

20 YEARS AND 20,000 STUDENTS

UT COLLEGE OF ENGINEERING CO-OP ANNIVERSARY CELEBRATION

SEPTEMBER 25, 2018





Dear Friends of the UT College of Engineering,

In 1997, The University of Toledo College of Engineering made the bold decision to require all engineering science students to complete three semester-long co-ops as part of their undergraduate degree program. Since 1998, when the first group of students were placed in regional employers, more than 20,000 student co-op placements have occurred. One of only eight engineering colleges in the U.S. to have mandatory engineering co-ops, our College of Engineering has become a top choice for many students and employers.

As you will see in the pages that follow, the co-op program has been truly life-changing for our students. For many of our students, the co-op program has allowed them to graduate from college debt-free and with a full-time job lined up. Having a full year of experiential education under their belts by the time they graduate gives our students the confidence and skills needed to hit the ground running in their postgraduation jobs. The effect on our students and their families has helped UT be top-ranked in social mobility, giving families the ability to educate their sons and daughters with reduced debt, and enter a well-paying career with unlimited opportunity.

The stories our College of Engineering co-op alumni have shared with us are truly heartwarming, and affirm that our co-op program is worth the hard work that our Career Development Center staff put into it all year.

Employers love our mandatory co-op program because it allows them to "test-drive" students before making an offer for a permanent position. Because we require students to complete at least two co-ops with the same firm, employers can see how a student performs in positions with increasing responsibilities and complexity. While the costs of having student interns from other schools are viewed as a necessary investment in future talent, many of our talented co-ops are billable and/or productive well above their compensation.



What has also become apparent as we prepared for our co-op anniversary celebration is the impact our coop program has had on the industries and communities that these students serve. Our 2,838 employers, from <u>46 states and 44 countries</u>, have overwhelmingly responded to our request to celebrate our 20th anniversary by telling us how our co-op program has greatly benefited their companies.

Our <u>Corporate Partners Program</u> has also added a new dimension to the co-op program, by having industry invested in our college, our curriculum and our students. Our corporate partners have a seat at the table, advising us on new trends in industry, presenting to students in our corporate partners speaker series, and working with our researchers on needs we can help meet within their companies.

Thank you for your support. We look forward to the next 20 years of co-op, and serving the students, companies, alumni and communities that make up The University of Toledo College of Engineering.

Go, Rockets!

T. Michael Toole, PhD, PE Dean, College of Engineering

MORE THAN 21,269 PLACEMENTS WITH 2,838 EMPLOYERS AT 3,636 SITES

CORPORATE PARTNERS



















88 **550e**°



























Ashley Kalies Catalent Biologics – Bioengineering



Cameron Layne - OshKosh Defense -Mechanical Engineering

Chloe Huston – Jones & Henry Engineers Ltd. - Environmental Engineering



Madeline Szymanski – POET – Chemical Engineering



Sarit Dhar - Ford - Bioengineering



Nicole Wright – Patrick Weil – Justin York – Federal Mogul – All 3 of these students are Mechanical Engineering

Austin Ullery – Timken – Mechanical Engineering





Matt Holsinger – The Chemours Co. – Mechanical Engineering



Jessica Baron – J. M. Smucker's – Chemical Engineering



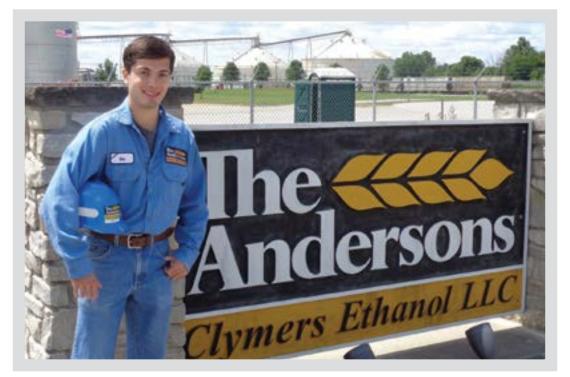
Kimberleigh Burdorff – Johnson & Johnson – Mechanical Engineering



Mitchell Krot – Toledo Molding & Die – Mechanical Engineering



Oliver Eby - UT BIOE Research Lab -BioEngineering



Dan Reichenbach – The Andersons – Chemical Engineering

"The co-op was a huge part of my decision when I was looking at schools for engineering. I knew that the practical experience I would gain while working for a company full time would allow me to have a unique advantage over other students who did not participate in a co-op.

