

Additionally, the American students needed the Indian students to translate during the demonstrations and we learned to appreciate the difficulty in overcoming language barriers. In the end, the event turned out to be what the Indians termed “a grand success” and the high schoolers were hard-pressed to return home.

What inspired you to choose engineering?
I participated in an electrical engineering internship for high school students at the University of Wyoming. We used existing computer code to design a flight simulator and then build a model. We found motors lying around in a stock room, got them working, and built a control box to use them to maneuver six wires that controlled the model flight simulator’s movement. I was hooked on the combination of mechanical and electrical systems and knew I would pursue engineering.

Who are your heroes or role models and why?
My role model is Margaret McAtee, one of my junior high school teachers who mentored my “Future Problem Solvers of America” group to an international competition. She taught me to develop and listen to my own voice and she epitomizes “To thine own self be true.” Because my family could not afford a home computer, she and her family shared theirs with me throughout junior high and high school. I believe that without their sacrifice, I would have lacked the computer access I needed for honors classes. Honors classes support students who value and intend to pursue higher education and increase their chances of earning scholarships. I question whether I would have attained an undergraduate degree without her family’s generosity.
Natasha Mallette

Chemical Engineering
Doctoral Candidate

I started college with a strong desire to help others and an interest in alternative energy sources. Through studying for my degree in Chemical Engineering, I learned I wanted to make a difference in the way our society uses energy sources. This led me to internships with photovoltaic and fuel cell manufacturers, and eventually a full-time engineering job at a nuclear power plant. While there, I challenged perceptions about what a female engineer could and would do by taking on tasks that many of the male engineers were not interested in, such as climbing and inspecting the cooling tower. The desire to make a bigger impact in the lives of other women engineers led me to graduate school. My research project on a fuel-producing fungus has implications for how liquid fuel sources are approached in the coming decades and is a fulfilling challenge. I hope to inspire other students through my graduate work and present and past volunteer activities by mentoring undergraduates, teaching, guest lecturing in other classes on my experiences, serving on the COE’s Women in Engineering Advisory Board, participating in MSU’s Women In Science and Engineering (WISE) group and the Eagle Mount Therapeutic Recreation Program. My newest challenge is balancing graduate work with my beautiful infant daughter. It has been a rewarding experience and has focused and improved my work, an unanticipated impact. Ultimately, I hope that my experience will help other women believe that they can have a successful career and a rewarding personal life.

What is your favorite type of music?
The blues. Despite the name, it makes me happy.

What inspired you to choose engineering?
I love practicality. I wanted a field that makes me feel empowered to make a difference in the things I care about. Also, my indecision. I have had so many interests in my life; so, I needed a versatile field. Engineering has helped me explore some of my interests, and I’m sure it will lead to others.

Who are your heroes or role models and why?
My role models portray commendable characteristics. My good friend is a very effective engineer and a great self-advocate. My partner handles tough situations well. My mom sees the positive in every situation. My Ph.D. advisor maintains a healthy work-life balance despite very challenging career demands. One of my fellow Ph.D. students jumps at the chance to help others.

What is most helpful to you in balancing your academic goals with family relationships and personal interests?
Priorities and perspective! Knowing my priorities helps me make daily decisions about how to spend my time. That means my #1 priority is sometimes different from day to day. I rank my personal life as high as my professional life but try to focus on one at a time.

What is the best advice you ever used?
K.I.S.S. Keep it Simple...Surely!

What is your favorite type of music?
The blues. Despite the name, it makes me happy.

What inspired you to choose engineering?
I love practicality. I wanted a field that makes me feel empowered to make a difference in the things I care about. Also, my indecision. I have had so many interests in my life; so, I needed a versatile field. Engineering has helped me explore some of my interests, and I’m sure it will lead to others.

Who are your heroes or role models and why?
My role models portray commendable characteristics. My good friend is a very effective engineer and a great self-advocate. My partner handles tough situations well. My mom sees the positive in every situation. My Ph.D. advisor maintains a healthy work-life balance despite very challenging career demands. One of my fellow Ph.D. students jumps at the chance to help others.

