Our Mission

The School of Engineering & Applied Science at Gonzaga University produces broadly educated and capable engineers ready to contribute innovative solutions for a better world.

Engineering is a profession that is especially suited to a University that prides itself on engaging the life of the mind and strengthening and refining a system of values.

Gonzaga currently provides accredited undergraduate programs in mechanical, electrical, computer, and civil engineering; a computer science program; and an engineering management program, which is taught cooperatively with the School of Business. The School also offers an online master’s degree in Transmission and Distribution Engineering.

Our Engineering Education Objectives

Engineers educated at Gonzaga University will:

1. Develop engineered solutions that are well-conceived and carefully implemented to meet public and private sector needs.

2. Contribute effectively to organizations as leaders and/or team members.

3. Foster personal and organizational success in a dynamic, globalized professional environment.

4. Improve society by applying Jesuit, humanistic values to their professional and civic responsibilities.
Gonzaga University is an exemplary learning community that educates students for lives of leadership and service for the common good. In keeping with its Catholic, Jesuit, and humanistic heritage and identity, Gonzaga models and expects excellence in academic and professional pursuits and intentionally develops the whole person -- intellectually, spiritually, physically, and emotionally.

Through engagement with knowledge, wisdom, and questions informed by classical and contemporary perspectives, Gonzaga cultivates in its students the capacities and dispositions for reflective and critical thought, lifelong learning, spiritual growth, ethical discernment, creativity, and innovation.

The Gonzaga experience fosters a mature commitment to dignity of the human person, social justice, diversity, intercultural competence, global engagement, solidarity with the poor and vulnerable, and care for the planet. Grateful to God, the Gonzaga community carries out this mission with responsible stewardship of our physical, financial, and human resources.
Larry Shockey Retires After 24 Years at Gonzaga

Engineering technician Larry Shockey retired this spring. To celebrate his retirement, Larry and Cindy, his wife of 46 years, will travel across America with his brother and sister-in-law. Following a family reunion in Oklahoma, they will see some of America’s most majestic sites, including the Grand Canyon, the Mesa Verde cliff dwellings, and Arches National Park, along with “anything else that attracts us.” In retirement, Larry hopes to relax, improve his golf game, and spend more time on handyman activities at home. Larry and Cindy have two sons and one granddaughter.

Thank you for your dedication and hard work at Gonzaga, Larry!
Dear Friends of Gonzaga SEAS,

I would like to express my sincere gratitude for your support during my second year as Dean. The School continues to increase its visibility and reputation as a result of: (i) exceptional faculty and staff, (ii) enthusiastic and talented students, (iii) alumni, parents and family, and friends who genuinely care about our School, and (iv) increasing enrollment!

**Looking Back / Looking Forward**

Looking back, our School has taken advantage of several opportunities to pursue excellence and innovation. Our freshman numbers were dramatically higher than prior records with over 280 students attending our freshman seminar last fall! The size of our senior class also continues to grow, with our Center for Engineering Design & Entrepreneurship guiding 40 Senior Design projects on topics ranging from suspension systems on a Baja car, to smart-phone apps, to fish ladders designed to allow rapid fish counts! Efforts supported through a grant from the Kern Family Foundation continue to excite our undergraduates with the Goller Hall Living Learning Community and engaging opportunities, such as our 24-hour INNOVENTION Challenge. Our Transmission & Distribution Engineering online graduate program produces an ever-greater number of Master’s and Certificate recipients.

The quality of our students also continues to impress! Two seniors recently placed 3rd in the Start-Up Weekend Competition (Spokane) for new businesses with their proposal to teach entrepreneurial skills to engineering students. Throughout the year, our student chapter of the Society of Automotive Engineers worked feverishly to finish our new Baja car to compete at an SAE competition in El Paso, Texas!

Looking forward, our School is pursuing both strategic planning and our accreditation renewals. Within the strategic plan, we are seeking ways to make our programs more visible, innovative, and exciting. Through a generous gift, we are introducing laptop-based learning environments this fall. Our Mechanical Engineering program is completing upgrades on their design labs. Our student project space also continues to increase in its capabilities (including a series of 3D printers).

A large part of the excitement I feel for the future of our programs derives from our close relationship with you, our alumni and friends of SEAS. You have told us that you want to be involved in helping us reach new heights of excellence. We hope to engage you through a number of initiatives, including our new Alumni and Engagement Council and, as always, through our efforts in Senior Design. We also hope that you watch (and assist us!) as we begin planning for major renovation and expansion of our facilities.

Excitement also derives from our young faculty – this extraordinary group of scholars works tirelessly to offer new opportunities and challenges to our students.

Finally, our excitement comes from our wonderful students. This fall, we will once again welcome a freshman class to our School that is expected to exceed 220 students. While such enrollment numbers continue to challenge our resources, we eagerly look forward to working with these young students as they grow into the leaders of the next generation of engineers and computer scientists!

Thank you for the privilege and honor of allowing me to share our School with you.

**Stephen E. Silliman**

Dean of Engineering & Applied Science
Known affectionately as “Dr. Sue” by her students, Dr. Sue Niezgoda, Associate Professor of Civil Engineering, was nominated for an Exemplary Faculty Award by Dr. Stephen Silliman, Dean of the School of Engineering & Applied Science, and Dr. Paul Nowak, Department Chair of Civil Engineering. “Sue can regularly be seen working with her students in some of the most creative laboratory and course exercises we have witnessed in our nearly 50 years of combined teaching experience,” write Drs. Silliman and Nowak in their letter of nomination.

Dr. Niezgoda began teaching at Gonzaga in 2011. She teaches numerous courses, including Fluid Mechanics, Hydraulic Engineering, Water Resources Engineering, Stream Restoration, Applied Hydrologic and Hydraulic Modeling, Sustainable Systems and Design, and Senior Design. She also advises over 20 students each year and conducts research in engineering education, hydraulic engineering, soil erosion and sediment transport, river engineering stream restoration, and uncertainty and risk assessment for stream restoration.

In 2014, Dr. Niezgoda co-published a new academic study as lead author for the Journal of Hydraulic Engineering. The article, “Defining a Stream Restoration Body of Knowledge as a Basis for National Certification,” will result in more consistent and successful water restoration projects by reducing uncertainty and raising the standard of care in design.