"The co-op experience has really opened my eyes to the practical world of chemical engineering. Co-op has shown me that there is more to engineering than designing new equipment or processes. Engineers play an important role in making sure a plant operates at the highest efficiency, while maintaining employee and environmental safety. I also broadened my skills in communication, as I had to work among employees with various levels of technical background and share my ideas in a way that any individual could understand."

Dan Reichenbach, CHEE co-op student

"The experiences shared between University of Toledo Engineering students and The Andersons have been mutually beneficial. The advancing skills that students bring to the workplace supplements our on-going charter to technically support our diverse businesses."

Steve Bell, Vice President, Grain Operations, The Andersons



"We were often able to partake in projects that other co-ops were doing despite having a project to focus on. It allowed me to explore outside of just programming and I am really thankful for that."

"I was given open-ended projects that I was able to learn to manage on my own, giving me an opportunity to learn my weaknesses in engineering."

R.W. BECKETT CORPORATION



"R.W. Beckett has become very dependent on our co-ops. They are very much a part of the team, and we use them to do the real engineering work. We did a survey of co-op programs among state universities in Ohio and found that UT engineering has a co-op program that is substantially more mature than other programs, and we very much appreciate the partnership between the educational and industrial segments."

THE ANDERSONS INC.



Elizabeth Makley, EECS co-op student

Harry Wilson, EECS co-op student

Timothy Beight, Sr. Principal Software Engineer, R.W. Beckett Corp.



BP

bp

"The company really made it possible to give me opportunities to explore Alaska while I was here. Such as kayaking in Seward, Alaska, and seeing the oil field in Prudhoe Bay!"

Paul Moenart, CHEE co-op student

"I was able to see a ton of industrial construction, be out in the field a lot, and was able to contribute to my department in a positive way. Everyone I came across was willing to stop and help me along the way. This co-op confirmed my desire to work in a refinery setting. I want to make this my full-time job."

Thomas Shepherd, MIME co-op student

"At BP, UT's co-op students gain technical depth and real-life application from what they learn in the classroom. They also learn and experience our company culture and how BP brings energy to the world around us. Thanks to the co-op program, students who join us in full-time roles after graduation are able to hit the ground running in their careers from day one."

Amy Patton, Director – U.S. University Relations, BP America, Inc.



BUCKEYE BROADBAND



Buckeye Broadband has been a strong supporter of The University of Toledo College of Engineering co-op program for many years. Thanks to their financial investment in this important academic experience, UT faculty are able to provide mentoring and oversight to engineering students while they are in co-op, ensuring their work is tied to meaningful experiences and preparation for career immersion. Buckeye Broadband is proud to support the communities they serve.



"The University of Toledo engineering co-ops have consistently been well trained and prepared for the workforce. Cooper loves that UT has built co-ops into the program. This is extremely advantageous for both us and the student, as they get work experience and hands-on experience and, likely, a job upon graduation. The fact that we have such a wonderful engineering school 'in our backyard' makes acclimating the students to our region in northwest Ohio a lot easier."

Haley Reed, Corporate Recruiter, Cooper Tire & Rubber Co.

"I learned a lot of valuable skills relevant in my field of study and was able to work with experienced engineers. I enjoyed the experience and will continue co-op-ing here for my remaining terms, and hopefully work here after graduation."

David Haas, EECS co-op student

"My co-op experience has helped me decide the area of chemical engineering I would like to work in and taught me skills and professionalism I can use in my future career. I enjoyed my co-op experience as a whole. My favorite part is being given projects that are real and useful to the company. Cooper also gives co-ops the opportunity to rotate through different departments and find what they are truly interested in."

Keri Eickholt, CHEE co-op student



DANA INCORPORATED



COOPER TIRE & RUBBER CO.



"Dana's relationship with The University of Toledo College of Engineering goes back many decades. The co-op program has been instrumental to Dana's success. We view it as a three-way partnership between UT, the student and Dana. We became a corporate partner because we wanted to be a vital part of this ecosystem. UT engineering's co-op program is our secret weapon!"

Steve Wesolowski, Global R&D/University Relations Lead, Dana, Inc.