What is most helpful to you in balancing your academic goals with family relationships and personal interests?
Priorities and perspective! Knowing my priorities helps me make daily decisions about how to spend my time. That means my #1 priority is sometimes different from day to day. I rank my personal life as high as my professional life but try to focus on one at a time.

What is the best advice you ever used?
K.I.S.S. Keep it Simple...Surely!
Growing up in Helena, Montana, I didn’t know what I wanted to be when I grew up. While my classmates were dreaming of being veterinarians or marine biologists, I just kept up on my studies, confident that I would figure it out when I got older. I did know where I was going to college though, Montana State University. My dad graduated from MSU in 1984 and I listened to him tell great stories of Bozeman and MSU.

When I entered college, I still wasn’t sure what I wanted to major in. I grew up doing home repair with my dad and grandpa, so I decided to try the Construction Engineering Technology program. It was a great fit and I loved it. Because I had zero industry experience, I tried for and got several internships, which opened my eyes to construction on a professional level. These internships also enabled me to meet a lot of people, work in both private and federal sectors and gave me an idea of what direction to take my career in. They also treated me to some unique experiences, from living in both bigger and smaller towns in Montana to spending my work-weeks avoiding grizzly bears in the Flathead National Forest to riding ATVs around the High Plains in Northeastern Montana.

Now, I am in the Master of Construction Engineering Management program, with the hope that by furthering my education, I will be able to change the construction industry for the better.

What is your favorite type of music or who is your favorite band/singer? Blink-182.

What inspired you to choose construction engineering? Watching dirt lots go from nothing to a complete building in a short amount of time made me want to be a part of that process.

Who are your heroes or role models and why? My parents because they always inspired me to do my best and follow my dreams.

What is most helpful to you in balancing your academic goals with family relationships and personal interests? Plan how you will go about doing major projects and don’t wait until the last minute to do them.

What is the best advice you ever used? “Always draw a picture.” It is surprising how much I have used this and how much this has helped me get through school and work.
What inspired you to choose engineering?
I was interested in complex biological systems that could be explained with a mixture of applied mathematics, biochemistry and microbiology. Chemical engineering is a great combination of tools needed to effectively analyze these problems.

Who are your heroes or role models and why?
My advisor, Brent Peyton, and Lisa Kirk, President of Enviromin, who completed her Ph.D. in my laboratory, have been role models for me the past few years. They have a great balance of work/life commitments and have helped me make crucial decisions.

What is most helpful to you in balancing your academic goals with family relationships and personal interests?
Being able to prioritize time and realize that sometimes you can not do it all so you have to remember what is really important.

What is the best advice you ever used?
Do not think or plan too far into the future; stay present and enjoy the moment.

Ari Staven

Chemical Engineering
Master’s Candidate

Attending Montana State University for my undergraduate in Chemical Engineering and continuing for my graduate degree was one of the greatest decisions of my life. My research, outreach and social experience at MSU has shaped who I am today as well as given me great opportunities for my future. As a sophomore in college I switched to Chemical Engineering and immediately joined Brent Peyton’s research group. I worked with several different projects and had the opportunity to travel to Slovenia to collect samples and meet with collaborators. I received a second author publication and a graduate intern position in the Biological Systems Department at Idaho National Laboratory resulting from the work I did as an undergraduate.

I was able to be a part of several of MSU’s excellent community outreach programs, specifically Engineering Ambassadors, the Expanding Your Horizons (EYH) Conference and Women in Science and Engineering (WiSE). I hold EYH in a special place in my heart because I have been on the planning committee for the past two years and spent numerous hours specifying various aspects of the day to make it a profound experience for the middle school girls involved. Getting involved in outreach on campus has been wonderful;
summer after my junior year, I was offered an internship at a chemical plant. While I discovered that process engineering wasn’t a good career fit for me, the internship was a great opportunity. I came to realize that learning what you don’t want in life can be just as important as determining what you do want. In the fall, I finished my degree and, somewhat uncertain what direction my future should take, worked over the next year as a part-time teaching assistant. Then a fortuitous meeting with an enthusiastic new professor brought me back to graduate school for a PhD. Research gave me the opportunity to travel around the world, live in a foreign country and meet all kinds of interesting people. Now, as a professor, I get to offer that experience to others through research and advising. I never would have guessed as an undergraduate student that I would end up a university professor, but in retrospect, it’s where I was always meant to be. There was a lot of uncertainty in my path to this career, but I think that is all part of the process of discovery. The big secret is that most of us have no idea what we want to be when we grow up and while that can be scary, it can also be exciting if we let it.