Along with teaching, advising, and research, Dr. Niezgoda is an active contributor to University and School committees, including representing Civil Engineering in extensive strategic planning efforts. She also serves as advisor to the 30+ student chapter of ASCE, “with substantial plans to invigorate this student organization to national prominence,” note Drs. Silliman and Nowak. Beyond Gonzaga, Dr. Niezgoda is a member of both the Board of Directors of River Restoration Northwest and the American Society of Engineering Education.
In response to receiving this award, Dr. Niezgoda says, “I am truly humbled and honored to have received this award. It was totally unexpected. I love my job, I feel it’s my purpose in life. My students inspire me every day, and watching them grow into professionals and succeed in life is my ultimate reward. I love being a faculty member at Gonzaga, as I feel such strong support and encouragement to apply my passion for teaching to enhance the educational experience of the undergraduate student. When you have such strong support from all levels, it is easy to create an environment that engages, inspires, and motivates students to learn more. I feel very fortunate to be a part of the Gonzaga community, and am truly appreciative of this recognition.”

“Dr. Sue is extremely dedicated to both her engineering career and her students. My life has been significantly changed because of her wealth of knowledge and her ability to convey it.” - Jack Siemens

“Dr. Sue is a professor that everyone wishes to have at some point in their Gonzaga career. She is willing to help students with anything and everything, from homework to senior design projects to preparing to enter the workplace.” - Dallas Dimock

“Dr. Sue is an extremely hard working teacher and mentor. All her students love her teaching style with Myth Buster Mondays and in-class experiments. As a senior design adviser, she pushed us to design our own solution to fix a real-life problem based on research and natural stream conditions. By expecting more of our group, we accomplished more than we thought we could. Thanks, Dr. Sue! You deserve to be recognized.” - Jamie Gable
On April 5-6, 2014, 28 SEAS students participated in INNOVENTION, a 24-hour competition that tested students’ resourcefulness, creativity, and business knowledge. The event was organized by Dr. Vladmir Labay and Toni Boggan with support from students Paige Bernier, Katie Neal, and Tyler Pattison.

Guest speaker Ed Dougherty, Villanova University’s Director of Engineering Entrepreneurship, mentored students throughout the weekend as their ideas moved towards inventions. Students also competed in high-energy flash challenges for extra points. Following a trade show displaying their products and business plans, teams made a final presentation for a panel of local judges with expertise in engineering, technology, business, and marketing.

At the end of the weekend, the team with the most points was General Inventors. Team members Teague Hatfield, Greg Wirth, Alec Reed, and Nathan Ducey won the $1,000 prize with their invention, The Sound Barrier.

INNOVENTION was made possible through a generous donation by Gonzaga University alumnus Ron Seubert (Electrical Engineering, 1972) and his wife Sara.

Mr. Seubert is the founder, President, and CEO of RareCyte, a Seattle-based life science company dedicated to building innovative health technologies. In over 26 years as president and CEO, Mr. Seubert led his companies through consistent and rapid growth by developing innovative products in the life sciences and semi-conductor industries.

Mr. Seubert grew up on a farm in Idaho and was fascinated by mechanics and electricity from an early age. “I have made and built things since I can remember. I helped repair and build farm equipment with my Dad. I repaired and modified radios, although not always successfully,” he says. He always thought he would be an engineer and never really considered any other degree.

Reflecting on his time as an engineering student, Mr. Seubert recalls, “I really enjoyed the freshman and senior projects at Gonzaga. Those projects exposed me to real-world situations and allowed me to apply classroom and external knowledge to solving these challenges.”

Programs like INNOVENTION and KEEN further emphasize the importance of real-world application of engineering projects and business know-how. “It is helpful for technical people to understand the dynamics of a business. The best ideas and technology do not always win. The entrepreneurial mindset is important in business and in relentless product design and innovation,”
Gonzaga University is one of 19 engineering colleges that comprise the Kern Entrepreneurship Education Network, whose mission is to graduate engineers who will contribute to business success and the American workforce.

The KEEN program at Gonzaga University continued to sponsor a Living Learning Community for engineering and computer science students in Goller Hall. Approximately 85 freshmen and sophomore students participated in a variety of events at Goller, including weekly tutoring and monthly dinners with speakers and presentations focused on entrepreneurial engineering attributes.

Throughout the year, SEAS held nine lunchtime KEEN Engineering Competitions in which teams of three students had 50 minutes to solve a mystery challenge to win a $300 prize. The challenges tested teamwork, problem-solving, technical, creativity, and communication skills.

In April, SEAS organized Integrating the Curriculum with Entrepreneurial Mindset (ICE), a faculty workshop with attendees from 13 KEEN schools. With the theme of Engineering Ethics, ICE featured six guest speakers whose expertise ranged from STEM to business to philosophy.

notes Mr. Seubert. "Engineers focus on the technology, but it is the people who are the most important. Without a customer, the best idea is just an idea."

The Seuberts choose to financially support Gonzaga programs for a number of reasons. “We are entering a time when technology plays new roles in ecology, global health, and global warming. I think Gonzaga has a unique opportunity to play a role in these areas,” says Mr. Seubert. “When I was approached to help with the KEEN initiative, I thought that this was an excellent way to reach engineering students. The SEED (Seubert Engineering Entrepreneurial Design) program will hopefully fuel ideas and help students see ways to turn their ideas and inventions into reality.”

We are profoundly grateful to the Seuberts for their support of entrepreneurial endeavors in the School of Engineering & Applied Science.
Alex Williams, Computer Science,
recipient of the 2014 Award for Academic Excellence for
the School of Engineering & Applied Science!

Alex Williams was selected unanimously among Department Chairs for this award. Dr. Shawn Bowers served as Alex's Senior Design advisor this year. “He has done an outstanding job in Senior Design, providing excellent leadership to his team,” writes Dr. Bowers. “He has also done an excellent job communicating with the team's sponsor, WinchEngineer Group, which makes a huge difference for a team.”

Originally from Federal Way, WA, Alex was inspired to study Computer Science following an introductory course taught by Professor Daniel Hughes, now retired. He especially enjoyed working on a project during his sophomore year in which he and classmate Evan Shioyama created a customized version of the game Minesweeper with a photo of Dr. Bowers. As a student, Alex was also a member of the Gonzaga Cycling Team and active in intermural sports.

After graduation, Alex began work as a Software Development Engineer at Amazon in Seattle.