"This co-op was vastly different than my previous co-op, which was in a refinery. I was able to work in an office building with a large team of engineers that worked on projects as a unit, instead of individually like at my previous company. This gave me the ability to develop more soft skills, like how to communicate, work in a group, critical thinking and problem solving with several opinions and inputs. It also helped me determine what type of work environment I want to work in. I like that Dana has a mix of office and handson work that all engineers experience. I really appreciated all of the different tasks I worked on throughout the semester. Due to my projects being assigned from various engineers in my department, I was able to learn about the different products and technology that Dana uses. I think I was able to learn about my career interests, specifically, what I like and don't like in a career, work environment, work tasks, etc. I like that my co-op had more general tasks that gave me a taste of everything my group does as a whole."

Margaret Buchele, MIME co-op student

"I learned how to adapt to and overcome adversity. I also learned a great deal about how materials are heat treated and how different processes will be able to achieve different properties in the materials. This has been a great learning experience and will surely help me in my future in the engineering field. This co-op has led me to try to get a job in a field that I did not study in school. It helped me realize where my actual interests lie. This has been a great learning experience and will help me in my future and in my decision on where I want to end up in the future."

Tyler Brown, MET co-op student



"All of our current owners are UT engineering graduates. DGL felt it was important to stay involved with the College of Engineering, and it's really a win-win. The enhancement of learning both in the classroom and in industry really increases the student's knowledge base, and brings DGL great quality employees upon their graduation. The co-op program brings the student and employer together in a more efficient and productive way."

Laurie Adams, Managing Principal, DGL Consulting Engineers, LLC (alumna)

DGL CONSULTING ENGINEERS, LLC



"I enjoyed getting to work with everyone at DGL. If I ever had a question or needed help I knew a coworker would be more than willing to help me in any way possible. I also enjoyed working in 2-man crews in the field. Over the course of a summer I built friendships, and that's always something that can motivate you to want to come in to work."

Christopher McClanahan, CIVE co-op student

"Working at DGL Consulting Engineers, LLC means being involved in largescale projects with a team of enthusiastic professionals who value the importance of inclusion, teamwork and commitment, while keeping a clear vision of their long-term goals. It has been a great opportunity for me to learn and grow personally and professionally!"

Rami Hanna, CIVE co-op student



GLASSTECH, INC.



"I gained real-world experience, learned how to effectively communicate my own ideas in a group setting, and now have a better understanding of the work that goes into new product design."

"The Nitschke family, co-founders of Glasstech, have always been proud supporters of The University of Toledo's College of Engineering. The engineering co-op program has allowed us to bring fresh ideas from UT students, take that knowledge and leverage it into our workflow and production. We find the spirit of the UT students to be energetic and ready to learn, and it has been a great experience having them as part of our company. We just hired a UT engineering co-op grad for full-time employment last semester, and she is already a great part of our team!"

Michael Pulhuj, PE, Director of Engineering, Glasstech

Brian Bils, MIME co-op student



THE LATHROP COMPANY

Lathrop

"We treat our co-op program as a really extensive job interview. Having hands-on experience is invaluable. It also allows the students to explore different career paths in their respective engineering fields.

"As an alumna, I now have my career with a wonderful, international company as a direct result from my co-op through The University of Toledo. There are things that just cannot be taught in a classroom. Co-ops teach things like soft skills, different computer applications and working as a team in an office environment, as well as how to deal with the real-life challenges of being an engineer. The co-op program at The University of Toledo is an invaluable experience. As a recruiter for The Lathrop Company and a past co-op through UT's College of Engineering, I can honestly say that co-ops give an opportunity to see if a specific area of engineering is right before fully committing to it. Companies have the opportunity to see if a co-op will work as a full-time employee before they make a full-time offer. It is a win for both employers and students!"

> Erika Contreras, Estimating Engineer & Recruiting Coordinator, The Lathrop Company (alumna)

"Lathrop provides you a distinctly unique experience to apply your knowledge and grow your future; you will encounter an abundance of diverse knowledge across various generations of experience for you to learn from."

Hussein Akl, CIVE co-op student



"The co-op allowed me to understand how to go about building my career and allowed me to explore different avenues of work. It also allows me to understand what kind of work I enjoy along with what I do not enjoy."