Jennifer Brown

Chemical & Biological Engineering
Assistant Professor

I was born and raised in small-town Montana, the child of an elementary school teacher and an insurance agent. As a kid, I didn’t have much exposure to what was possible in a scientific career, but despite this I went off to college and majored in chemical engineering. To be honest, I had no idea what a chemical engineer might do for a living, but I was good at chemistry and math and my brother was a civil engineer. The

What is your favorite type of music or who is your favorite band/singer?
I have eclectic tastes, from Johnny Cash to Modest Mouse. Current favorite is Iron and Wine.

What inspired you to choose engineering?
My brother was a civil engineering major when I started college and I liked chemistry and math, so I decided to try chemical engineering.

Who are your heroes or role models and why?
My fellow women in engineering, for being the dedicated, warm-hearted and sensible people that they are.

What is most helpful to you in balancing your career goals with family relationships and personal interests?
Deciding to be committed to carving out time for exercise, play and family.

What is the best advice that you ever used?
The best advice I have used is to keep stepping outside of my comfort zone. If you’re never uncomfortable, you never grow professionally or as a person.
What inspired you to choose engineering?
The chance to make a difference and to integrate science with solutions to problems, particularly with water quality.

Who are your heroes or role models and why?
Without question it is my mother. Our family went through quite a bit of adversity when I was growing up and she always made sure that my brother, sister and I had what we needed at her own sacrifice. She was a strong proponent of education and gave me the strength to overcome the negative feedback I often got in my small school for being the science nerd. She continues to be an advocate for literacy and was instrumental in organizing the efforts to build a beautiful new library in my hometown. She’s a young 80+ years old and I hope to be as active as she is when I get there.

What is the best advice you have used?
There are two pieces of advice that I take to heart. The first is to give credit where it is due. This is critical when you value the input and contributions of people who make it possible to be successful yourself. The second is to pick your battles. This can help you either set priorities and minimize frustration when you know that someone’s opinion won’t change, or it can help you redirect a situation that doesn’t fit with your vision.

Anne Camper

Civil Engineering
Professor and Associate Dean for Research and Graduate Studies

The greatest reward of my career as a professor has been the success of my students and the people who have worked in my research laboratory. I do my best to be sure that we are all looking out for each other’s success as well as creating a place where we are all happy to be involved. I could count papers published, grants received, and other tangibles but more important is the ability to give these wonderful people a chance to have a meaningful career of their own. It truly makes my day to get a message or phone call from a former student with an update on what’s happening in their life. Over the years, I’ve come to look at my research group (staff, grad and undergrad students) and my colleagues at other universities and in industry as extended family.

Although I don’t teach undergrad courses anymore, I remain active in teaching a graduate course about drinking water. Because I have contact with the industry, I bring real-world scenarios into the classroom and examples of problems that confront engineers. We have a final project where the students apply their knowledge and provide solutions for improving drinking water quality for a community.

When I was in high school, I envisioned myself going to the university and getting a degree in science and doing something with water. I grew up on rivers and lakes and loved everything about water with the exception of swimming—I am a terrible swimmer. I also knew I wanted to be engaged in education because I come from a long line of teachers. In large part, that’s what I do now, although I couldn’t have envisioned the path back then.
I think I first announced to my parents that I wanted to be a teacher when I was in elementary school, we call it primary school in New Zealand. As I grew up that never changed, but I did change from wanting to be a high school teacher to wanting to teach at a university. I decided I didn’t want to deal with any discipline issues; I just wanted to do the fun stuff “teaching students who want to learn.” I love seeing the wonderful and diverse careers that our students go into. It is such a pleasure when students return and I get to hear how happy and successful they are.