News & Highlights

WOMEN IN ENGINEERING DINNER WITH NORA GRASHAM

In October 2013, Gonzaga alumna, Nora Grasham, spoke to a group of female engineering students in the Herak Club Room. An honors graduate in History & Classical Civilizations from 1998, Grasham is Head of Strategy, Business Operations, and PMO at eBay. The Women in Engineering event included dinner, a keynote speech by Ms. Grasham, and a Q&A panel with female engineers who shared their experiences of working in a male-dominated field.
SAE BULLDOG MINI BAJA GOES TO TEXAS

For the first time in 20 years, Gonzaga University Society of Automotive Engineers (SAE) members participated in the SAE Collegiate Design Series. In April, Andrew Asper, Nick Gavenas, Jesse Baker, and Victoria Indaco traveled to the University of Texas-El Paso for Baja SAE UTEP 2014. The club spent two years fundraising, designing, and building the vehicle through combined efforts of SAE and a Senior Design team who designed the vehicle’s suspension system. Gonzaga’s Bulldog Baja stood out among the competition with its unique trailing front suspension arms and hydraulic drive system. The car passed its Engine, Technical, and Brake Inspections and completed the 4-hour Endurance Race, but was not able to compete in dynamic events due to time constraints. "Building this car has taught us all more than we could have ever hoped for—design, collaboration, manufacturing, teamwork, patience, hope," said Victoria, Mechanical Engineering junior. They are proud to pass this year’s car on to the next generations of students who can adapt the design and compete in the future.

STUDENT PRESENTATION ACCEPTED TO STORMCON

Civil engineering students Colton Freels, Doug Ehlebracht, Ethan Rogers, and Charles Roberts will present the findings of their Senior Design project at StormCon, the North American Surface Water Quality Conference & Exposition, this August in Portland, Oregon. The project, sponsored by Spokane County, was to develop a design to test the pollutant concentrations of stormwater runoff to determine the effectiveness of bioinfiltration ponds in removing target pollutants. Their advisor, Aimee Navickis-Brasch, noted that few undergraduate presenters are accepted to this academic conference.

STEM OUTREACH FOR YOUTH

Each year, SEAS welcomes young adults to campus to cultivate an appreciation of STEM (Science, Technology, Engineering, and Math). In March, a group of 75 local middle school students attended a MESA (Math, Engineering, Science Achievement) event with a prosthetic arm competition and interactive tours of SEAS facilities, including the hydrology lab, machine shop, and student project lab, with faculty, staff, and students.
CHeers for engineers: Becca Ryan and Cat Truong

Stereotypes of engineers and cheerleaders “don’t really mix,” but two senior engineering students disproved such myths by excelling as both. Electrical engineering senior Cat Truong (right) and civil engineering senior Becca Ryan (lower left) joined Gonzaga’s Cheerleading team in their sophomore year. Both students could be seen cheering for Gonzaga’s Basketball teams at this year’s NCAA Tournament games.

The Gonzaga Cheerleading team requires a significant time commitment of its members with multiple 2-hour practices and sometimes multiple home games for Men’s and Women’s Basketball teams per week, as well as travel to post-season tournaments. Both Becca and Cat cited good time management and organization skills, as well as consistent communication with professors and peers, as key to balancing academics, cheerleading, and other interests. They also valued Gonzaga’s commitment to the development of the Cura Personalis and its focus on community.

TreKS to seattle, Silicon Valley, and more

Each year, the Career Center & GAMP (Gonzaga Alumni Mentor Program) organizes treks to key metropolitan areas across the country where students can network with alumni and potential employers. In 2014, engineering and computer science students had the opportunity to tour Google in the San Francisco Bay Area and Boeing in Seattle, among other highly regarded engineering and technology firms and businesses.
Global Community

Gonzaga-in-Florence

Fall 2013 marked the 50th anniversary of the Gonzaga-in-Florence study abroad program. Since 2010, Gonzaga engineering students have had the unique opportunity to spend one semester studying in Florence while completing their undergraduate degree on time in four years. In Spring 2014, 40 SEAS students studied a variety of subjects in Florence, including Mechanics of Materials, Dynamics, and Renaissance Architecture. Civil engineering sophomore Allison Nichols (far left) shares, “Studying in Florence was a special experience in which I gained best friends for life, and had endless opportunities to explore the world. I come home with a new set of tools in my pocket including confidence, inquisitiveness, and a desire to learn about all that surrounds me.”

International Students

The international community at Gonzaga University grows each year, with freshman students hailing from 28 foreign countries in Fall 2013. International students are well represented in the School of Engineering and Applied Science thanks to government-sponsored programs that enable students to study in America. Through the Brazil Scientific Mobility Scholarship Program, Brazilian science, technology, engineering, and math students are able to study for one year in the United States. Similarly, the Saudi Arabian Cultural Mission allows students to earn their degree in the U.S. while improving English-language skills and developing cross-cultural connections between American and Saudi students. With an oil-based economy in Saudi Arabia, many students in this program are encouraged to study engineering and computer science. SEAS is enriched by the community of international students who bring their unique
AMERICAN SOCIETY FOR ENGINEERING MANAGEMENT

ASEM speaks for the profession of engineering management across the world. The mission of ASEM is to provide engineering management solutions to leadership and management challenges in order to create and lead great technical organizations while promoting the development and practice of the engineering management profession. Gonzaga’s chapter offers students the opportunity to network with professional engineering managers to learn about engineering management as a career.

2013-2014 Officers

Hailey Fitterer, President
Mustafa Mahmood, Vice President
Matthew Williams, Treasurer
H.I.M. Khan, Secretary
Sue Niezgoda, Faculty Advisor

AMERICAN SOCIETY OF CIVIL ENGINEERING

ASCE provides students with educational and motivational experiences with a focus in Civil Engineering. During the year, we spent one month focusing on a concentration within the discipline: Structural, Transportation, Environmental, Water Resources, Geotechnical, and Construction. Ten club members attended the Portland Regional Conference in April. We met with over 350 students from other West Coast school to compete in a series of challenges, including an environmental lab, concrete bowling, and a transportation scavenger hunt using Portland’s transit system. Club officers also visited WSU for a tri-chapter ASCE meeting between Gonzaga, Washington State University, and University of Idaho. Throughout the year, we organized field trips, speakers, and service opportunities for all engineering students. We worked closely with the Professional Chapter of ASCE in the Inland Northwest to connect students with successful professionals. With the variety and continuation of events offered, we hope to exceed expectations and provide a model of leadership.

2013-2014 Officers

Hailey Fitterer, President
Mustafa Mahmood, Vice President

Kyle Branch, Vice President
Ryan Kelsey, Service Coordinator
Peter McKenny, Faculty Advisor
TAU BETA PI

Tau Beta Pi recognizes the achievements of students studying engineering and provides resources for members to further their education and career success. This year, the Gonzaga Chapter hosted a regional conference for Northwest chapters and “began preparations to host the National Convention in October 2014. Society members aided in a clean-up of the Spokane River and provided tutoring for fellow engineering students in the fall. In the spring, our chapter hosted an engineering workshop, and we hosted a bone marrow donor registry drive. This year has been an opportunity for our chapter to grow, and we are looking forward to continuing this growth in the coming years.