THE LUBRIZOL CORPORATION

Lubrizol

Amir Elgeyoushi, EECS co-op student

"Lubrizol's goal with the co-op program is to provide students with real world experience in multiple aspects of your field and provide the opportunity to grow as an employee within the company, which is exactly what I experienced during my three co-op rotations with Lubrizol. My co-op experience at Lubrizol both introduced me to and fueled my passion for infrastructure and business in the Information Technology world, and by the end of my last rotation with them, provided me with a full-time job offer with the team I was working on at the time. Both Lubrizol's co-op program and the University of Toledo's program provided me with the educational experiences and resources needed in order to be successful in my full-time career."

Erin Gauthier, Telecommunications Analyst, Lubrizol (alumna)



"Information technology is broad and encompasses many different jobs and roles. CSE students who complete the required co-op terms graduate with experience and awareness of IT job roles. Consequently, they have a much better idea of what they want in a full-time job and what employer qualities they value."

Kelli Routsong, IT Projects Supervisor, Marathon Petroleum Corporation (alumna)

"Not only did my co-op set me up for success for my future career through valuable experience and training in the refining oil industry, it was also crucial for the additional income needed to pay for my tuition and get through college. I was able to learn from real engineers in the field and was given responsibilities equivalent of a full-time engineer. The focus of the co-op program with Marathon is for co-ops to gain the experience and tools necessary to be successful engineers after graduating."

Adam Beaman, Refining Engineer II, Marathon Petroleum Corporation (alumnus)

"My co-op with Marathon helped me realize how much I love being in the field and that leadership is what I want to do in the future of my career."

Julia Button, EECS co-op student

"This experience helped me solidify not only which company I would like to work for, but also which department that I am most eager to work in. I enjoyed collaborating with operations, reliability, maintenance, accounting, and process controls to further develop my comprehension of how this company operates effectively."

Cody Spoon, CHEE co-op student



MATRIX TECHNOLOGIES, INC.

Matrix Technologies "The co-op program is a win-win for the company and the student. The company is able to get additional resources for engineering projects and the student is able to learn real-world, practical applications for engineering concepts they learn in the classroom. Students at UT have real-world engineering experience when they graduate. These students are able to hit the ground running when hired on as entry-level engineers."

"We have been successfully using interns for many years. We typically hire 8-10 co-ops per semester to work in all of our divisions. The co-op program has been an excellent pipeline of talent into our engineering positions. The co-op experience at Matrix provides the student with a very hands-on experience of what work will be like in a full-time position. They are able to build both their technical skills and their soft skills. At times, they even have the opportunity to visit client sites and experience that aspect of the business. The co-ops that we hire full time are able to hit the ground running and make an immediate impact in their jobs."

MARATHON PETROLEUM CORPORATION



Martin Murray, HR Generalist, Matrix Technologies, Inc.

Lisa Behrendt, Director of HR, Matrix Technologies, Inc. (alumna)





"UT engineering co-ops have created a strong talent pipeline for our manufacturing leadership programs; these employees then continue to be skillful leaders in our company. The UT co-op program fuels experiential learning for students. Once in full-time roles, students are capable of applying their knowledge and learn at a much faster pace due to solid foundations. Lastly, I believe the co-op program ensures students' desired career paths and lowers the risk for our company hiring early-career employees."

OWENS CORNING



"One thing I really enjoyed from my co-op experience with Owens Corning was taking on the responsibility of planning a capital project. Just really having a lot of pride in my work and providing something that is actually valuable to the team was a great experience that I was able to appreciate. This co-op experience positively impacted my future career plans in a big way. It gave me a clear understanding of what I want to do after college, and hopefully I will be able to do so with this company."

NORTH STAR BLUESCOPE STEEL



"We have found The University of Toledo engineering co-op program to be a great match for us. We have been able to offer excellent projects for co-op students to work through while generating a lot of career interest. The caliber of students has been outstanding.

"We have great history working with The University of Toledo. From our on-site MBA program to the fantastic professors we utilize for our Leadership University, UT has been a great partner for the past 20 years. We wanted to strengthen that relationship by investing in the Corporate Partner program to help us take full advantage of all that The University of Toledo has to offer."

Rich Menzel, Vice President of Human Resources, North Star BlueScope Steel

Ty Paris, Early Career Specialist, Owens Corning

Daniel Shopshire, CHEE co-op student



"The co-op program with UT engineering has had such a positive impact on our company! We have hired a large number of full-time employees from UT. The co-op students are able to gain real-world experience and try out the industry to see if this is a fit for them."

Miranda Ulrey, HR Business Partner & Generalist, Owens-Illinois, Inc.