The research side of my job has made me feel like I am part of a large international family. I have friends all over the world and wonderful memories from all the times I have visited them. All the students in our lab get to join this international family also, and it is inspiring to see how these connections open their hearts and their minds to our global community.

I spend a lot of time thinking and dwelling on hard problems, and that is why skiing is my favorite pastime. When you jump into a tight chute, with a cliff below, and want to get down it without hurting yourself, then you have to clear your mind of everything else and can only think about the task at hand, so skiing allows me to totally get away from everything else in my life and I can come home reenergized and invigorated—ready to tackle those hard problems again.

I come from a really close family and have a lot of friends and family in New Zealand. People ask me how I can live so far away from them. With today’s technologies I spend more time with my family than some people do with their families who are in the same state. We all have iPhones and we can video-conference call each other every day if we want from wherever we are. We have our own family chat room where we post photos daily and joke with each other. I never feel they are very far away at all.

What is your favorite type of music or who is your favorite band/singer?
I really like the eclectic mix played on our very own university radio station, KGLT.

What inspired you to choose engineering?
I love to solve challenging problems and work out efficient solutions.

Who are your heroes or role models and why?
My role models are anyone who has a busy and challenging job and yet always manages to smile at everyone they interact with and take time to listen to what they have to say, even though they may have a million other things going on in their lives.

What is most helpful to you in balancing your career goals with family relationships and personal interests?
Good time management, scheduling time for my skiing, running and other interests so that they don’t always get pushed off the agenda.

What is the best advice you have used?
Step outside your comfort zone and push yourself. If you don’t challenge yourself, then you won’t grow.
Penny Knoll

Construction Engineering Technology
Associate Professor

I was born and raised in the northeast corner of Ohio in a small rural town named Ashtabula. I spent the first 23 years of my life in Ashtabula, working for a veterinarian and showing dogs. I had wanted a career in medicine, but after working 10 years for the veterinarian and two years in nursing, I decided I had had enough of medicine and Ohio winters. I spread my wings, flew west and landed in San Diego, California, for a year. The next summer I moved inland to Phoenix, Arizona, where I spent 12 years before moving on to Bozeman, Montana, in 2000.

When I arrived in Arizona, I knew it was time to seriously think about a “second” career, which was always building. I had been fascinated since my younger years by how things got built and always lent a hand when construction was going on. I started my construction career the moment I arrived in Arizona and have not looked back. I got both my undergraduate and graduate degrees in Construction from Arizona State University in Tempe, Arizona, and have worked commercial construction since 1988.

I’ve been involved with construction on a nuclear power plant, a hazardous waste plant, a copper-cable manufacturing plant, Gore-Tex manufacturing plants, and multiple shopping centers and retailers like Macy’s and Mervyns. I began design-build commercial construction in 1993 and continued to build similar retail centers but became responsible for the design component of the projects as well. In January 2000, I accepted an adjunct teaching position at Montana State University in Construction Engineering Technology, and 12 years later, I am the program coordinator for the undergraduate and graduate programs in construction engineering and am a tenured Associate Professor at MSU.

What is your favorite type of music?
My favorite singer would have to be Josh Groban. I just started playing the piano last year, so I am really into my piano. I played trumpet in 4th to 6th grade and then switched to French Horn 7th to high school. I love the French horn—in my opinion, no other brass instrument can produce the haunting sound of the French horn!!

Who are your role models and why?
Thomas Jefferson for sure. That man was brilliant. I like many of our country’s forefathers because they understood what life was all about and truly put their lives on the line to found a new nation. I doubt anyone would do that today!!

What is most helpful to you in balancing your career goals with family relationships and personal interests?
Great time management skills. Construction requires great time management skills because there are always deadlines in construction and deadlines mean money—either lost or gained.