2013-2014 Officers
Adam Obenberger, President
Matthew McCauley, Vice President
Greg Hutchinson, Corresponding Secretary

Taylor Kunke, Recording Secretary
TJ Ellis, Treasurer
Mara London, Faculty Advisor

MATERIALS ADVANTAGE CLUB

Materials Advantage Club is designed to increase student exposure to materials science and engineering. The MAC is structured around industry exposure, hands-on projects, research experience, and service in our community. These pillars were chosen to optimize members’ experience and exposure to the Materials Science and Engineering industry. For industry exposure, the MAC provides its members opportunities to network with industry professionals. We also toured Spokane Industries and Mackay Manufacturing facilities. Hands-on projects help to develop beneficial skills while creating projects that can be used for future job opportunities. Research experience, specifically in hydrogen embrittlement, helps to develop skills for graduate research experiences and to contribute to the scientific research world. Our final pillar is service. With service, we hope to cultivate the men and women for others utilizing our engineering skill set learned here at Gonzaga.

2013-2014 Officers
Charlie Rogers, President
Christine Ngan, Vice President

Trevor Longbottom, Secretary
Patrick Ferro, Faculty Advisor
SOCIETY OF AUTOMOTIVE ENGINEERS

Gonzaga's Society of Automotive Engineers is a club designed for engineering students with mechanical and automotive interests to pursue student-run club projects and competitions. This club works closely with the Gonzaga University Machine Shop, and focuses on providing hands-on exposure for students to apply classroom knowledge to club-based projects. Over the 2013-2014 school year, Gonzaga's SAE researched, designed, modeled on SolidWork, performed calculations, and constructed a Mini Baja vehicle all within the club. In April, the club competed in the SAE International Mini Baja Competition, proudly representing the University in El Paso, Texas. Gonzaga's Society of Automotive Engineers strives to take on projects that convert the skills and knowledge learned in school to practice and hands-on exposure.

2013-2014 Officers
Andrew Asper, President
Jeff Barnhart, Co-Vice President
Nick Gavenas, Co-Vice President
Jon Lee, Co-Vice President
Joe Janicki, Treasurer
Victoria Indaco, Secretary
Drew McCurdy, Public Relations

IEEE formed to join the common interests, both professional and educational, of students at Gonzaga University. IEEE's mission is to provide a fun and educational environment for all electrically-minded students to learn and grow. This year, IEEE has seen some amazing growth. With the addition of a Micromouse chair to the board, the Micromouse project has taken off with weekly meetings among the various teams. The club also had success with two soldering workshops, which allowed the club members to get hands-on experience with a soldering iron (many thanks to the faculty members who helped this happen!). The club served our community at Second Harvest Food Bank each semester, attended the Region 6 conference in Spokane, hosted a Navy recruiter, and called the incoming class of freshmen to encourage them to continue with their studies of electrical and computer engineering at Gonzaga University.

2013-2014 Officers
Megan Nickolaus, President
Chris Birmingham, Vice President
Marc Carlson, Treasurer
Kelsey Zaches, Secretary
Beth Andrews, Publicity Chair
Sam Cutler, Micromouse Coordinator
Vladimir Labay, Faculty Advisor
SOCIETY OF WOMEN ENGINEERS

SWE encourages and enables women to achieve their full potential as leaders in engineering, to expand the image of the engineering profession as a positive force in improving the quality of life, and to demonstrate the value of diversity. We focus on professional development and creating a community for Gonzaga’s female engineering population.

2013-2014 Officers
Paige Bernier, President
Kelsey Zachs, Vice President
Jamie Gable, Secretary
Beth Andrews, Treasurer
Casey Burt, Advertising Chair
Sophie Nespor, Social Chair
Victoria Indaco, Future Chair
Sara Ganzerli, Faculty Advisor

GONZAGA WITHOUT BORDERS

Gonzaga Without Borders works for social justice at local and international levels through improving the living conditions of those in need. In Summer 2013, our president traveled to Benin as a member of Dean Silliman’s research group and evaluated potential sites where GWB could build long-term relationships. This year’s efforts included project development and increasing regular fundraising goals, resulting in a record income to apply directly to the future project. Next year, GWB plans to work with a SEED project focused on energy and sanitation in Benin.

2013-2014 Officers
Damiano Seghetti, President
Brian Gravelle, Vice President
Andrew Schafer, Treasurer
Caleb Erb, Secretary
Devin Lujan, Fundraising/Advertising Coordinator
Nathan Ikehara, Community Service Coordinator

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

American Society of Mechanical Engineers at Gonzaga gives students the chance to participate in hands-on projects, learn about regional and national engineering events and opportunities, and network with fellow students. During the 2013-2014 school year, ASME began design work and bought parts for a remote control buggy and participated in community service.

2013-2014 Officers
Mary Shipley, President
Nathaniel Fischer, Vice President
Jon Merkel, Treasurer
Patrick Mahony, PR/Advertising
Tailian Chen, Faculty Advisor
Established in 1992, Gonzaga University’s Center for Engineering Design & Entrepreneurship enhances the design experience for senior engineering students. The Center organizes projects for the academic year that are commissioned by sponsors in the private and public sectors. Most Senior Design teams consist of three to five students and a faculty advisor who work with a sponsor liaison. The students’ initial task is to generate a plan and define strategies that will bring the project to fruition. Students must make effective use of available resources to manage their project activities. Specific milestones are identified, including written reports and oral presentations, culminating in Design Exposition Day with a final report presentation for sponsors and the Design Advisory Board.
CIVIL ENGINEERING PROJECTS
CE01: Stormwater Monitoring
CE02: Ente Creek Spawning
CE03: Blue Creek, Midnite Mine
CE04: Freeman School CC14 Removal
CE05: CSO Stormwater Treatment
CE07: Willow Creek Bridge
CE08: Padhar, India Hospital
CE09: Bridger Bowl Lodge
CE10: GU Structural Assessment
CE12: SCC Technical Education
CE13: SCC Bldg 15 Addition
CE14: HydroSafety Grab Lines

ELECTRICAL ENGINEERING PROJECTS
EENG03: Wireless Electricity
EENG04: Winch Embedded Controller System
EENG05: SEL Wireless Communication

MECHANICAL ENGINEERING PROJECTS
ME01: Expandable Coil Mandrel
ME02: Combine Feed Plate Adaptor
ME03: Silica Particle Sampler
ME04: Pressure Transient Testing
ME05: Solar Panel Device
ME07: Bulldog Baja Suspension
ME08: Part Handling System
ME09: RCVD Run Load Disassembler
ME10: Belt Feeder
ME12: Lifting Device for Ingots
ME13: Winch Drum Design and Analysis
ME14: Boiling Cold Plates
ME15: Rack & Pinion Conveyor
ME16: The Fishbox

MULTIDICIPILINARY ENGINEERING PROJECTS
CE06/ME06: Sustainable Kitchen
CE11/ME11: Benin Groundwater Research
EE01/ME18: Downtown Network Model
EE02/EE17: Parkinson's Voice Monitor

COMPUTER SCIENCE PROJECTS
CPSC01: GoLumber
CPSC02: Schweitzer Mobile App
CPSC03: Glider Winch Host Manager
CPSC04: Mobile App for GU
Noel Bormann, Ph.D., P.E. advised an EPA project which sent three students to Zambia to promote sustainability. He also assisted Catholic University in constructing a new facility in South Sudan through a USAID grant and co-authored a paper for the ASEE National Conference.