OWENS-ILLINOIS, INC.



"Our partnership with the UT College of Engineering has resulted in O-I hiring more than 30 students over the last two years in a variety of full-time, co-op and internship roles across a broad range of functional areas."

Adam Schlatter, Manager of Talent Acquisition, Owens-Illinois, Inc.

"I've learned to wear multiple hats and take on tasks that I was not necessarily taught to perform. The work satisfaction was great, and I enjoyed having mentors who have been at the company for an extended amount of time. Their insight was really helpful."

Courtney Fung, BIOE co-op student



"Our co-op has had a tremendous positive impact on the business. We always match the co-op with an engineer that assists and tasks them on a daily basis. They work on high-impact items that teach them our business and drive results to the bottom line, all the while using their problem-solving techniques that make them engineers. I always treat the co-op experience as a 'two-way interview.' It allows us to observe firsthand the co-op's abilities and attitude. At the same time, the co-op 'interviews' us to see if we supply the working environment they want to be a part of to start and grow their career. As an alum, I strongly believe that the co-op program best prepares a student for what life is like after school. With so many opportunities for an engineering student, it's critical to see firsthand what's out there. My co-op experience allowed me to see the manufacturing side of the industry, and ultimately drove me to where I am today. PCC Airfoils has become a corporate sponsor to play a larger role in the program."

PCC AIRFOILS, LLC



"UT's engineering co-ops are resources that the entire engineering department draw upon. They are very useful in projects where close attention to detail and follow-up is required. UT co-ops also bring excellent CAD and other simulation software skills, which the engineering department regularly relies upon. Co-ops that return to PCC Airfoils for multiple rotations are extremely highly valued after graduation. They represent an incumbent who, after graduation, can be brought on-board nearly fully trained and become contributing members of the engineering team on day one."

Justin Daugherty, Engineering Manager, PCC Airfoils, LLC (alumnus)

"My company currently employs between 3-5 co-ops every semester. Co-ops have been vital in helping run various engineering trials to improve our processes. By helping with these trials, the company as a whole is able to reduce scrap costs and improve yields, which is vital in any manufacturing setting. When a student completes various co-op rotations, it truly helps the student learn what they like and dislike with a certain industry or type of engineering role. When the student understands what they like, it helps us determine whether or not they would be a great fit for us. Doing co-op rotations is also beneficial in the sense that there is essentially no college-to-work transition. Students that finish co-op rotations have had time to learn to be independent and may be more comfortable stepping right into a role, rather than needing more instruction on a daily basis."

Peter Sraj, Lead Quality Engineer, PCC Airfoils, LLC (alumnus)

Andrew Sipple, Process Engineer, PCC Airfoils, LLC



When the UT engineering co-op program was launched, it was an easy decision for PTI to get involved, and today we still employ some people who started in that first co-op. We have employed more than 100 individuals through the co-op program, with many of them going on to be hired as full-time employees after graduation. The students become actively engaged in our company from the beginning. We train them in various departments, ranging from design and package development to prototyping and testing. The co-op program offers real-world experience to the students, which is invaluable. They are able to apply their academic learning while on co-op, which strengthens their skill sets in a professional atmosphere. They are challenged while learning the expectations of working outside the classroom, but also challenge. PTI is proud to have been involved with the co-op program since its beginning and congratulate The University of Toledo's College of Engineering on this successful milestone.

"The co-op program has had an excellent impact at PTI. We have been fortunate to work with great students who come in prepared and willing to tackle any projects. We work diligently to broaden their experiences in a variety of departments to help them gain deeper understanding. The real work experience they gain while on co-op is valuable to both the student and future employers. The students are able to enter the workforce with some experience, as well as understanding and expectations of business culture."

Missy Otterson, Director of Organizational Development,

ΡΤΙ

"PTI became a corporate partner because we had already seen the benefits of the co-op program and appreciated the college's desire to engage corporate partners to strengthen the program. Having input to a successful group of future employees was appealing to us. The ability to work with other corporate partners and the College of Engineering has increased our recruitment capabilities, as well as given us input and opportunity to make students more successful after they graduate."