What is the best advice you ever used?
R&R—rest and relaxation. My father taught me that. Our bodies are like machines; they need rest and relaxation just like any motorized mechanical object—so always make time for “down time” so that you can give yourself some time to yourself!!
Whitney Lutey

Construction Engineering Technology
Assistant Professor

I’m originally from Anchorage, Alaska, and was drawn to MSU’s engineering program, mountains and long winters to pursue my first love, cross country skiing, and a degree in civil engineering with the intent to return to Alaska to work on a future natural gas pipeline. There were a few modifications to that plan, detours, if you will, and I’d have to say that each detour has enriched my life more than I ever could have anticipated. I never thought I would work in California, building additions to the San Francisco International Airport, high-rises, public facilities, and an IMAX theater. And I didn’t know that I would find the love of my life, start a family, and establish roots in this lovely community we call home.

I started at MSU as a Civil Engineer major and soon found myself drawn to the hands-on technical study of Construction Engineering Technology. This change was affirmed in two summer internships which took me to Seattle and Denver. I graduated with a minor in I & ME and a bachelor of science in Construction Engineering Technology. A year later I was the first graduate from MSU’s Master of Construction Engineering Management program. I enjoyed my undergraduate years, but graduate school was far more interesting. I was surrounded by positive and enthusiastic learners with excellent educators dedicated to bridging the gap between engineering, design and the construction industry; the degree was designed to enhance communication between design teams, project owners, and the constructors. After working in the field for nearly 10 years, I began teaching at MSU. I had my dream job, which was another reason I pursued graduate education. Prior to this my husband (another MSU CET graduate) and I returned to Bozeman to start our family and take over his family’s construction company.

What inspired you to choose engineering or construction?
My choice was both. My father was an educator in drafting, architectural drafting, and AutoCAD at University of Alaska Anchorage. He was keen to share his love of building with me. He told all of his daughters to pursue a career where we would perform our best, even if it was “driving truck.” His encouragement and my interest in math and science drew me to Engineering Explorers, a division of Boy Scouts of America, where my mentor was a Civil and Environmental Engineer working at British Petroleum.

Who are your heroes or role models and why?
I have many role models in MSU’s COE, and I appreciate our mutual support, particularly the female faculty. A key role model is Dr. Ted Lang, because he loves to teach. That is why he’s still here after 40+ years. He has a sincere, good heart and wants us all to succeed. He inspires me to be a better teacher.

What is most helpful to you in balancing your career goals with family relationships and personal interests?
I have a very understanding husband who views raising our three children as a team effort. He supports my travel to ASEE conferences so I can focus on the latest in construction engineering education. He has supported my work in ASCE’s Excellence in Civil Engineering Education, which has required weeks away from home each summer.
I never really considered chemical engineering until I looked at the course catalog two weeks before my first semester of college was to start. I originally planned to major in nursing, but when picking out my classes, I was sad to see that I wouldn’t have to take any more math and only one more year of chemistry. I looked at the classes that chemical engineers took and the list was full of math, chemistry and engineering classes whose titles or descriptions mentioned chemicals. I decided it was the perfect combination of math and science and promptly changed my major.

After my first year in college I was hooked and never doubted that last-minute decision to change majors. Yes, engineering was for me! I loved that problem solving is a major component of engineering. I loved that the discipline takes cutting edge advances in science and incorporates them into processes that improve our lives, such as economically producing fuels from renewable resources or developing processes to safely and inexpensively produce life-saving medicines. Yes, the classes were challenging and I spent long hours trying to complete what sometimes seemed like impossible homework assignments, but it was what I loved.

As my time as an undergraduate came to a close, I started doing research with some professors in my department. We were trying to use enzymes from tiny microbes that inhabited the hot springs in Yellowstone National Park to create a system that rapidly detects toxins in drinking water.

Before I began my research project I knew very little about microscopic life forms, but I was immediately fascinated by them. That experience prompted me to pursue a Ph.D. in chemical engineering with an emphasis in biological processes.