Sara Ganzerli, Ph.D. worked on several undergraduate research projects and presented three papers. She attended several continuing education seminars, is active with SEAW, SWE and TMS, and advises the Gonzaga student chapter of SWE.

Andrea Hougé, P.E., S.E. engaged students in practical applications through several tours of local manufacturing facilities and job sites. Her students also participated in hands-on-learning with Habitat for Humanity.

Anwar Khattak, Ph.D. continued his work with soil conditioning affected by wind loads on pile foundations. The theory has been developed and full-scale field experiments are being sought for verification.

Mara London, Ph.D. worked with students on EPA sustainable drinking water/air quality research projects. She published several papers - one in the Journal of Environmental Engineering - and attended a sustainable engineering conference. She advises Tau Beta Pi, which is planning the 2014 National Convention to be held in Spokane this October.

Mark Muszynski, Ph.D., P.E. developed an Engineering Design and Practice course and continued researching seismic induced soil pressures on bridge foundations. He has consulted on geotechnical projects and is Vice President of the Inland Empire ASCE Chapter.

Sue Niezgoda, Ph.D., P.E. published an article in the ASCE Journal of Hydraulic Engineering on water restoration. She attended three national/regional conferences, served as Executive Officer for River Restoration Northwest, and remained active in ASCE and as a Faculty Advisor.

Paul Nowak, Ph.D., P.E., Associate Dean, Department Chair continued his consulting work on over 30 structural projects, many of which are brought into the classroom for the student’s learning experience.

Dr. Paul Nowak, Chair, Civil Engineering
Per the national trend, the computer science faculty expanded the types of introductory computer science courses this year to four: Algorithmic Art (211), Computational Modeling (212), and two different types of Computer Science I (121) – one for programming robots and one for programming mobile devices.

**Dr. Shawn Bowers** worked with students this year on research, including an NSF-funded Euler project that involves designing and implementing new algorithms and approaches for analyzing and integrating biological taxonomies. Another project involves a new extension to the SONet project, also an NSF-funded grant, that applies information retrieval techniques to extract ontological information (terms and relationships) from ecology dataset descriptions.

**Dr. Paul De Palma** used project-based techniques in his Computer Science II (122) courses. He also directed, with Dr. Overbay (Mathematics), five students in two research projects, resulting in student talks at the SIRC conference. He co-chaired a conference on rhetoric and another on artificial intelligence. In preparation for our first accreditation visit by ABET, he wrote the Self-Study for the Department and served as co-PI on the SEAS KEEN grant for entrepreneurship.

**Dr. Kathie Yerion** completed research with mathematics professors in developing an invariant for L(2,1)-colorings of graphs. This work has applications to the problem of assigning channels to transmitters to avoid inference. She also has been supporting efforts by Professor Bryant (Information Technology) in obtaining training for middle and high school teachers to offer "Exploring Computer Science (ECS)" courses next year.

**Dr. Yanping Zhang** worked on biological-inspired research in traditional sensor networks, security concerns in medical sensor networks, and cloud security. She worked with two undergraduate students during the past year on two GU-funded projects. Students worked on surveillance problems based on sensor networks, patrolling strategies of actuators, data security and privacy protection in medical sensor networks, and security issues in cloud computing.

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*Dr. Kathie Yerion, Chair, Computer Science*
A major upgrade initiative for our laboratory facilities and equipment began several years ago. This project is complete with upgrades to the Controls/Signal Processing Lab and the Senior Design Project Lab. The continued development of the Smart Antenna and Radio Lab (SARL), allowed the department to increase course offerings in wireless communications. Wireless communications and the electric power and energy concentration continue to be our most popular technical concentrations. Plans to introduce new course offerings in computer architecture, advanced embedded computer systems, and digital system design are underway.

**Grigore Braileanu, Ph.D.**, presented a paper at the International Conference on Acoustics, Speech, and Signal Processing 2013. He also continued research in his main fields of interest, digital control and signal processing. He reviewed nine papers for several academic journals, including the IEEE Transactions on Circuits and Systems and the 9th International Conference on Information, Communications and Signal Processing.

**Rick Cox** (right) is a retired Agilent Technologies R&D manager who teaches the introductory linear circuits classes and senior electives in wireless systems. He is working to integrate wireless design lab experiences with his courses.

**Yanqing Ji, Ph.D.**, continued his research in biomedical informatics and published two papers. He also served as editor for Journal of Biomedical Engineering Research and program committee members for two technical conferences.

**Vladimir Labay, Ph.D.**, continued to lead the Kern Entrepreneurship Education Network (KEEN) initiative on our campus. Through several programatic activities including student workshops and competitions, living and learning community at Goller Hall, faculty conferences and development workshops and curriculum redevelopment, the KEEN initiative instills the entrepreneurial mindset into our undergraduate engineering and computer science students.

**Steven Schennum, Ph.D., P.E.**, spoke at the Pacific Northwest Association of College Physics on “Industry University Cooperative Research and Product Development: Creating Jobs in the Pacific Northwest.” He also presented “Gonzaga’s Smart Antenna and Radio Laboratory” at Notre Dame’s Wireless Institute. In addition, he was a presenter at the 2014 Wireless Innovation Forum.

**Claudio Talarico, Ph.D.**, submitted a paper titled "A 60dBm 2.9 GHz 180 nm CMOS Transimpedance Amplifier for a Fiber Optic Receiver Application” to the IEEE Midwest Symposium on Circuit and Systems Conference, a paper titled "Design Optimization of a TIA for High Speed Data Applications using gm/ID Based Methodology” to the International Journal of Circuits, Systems and Signal Processing, and a National Science Foundation grant about student retention.