> Aaron Bollinger, Predictive Modeling and Project Engineer, PTI (alumnus)



RUDOLPH LIBBE GROUP



"Rudolph Libbe is and continues to be an incredible experience because I've been able to learn from such a skilled and dedicated team. Through my time here as a co-op and now as a full-time employee, I have role models throughout the company that still inspire me to be better"

Brandon Boehm, Preconstruction, Rudolph Libbe Group [former co-op]

"We use the co-op program for both short-term positions [semesters], but more importantly, as our primary resource for full-time employment. Today, we have more than 35 UT Engineering grads working for us full-time. I really like the rotation program, where employers have the opportunity to hire co-ops during all three semesters on a continuous basis."

The UT Co-op program has been a tremendous benefit to our company, and a corporate sponsorship is a great way to give back and keep the program strong, especially in an industry that faces a workforce shortage. This program provides access to some of the best talent in our area. Our company would love to continue being a long-term supporter to the engineering program that has led and will continue to lead so many students into great careers.

Mike Livingston, Senior Preconstruction Leader, Rudolph Libbe Group



"Our connection to UT goes back almost to the beginning, but the co-op program has made our relationship with the College of Engineering circular. The value of these co-op students is high, and the work they provide for the cost is a great value for SSOE. We also enjoy supporting UT and mentoring these students. As a corporate partner, we love helping UT create the best engineers possible!"

Vince DiPofi, Chief Operating Officer, SSOE

SSOE GROUP

"I gained more confidence in my ability to make design decisions and effectively communicate technical questions. Much of what I am learning here is simply not taught in school, so I feel I am getting a head start on my career in engineering. I appreciate the freedom I have been given to make mistakes and learn on my own while working on construction packages. A more specific example of something I appreciated was being considered to go out on another initial field investigation at a client location in Arizona. During my last full-time semester working at SSOE, I accompanied an engineer for a field investigation, but this time they were willing to send me as the sole controls representative."

William Brenner, EECS co-op student



The University of Toledo has continuously provided us an exceptional talent pool for ZF to remain a leader in driveline and chassis technology, as well as active and passive safety technology. Valuing the impact made by our student interns and co-ops, we celebrate the completion of their term with a social gathering of all site location students, allowing them to network with company employees, managers and executives.

"The University of Toledo College of Engineering co-op program has helped ZF create a structured system for all student hires within our company, regardless of which university they come from."

ZF



"One of the many things that is great about ZF is the fact that they make you feel like an engineer, not like you are just an intern. I was tasked with projects and day-to-day tasks that made me feel that my work was important with true impact. I also really enjoyed working with my assigned team and mentors. I was able to make friendships that I hope to continue after my term."

Brittani Blackwell, University Relations Specialist, ZF

"I completed all three of my co-op experiences with ZF, so now I know the ins and outs of the company and what is to be expected of me if I am hired on full-time. The skills I honed during co-op can be applied to any future job.

Nicholaus Cipriano, MIME co-op student



The Douglas Company

"As an alum, I found practical applications to the knowledge we obtain at UT is vital to truly comprehend what it is we learn. Seeing a tangible moment where we can apply it to solve potential problems or even understanding why a process is performed in the manner it is develops the understanding of why we are learning the skills taught throughout our courses. My experience at a UT co-op gave me a real insight to the world I would be walking into after graduation. It also allowed me to find out new options for a career I did not know I would really enjoy. Having the chance to walk into a job after graduation is a priceless opportunity that The University of Toledo provides their engineering students. I am very fortunate to have gone to a university that cares that much about the success of their students after graduation."

> Andrew Nowak, Estimating Coordinator, The Douglas Company (alumnus)

Diebold Nixdorf

"We hire some of the best and brightest co-ops from Toledo. The Toledo engineering career fair is not to be missed from our lineup!"

Kelsey Klima, University Relations Specialist, Diebold Nixdorf

FirstEnergy Corp.

"The University of Toledo co-ops have been an integral part of our program. The education they're receiving in the College of Engineering creates a base for them to pick up things quickly and be successful in our environments. UT co-ops are getting real-world, handson, entry-level experience during their co-op. They're able to hit the ground running after graduation."

> Ted McQuain, College Recruiting Program Lead, FirstEnergy Corp.

Freudenberg-NOK Sealing Technologies, Inc.

"Through our relationship with The University of Toledo and its co-op program, we have experienced a great group of well-rounded students. These students have a great foundation and an eagerness to learn how to apply their classroom experience into the workplace. They bring current methodologies and practices to

our team that add a renewed energy to our process. Having a co-op student who has participated in the program enables the student to understand the workplace, as well as develop the business acumen that will serve them in their future careers. This experience becomes a win-win for the employer. We are able to have someone with real-world experience in their field and not just the classroom part of their degree."