I am now a faculty member in Chemical and Biological Engineering, teaching the classes that I so loved as an undergraduate. I’m still quite passionate about research, but the most gratifying part of my job is seeing successes of the talented young women here at MSU as they earn competitive internships, win national scholarships and become the future leaders in engineering. The students here are the best part of the job—thank you for being so amazing!!
Mandy Rutherford

Mechanical Engineering Adjunct Instructor

I began my path to an engineering degree early in life. As a mechanical engineering professor, my dad always encouraged my interests in math and science. As a kid I loved LEGO’s, deconstructing toys, and building forts—all pretty good indicators of an engineer-to-be! For my undergraduate degree, I chose to major in Civil Engineering here at MSU. Our department head was a former employee of Los Alamos National Laboratory (LANL) who encouraged me to apply for an internship there, even though I was just a freshman. Although I was skeptical about my chances of getting an internship at such an early stage in my college career, I applied and got the job! It was an amazing experience that exposed me to cutting-edge research. I returned to LANL in various capacities throughout my undergraduate and graduate years and was eventually hired as a technical staff member there from 2002-2007 working on structural dynamics of complex mechanical systems.

My career at LANL was technically challenging and a lot of fun (what’s not to like about blowing things up as a part of your job?). It also enabled me to mentor students as I had been mentored, which was immensely satisfying. So, it wasn’t a huge leap for me to change careers to teaching when my husband and I decided to move back to Montana in 2007. I have taught a wide variety of classes now, each one bringing different faces and new challenges. I love trying to perfect my presentation of difficult material and learning from my students, who often have unique ways of approaching problems themselves. Teaching in the COE is something I hope to do for a long time.

Right now, I work part-time so that I can hang out with my two girls, Claire (5) and Natalie (21 months). The girls and I like to take walks and play around the house. When we’re able, my husband, Steve, and I love cross-country skiing. When I have time to myself, I love to read and I am an amateur knitter.

Who are your heroes or role models and why?
My most influential career mentors (besides my dad!) were my colleagues at LANL, both my peers and my supervisors, who supported and encouraged me in any educational endeavor that I chose to pursue, including my master’s degree in Engineering Mechanics at Virginia Tech, and Ph.D. work through University of California, San Diego.

What is most helpful to you in balancing your career goals with family relationships and personal interests?
The most helpful thing that I have learned about balance is that having a support network helps! After our daughter, Claire, was born in 2007, my husband and I decided to move back to Bozeman to be near family. Our support network includes grandparents, aunts and uncles, and even great-grandparents, all of whom have been integral in our ability to balance work, family, and time to pursue our own interests.
Laura Stanley

Industrial Engineering
Assistant Professor

Before embarking on my engineering education, I didn’t realize that engineering could be such a people-oriented profession. I always thought engineering was simply about designing machines.

It was in my freshman year that I began to understand how engineers can play a key role in improving the lives of so many. During my sophomore year, I was introduced to the field of human factors engineering (a subset of industrial engineering), where I was able to satisfy my keen interest in the physical and cognitive capabilities of the human mind and body.

Through my studies of human factors engineering, I learned how engineers can better design technology to fit human needs, whether that be better logistics in providing humanitarian relief, a drinking system for those who have limited access to water, or a safer vehicle design.

If you are interested in math/science and have an interest in developing the critical thinking skills that an engineering education provides, then you are well on your way to solving human-based needs; it’s not just about machines.

What is your favorite type of music? My favorite type of music varies drastically, from hip hop to alternative to bluegrass. My favorite singer is Brandi Carlile, whose genre can’t be easily labeled and my bluegrass roots come from my famous uncles, The Stanley Brothers—remember that song “Man of Constant Sorrow”?

Who are your heroes or role models? My heroes continue to be my mother, father, and grandmother—their lives mimic the typical rags-to-riches story. My grandfather and great grandfather (an immigrant from Hungary) were uneducated coal miners in Appalachia. My father also works in the coal industry and was the first in his family to graduate from college. I am the first on my mom’s side to graduate from college and the first on both sides to receive an M.S. and Ph.D. They have always encouraged me to find a passion and follow it.

What is the best advice you have used? My father believes that if you love what you are doing, you will be successful. And remembering that success is not the key to happiness; happiness is the key to success. Finally, I strongly believe in the power of an engineering degree. I am forever grateful for the opportunities it has presented me and continue to believe it will do the same for those who seek those opportunities!