**Dr. Vladimir Labay, Chair, Electrical & Computer Engineering**
Mechanical Engineering

Mechanical Engineering at Gonzaga University continues to grow in enrollment. Last year we graduated 52 Mechanical Engineering students; this year we will graduate 60 students. Next year we have 75 students registered as seniors and anticipate a senior class of 80 students in 2016.

To accommodate this growth, we completed a moderately sized lab renovation during this past academic year to improve how we use our existing space and create a more welcoming learning environment. Within days, we moved the Junior Design course into its permanent home. This move not only benefited the Junior Design course, but also freed up space in the Student Projects Lab for the Senior Design projects.

We have also invested in new laboratory equipment. The Junior Design course now has four 3D printers to fabricate prototypes quickly. This capability has both enabled the students to design machinery to meet more challenging constraints, as well as off-loading some fabrication work from the already busy SEAS Machine Shop. Additionally, we have added seven data acquisition stations to the Senior Measurements Lab and equipment carts to organize the existing experiments. Finally, we purchased a general purpose, moderately sized, tensile tester to be used in the Manufacturing Lab.

The lab upgrades also include the written learning resources that support the senior Measurements Lab. This summer Anas Delane, our new lecturer, will begin re-writing the lab curriculum to support the student learning using the existing and newly acquired senior Measurements Lab equipment.

We are pleased to announce that Anas joined our staff as a lecturer in January 2014. Throughout 2012 and 2013, he taught several courses in our curriculum as an adjunct. He holds a Master’s degree in Mechanical Engineering from State University of New York (Buffalo, 2011) and a Bachelor’s degree in Mechatronics from Hashemite University (Jordan, 2009). Please help us welcome Anas to our faculty.

Our enrollment growth has brought new opportunities as well as challenges. We have made great strides this year. In the coming year we have many further improvements to implement. If you wish to contribute your time, expertise, or effort to support our upcoming improvements, please reach out to us.

Dr. Steven Zemke, Chair, Mechanical Engineering
As another academic year ends, we reflect on our progress and look to the future of Engineering Management (EM) at Gonzaga. Since its inception in 2009, seventeen graduates have completed the EM Degree and embarked upon an assortment of engineering careers. Each year the program becomes more appealing to incoming freshmen due, in part, to the selection of engineering courses across all areas and the Business minor. Next fall, we will have a total of six seniors, nine juniors, 24 sophomores, and an (as yet) undetermined number of freshmen. As such, Engineering Management is beginning to resemble other programs in SEAS and will likely match, or pass, the numbers of students in the smaller programs in the near future.

In Fall 2014, in conjunction with the four existing ABET accredited engineering programs, both Engineering Management and Computer Science will participate in an on-site ABET accreditation visit. Assuming we are successful, all SEAS programs will have ABET accreditation next year, which provides the University and outside employers assurance that the School of Engineering and Applied Science has developed strong, technical, and well-rounded educational degree programs for our students.

This year, a number of our students completed the necessary steps to form a Student Branch of the American Society of Engineering Management (ASEM) at Gonzaga. Membership in this professional society is open to all EM Majors, and a strong push will be made in early Fall 2014 to encourage all existing EM students and incoming freshmen to join this professional organization.

The EM special topics course, introduced two years ago, remains a popular course choice for all engineering juniors and seniors. The course provides an opportunity for students to meet with industry professionals to discuss engineering and non-engineering topics they will likely encounter in their first 12 months in the workplace.

The business community has embraced the Engineering Management program in the best way: by hiring EM graduates. With recent alumni working at companies like Boeing, McKinstry, Power Engineers, Schweitzer Engineering Laboratories (SEL), Xylem, and Direct Energy, we look forward to an exciting future for this young program.

Dr. Peter J. McKenny, Chair, Engineering Management
This year saw continued growth rate in enrollment in the T&D program as 80 certificate students and 37 master’s students took a combined 226 classes. For the first time, the program was forced to offer some courses in multiple sections in a semester and 17 classes were offered overall during the year.

The program awarded seven Master of Engineering degrees in May 2014, including four to engineers from NV Energie Bedrijven Suriname, South America. So far, nine engineers from NVEBS have taken Gonzaga courses and the program is helping to improve the power grid and safety in countries around the world.

The program offered the new Transmission Line Design-Structures course to full enrollment and expects to offer the new Power Communications course in the coming year. While the majority of instructors have been with the program since its beginning, 2013 saw the retirement of Richard Snell and Mike Nissley in the Substation Design course and the addition of Matt Collins and Harvey Lehpamer from Power Engineers, Julie Reichle from Northwestern Energy, and Ajay Mallik from SANPEC.

The program is currently planning updates to several existing courses as well as new courses in Underground Distribution Design and Advanced System Protection.
Congratulations to the
Graduating Class of 2014
School of Engineering & Applied Science

Bachelor of Science in Civil Engineering

Ryan Michael Andrade  
Mitchell Alan Beck  
Garrett Charles Benson  
Krista Marie Beyer  
Jessica Danielle Bladow  
Brenna Lindsay Brown  
Gregory Scott Carter  
Emily Elizabeth Cronin  
Matthew Carey Del Moro  
Dallas James Dimock  
Douglas Kyle Ehlebracht  
Caleb Steven Francis Erb  
Jared P. Emy  
Kevin Raymond Evans  
Douglas Robert Forkner  
Colton Godsey Freels  
Jamie Christine Gable  
Samuel Crosby Hardison  
Zaeem Khalid  
Paige Marie Lawrence  
Preston Alan Love  
Michael Arthur Lucas  
Joshua James Masterson  
Connor Michael McGregor  
Bennett James McLaughlin  
Cody James Meckes  
Sophia Marie Nespor  
Julia Helen Pavicic  
Mitchell Leslie Pearce  
Charles Steven Roberts  
Henry A. Rodgers VI  
Ethan Andrew Rogers  
Rebecca Lynn Ryan  
Mohamed N. Sambou  
Andrew Jacob Schafer  
Kevin Robert Schell  
Jacob Brian Schlador  
Thomas Andrew Scott  
Damiano Mauro Seghetti  
Joshua Alexander Hung Sun  
Kamaleiokamakani Seto  
Nathan William Sieler  
Jack Andrew Siemens  
Lisha Gineli Sosa  
Eric Andrew Spurbeck  
Charles Holmes Stout  
John Joseph Strub  
Carson Michael Thompson  
Jaymee Lee Vaughn  
Colleen Walsh  
Chaz Cameron Woo

Bachelor of Science in Computer Engineering

Daniel Elliott Collins  
Troy Richard Cosentino  
Sam Robert Cutler  
Dominic Vincent Norris
<table>
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<tr>
<th>Program</th>
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<td>Bachelor of Science in Computer Science</td>
<td>Patrick Mathias Anderson, Joseph Cole Britton, Bradley Curtis Clemetson,</td>
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<td>Douglas Allan Coulsen, Matthew Dargen, Andrew Koon Hin Hee, Lauren Patrice</td>
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<td>Joplin, Jacob Matthew Kingsbury, Colin Glenn Knappert, Patrick Denning</td>
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<td>Paul Shioyama, Alex Peter Williams</td>
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<td>Marc Allen Carlson, Nathaniel Gesell, Kaitlyn Elise Helsing, JohnJoseph</td>
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<td>Bachelor of Science in Engineering Management</td>
<td>Jordan Paige Bernier, Aaron Jung Lee, Benjamin Thomas Rowland</td>
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<td>Bachelor of Science in Mechanical Engineering</td>
<td>Ross Tracy Anderton, Anthony Everett Armstrong, Anastasia Louise Ashley,</td>
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<td>Andrew Arthur Asper, Bryce Joseph Austin, Jesse Alexander Baker, Jeffrey</td>
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<td>Lindsey, Estefen Porforio Luna, Erick Lyons, Danielle Rose Mathews, Andrew</td>
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<td>Thomas McCurdy, Andrew Robert McMannis, Ben Thomas Meyer, James O. Moody,</td>
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<td>Kathryn Taylor Neal, Adam Charles Obenberger, Andrew Thomas Owenson</td>
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<td>(Bold indicates Honors Students)</td>
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</tbody>
</table>
Faculty

Dr. Stephen Silliman, Dean and Professor of Civil Engineering; B.S. Civil Engineering, Princeton University; M.S., Ph.D., Hydrology, University of Arizona.

Dr. K. Akbar Ansari, Professor of Mechanical Engineering; B.S., Electrical Engineering, Osmania University, India; M.S., Mechanical Engineering, University of California – Berkeley; PhD., University of Texas – Arlington.

Dr. Abdul Aziz, Distinguished Research Professor of Mechanical Engineering; B.S., Mechanical Engineering, Karachi University, Pakistan; Ph.D., University of Leeds, United Kingdom.

Dr. Noel E. Bormann, Professor of Civil Engineering; B.S., M.S., Ph.D., Civil Engineering, Colorado State University.

Dr. Shawn Bowers, Assistant Professor of Computer Science; BS., University of Oregon; Ph.D., M.S., OGI School of Science and Engineering, OHSU.

Dr. Grigore Braileanu, Professor of Electrical Engineering; B.S., Ph.D., Engineering (Specialization in Automatic Control Systems), Polytechnic Institute of Bucharest, Romania.

Dr. Massimo Capobianchi, Professor of Mechanical Engineering; B.S., M.S., Ph.D., Mechanical Engineering, State University of New York at Stony Brook.

Dr. Taillian Chen, Assistant Professor of Mechanical Engineering; B.S. Henan University of Science and Technology, China; M.S. Jiangsu University, China; Ph.D., M.S., Mechanical Engineering, University of Florida.

Rick Cox, Lecturer of Electrical Engineering; B.S. Washington University; M.S. Stanford University.

Anas Delane, Lecturer of Mechanical Engineering; B.S., Mechatronics, Hashemite University, Jordan; M.S. State University of New York - Buffalo.

Dr. Paul DePalma, Professor of Computer Science; B.A., English, St. Louis University; M.A., English, University of California, Berkeley; M.S., Computer Science, Temple University; Ph.D. The University of New Mexico, Computational Linguistics.

Dr. Patrick Ferro, Chair and Assistant Professor of Mechanical Engineering; B.S. Cornell University; M.S. Oregon Graduate Institute of Science & Technology; Ph.D., P.E. CMfgE, Colorado School of Mines.

Dr. Sara Ganzerli, Professor of Civil Engineering; M.S., Civil Engineering, University of Utah; Ph.D., University of Pavia, Italy.

Andrea Hougen, Lecturer of Civil Engineering; B.S., Civil Engineering, Gonzaga University.

Dr. Yanqing Ji, Assistant Professor of Computer Engineering; B.S., Industrial Automation, Quingdao University, China; M.S., Physical Electronics, University of Science & Technology, China; Ph.D., Computer Engineering, Wayne State University.

Dr. Anwar S. Khattak, Professor of Civil Engineering; B.S., Civil Engineering, Peshawar University, Pakistan; M.S., West Virginia College; Ph.D., Michigan State University.

Dr. Vladimir Labay, Chair and Professor of Electrical Engineering; B.S., M.S., Electrical Engineering, University of Victoria; Ph.D., University of Manitoba.

Dr. Mara London, Assistant Professor of Civil Engineering; Ph.D., University of Texas at Austin, Civil Engineering

Dr. John J. Marciniak, Associate Professor of Mechanical Engineering; B.S., Engineering Science, University of Notre Dame; M.S., Ph.D., University of Illinois-Urbana.

Dr. Peter McKenny, Chair of Engineering Management and Director of Transmission & Distribution; B.S., Electrical & Electronics Engineering, University of Newcastle Upon Tyne; M.S., Ph.D., Electrical Engineering, Clarkson University.

Dr. Mark Muszynski, Assistant Professor of Civil Engineering; B.S., M.S., Civil Engineering, Michigan Technological University; Ph.D., Civil Engineering, University of Illinois at Urbana-Champaign.
**Emeritus Faculty**

**Dr. Gail H. Allwine**, Assistant Professor Emeritus of Electrical Engineering; B.S., M.S., Civil Engineering, Michigan Technological University; Ph.D. Civil Engineering, University of Illinois at Urbana-Champaign.

**Dr. Paul S. Nowak**, Associate Dean and Professor of Civil Engineering; B.S., Civil Engineering, State University of New York at Buffalo; M.S., University of Illinois-Urbana; Ph.D., Applied Mechanics, California Institute of Technology.

**Dr. Steve D. Schennum**, Associate Professor of Electrical Engineering; B.S., M.S., Electrical Engineering, Montana State University; Ph.D., Washington State University.

**Dr. Claudio Talarico**, Associate Professor of Electrical and Computer Engineering; B.S., M.S., Electrical Engineering, Universita di Genova, Italy; Ph.D., Electrical Engineering, University of Hawaii.

**Dr. Kefei Wang**, Lecturer of Computer Science; B.S., Computer Science, Northeastern University, China; M.S., Ph.D., Computer Science, University of Nebraska-Lincoln.

**Dr. Kathie Yerion**, Professor of Computer Science; B.S., M.S., Mathematics, Northern Arizona University; Ph.D., Mathematics, University of Montana.

**Dr. Steven Zemke**, Associate Professor of Mechanical Engineering and Director of CEDE; B.S., Mechanical Engineering, University of Washington; M.S., Northwestern University; Ph.D., University of Idaho.

**Dr. Yanping Zhang**, Assistant Professor of Computer Science; B.S., Electrical Engineering, Zhengzhou University, China; M.S., Ph.D., Computer Science, University of Alabama.

**Lei Zhao**, Lecturer of Computer Science; B.S., Electronic Information Engineering, Northwestern Polytechnical University, China; M.S. Computer Science, M.S. Electrical Engineering, The University of Alabama.
Nicholas (’05) and Katrina (Saxby) (’05) Alexander
John (’54) and Jewel Andrew
John Aspebakken (’78)
Jake A. Avella (’12)
Avista Foundation
David and Marianne Ayers
Kristie Bacon
Nicholas John Barclay (’10)
Michael H. Bauer (’77)
Rowena M. Beaudry (’05)
Benefit
Lawrence J. (’72) and Anna M. Bennett
BL Best
Zachary J. Boyer (’06)
James E. Bronder (’09)
Randy L. Bronson (’88)
Gerda Brown (’44)
BSC Engineered Systems
Miles H. Bullock (’08)
Burlington Northern Santa Fe Foundation
Joshua Burright (’07) and Melisa Ziegler
Brian (’96) and Corinne (Coombs) Burton
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Mr. and Mrs. Michael Cahill
David and Paula (Fortier) (’00) Campion
John (’76) and Pat Campion
Canadian Solar
Drs. John and Sharon Cannon
John and Theresa Castona
Robert (’57) and Ramona Clavel
Dick (’56) and Catherine Cochran
Joe and Marjorie (’79) Cochran Frett
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Coffman Engineers
Gene J. Colin and Susan M. Janus
James K. D’Aboy (’85)
Carrie A. Davis (’09)
William (’91) and Britt-Marie (Bunch) DeForeest
Steven and Patricia Degracia, Jr.
Marcela de la Mar
John F. (’87) and Claire D. Dempsey
John and Christine Dorrance
Christopher J. (’98) and Stacey Dorrington
George Eastom (’60)
Eastom Engineering Co.
Richard (’64) and Jeanette Egge
Todd and Maureen Ellingson
Jason (’95) and Salliejo Evers
Myra (McGillivrey) Farquhar (’57)
Fidelity Investments Charitable Gift Fund
Fluke Corporation
Arny (’61) and Elmira Forner
Eric A. Forner (’56)
Rhett and Cindy Fulwider
Daniel J. Galligan (’01)
Dale (’83) and Lisa (’83) Garrett
Eric A. Gerst (’99)
John (’87) and Andrea Gibson
Allen D. Gillette (’78)
Michael B. and Allison S. (Tuszynski) (’04) Gillis
Martin and Leticia Godina
Douglas and Mary Goelz
Michael (’09) and Stephanie Gonia
Goodrich Corporation
James M. Graham (’04)
Nora Grasham (’98)
James and Annmarie Haldeman
Taylor J. Hall (’10)
Carl M. Hansen Foundation
Rodney and Jennifer Hatfield
Don (’46) and Carol (RIP) Herak
Fred Hobbs (’69)
Jeff and Jennifer Hood
Thomas Illich (’74)
Independent Colleges of Washington
Integrated Strategic Resources Inc.
Integrus Architecture, P.S.
Don (’56) and Marilyn Jans
Jody and Tami Johnson
Johnson Controls Foundation
Deborah (Shanks) Johnston (’94)
Johnston-Fix Foundation
Jeffrey (’85) and Christine Jones
Andrew P. Kalapaca (’03)
Joey Kastenholz (’11)
Gregory and Debra Ketchum
Kelly Ketchum (’08)
Nicole Kissinger (’13)
John Jesse (’95) and Danyelle Kohler
Don (’04) and Dena Kopczynski
Matthew (’00) and Brianne Kopp
Charles R. (’79) and Carol Krahenbuhl
LHC2
Dr. H. John Lane (’56)
Namhan Le (’82)
Patrick Lettenmaier (’49)
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<th>Donor Honor Roll</th>
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<td>Ronald M. ('64) and Grace Little</td>
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<td>Derek C. Long ('12)</td>
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<td>Todd and Lisa Longbottom</td>
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<td>Brent M. Lowe ('11)</td>
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<td>Donald and Meri Lowe</td>
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<td>David ('74) and Cyndi Lucke</td>
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<td>Paul Lukinich ('89)</td>
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<td>Max R. Magee ('11)</td>
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<td>James ('69) and Kathleen (Rogge) Mahler</td>
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<td>Carroll ('68) and Patricia Martell</td>
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<td>Alan and Cynthia Matsumoto</td>
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<td>Brent C. Mayer ('06)</td>
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<td>John P. McDonagh ('10)</td>
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<td>John and Cindy Mechenbier</td>
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<td>Sean S. Michael ('09)</td>
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<td>Jim ('72) and Jean Moore</td>
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<td>Patrick E. Morin ('69)</td>
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<td>David Muggli ('70)</td>
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<td>David Munger</td>
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<td>MW Consulting Engineers</td>
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<td>Bill ('62) and Teree Myrhang</td>
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<td>Robert and Sabrina T. (Finer) Parnell, III, 1991</td>
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<td>Dr. Donald R. Paugh ('79) and Ms. Diedre L. Olin</td>
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<td>Randle and Roxanne Phelps</td>
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<td>Ermel ('70) and Christine M. (Breitenbach) Quevedo</td>
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<td>Michael ('77) and Victoria Quinn</td>
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<td>Phil ('51) and Bev Reinig</td>
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<td>Ed ('59) and Bunny (Suva) ('59) Renouard</td>
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<td>Douglas and Peggy Smith</td>
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<td>Glenn and Stefani Soares</td>
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<td>Bruce Vadla ('80) and Karen Brett-Vadla</td>
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<td>Andrea (Soth) Vandehey ('01)</td>
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<td>Vanguard Charitable Endowment Program</td>
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<td>David Vanni ('01)</td>
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<td>Ray Vollert ('63)</td>
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<td>Darcy Wagner ('07)</td>
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<td>Thomas Wais ('61)</td>
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<td>David ('58) and Joyce Walsh</td>
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<td>James T. ('77) and Eleanor B. (RIP) Weston</td>
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<td>Marvin B. Williams ('64)</td>
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<td>Paul ('99) and Audrey Williams</td>
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<td>Xcel Energy Foundation</td>
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<td>Paul and Kathleen Zizza</td>
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Congratulations, Graduates!