Kim Smith, Human Resources Specialist, Freudenberg-NOK Sealing Technologies, Inc.

Hitachi Automotive Systems Americas, Inc.

"We've been able to enrich our employees by providing a mentorship opportunity, and receive help for some of the projects our employees haven't had the time to work on. It has been a very beneficial experience thus far. It's great to see students who have some industry or nonindustry-related professional experience on their resumes. It shows that they already have some idea of what it's like to work as a professional, and they have some idea of the engineering principles used. The co-op students from UT perform at a high level. There is a wide and varied background of co-op candidates available that enhances the success of Hitachi, as well as the students."

> Brian Kelly, Vice President, Hitachi Automotive Systems Americas, Inc. (alumnus)

Kokosing Industrial

"Toledo is one of our top-priority schools for the quality and quantity of students we are able to bring on our team from their programs. Having the co-op rotation program is extremely beneficial for the co-ops and our company so that we are able to have as much time with the student as we can. We have them on our projects most of the year. It gives the students jobrelated experience while they are still in school. If the student gets in with the company and it's a great match, then they have multiple semesters when they are able to showcase their knowledge. If they are able to have multiple co-ops with the same company, by their last couple it's like they are a full-time employee already. We hire most of our co-ops after graduation, as long as the interest is there from both parties."

Stacy Shumate, HR Generalist, Kokosing Industrial

Middough, Inc.

"The co-op experience impacted my life by allowing me to make money while in college. The extra money went a long way to staying out of studentloan debt. It also was a great resume builder. It gave me valuable training that is not necessarily part of the engineering curriculum. I got to test various medical devices. I worked with a multidisciplinary team and learned a lot more than just mechanical engineering. The co-op program is one of the factors that made me choose UT. I am so glad I made this choice."

Charles Bridge, Piping Engineer, Middough, Inc. (alumnus)

Motion Controls Robotics Inc.

"UT's co-op program has provided MCRI with both a valuable resource and a chance to provide students with real-world experiences. The company welcomes and enjoys participating in our co-op time here. UT's co-op program offers students a chance to explore and determine what they may or may not want to do in their careers. This knowledge is priceless when it comes to determining what your career goals may be. As an alumnus, UT's co-op program is the reason I chose to transfer to the College of Engineering."

T. Andrew Horn, Engineering Manager, Motion Controls Robotics Inc. (alumnus)

Zimmer Biomet Company

"During my 14 years with Zimmer Biomet, I have worked with many past UToledo co-ops and hired quite a few during my tenure. These engineers have brought their experience as a co-op into their first positions and continue to grow to become a big part of Zimmer Biomet. As the current lead of the Zimmer Biomet Development Co-op Rotation Program, UToledo students are always enthusiastic about working with Zimmer Biomet and are always up to the challenge. Since I took over the program, we've accepted 20 UT students."

> Susan Zogbi, University Relations Specialist, Zimmer Biomet Company

Ridge Tool Co.

"The UT co-op program is our single, most-reliable and important source of new software developer hires. We have about 20 full-time developers employed right now who went through this program, and we typically have between five and 10 co-ops employed at any given time. The single-greatest asset to the UT program is the

co-op program. Other universities in the area cannot compete due to the limited co-op opportunities through their programs. Having a student co-op with us for two or even three semesters gives us ample time to ramp up their responsibilities and provide top-notch softwaredevelopment experience. A student graduating with this kind of experience has a HUGE advantage over other new graduates, as they will have learned all about software development within a collaborative environment. Students who have co-oped three times are both more capable and more confident, and this is obvious during the interview process."

Jacob Gordon, Director of Software Development, Ridge Tool Co.

Ulliman Schutte Construction

"Ulliman Schutte has hired hundreds of co-op students from The University of Toledo, including several fulltime employees who were once co-op students. It has provided positive growth to our company. The co-op program provides a 'tryout' period for the employee and employer without a long-term commitment. It allows the student to display their work ethic, knowledge and adventurism, which is hard to gauge during the interview process. Most of our work locations are 200+ miles from Toledo; therefore, the co-op program provides a cost-effective method to determine which students are truly interested in construction. As an alumnus, I met a great group of friends at the College of Engineering and I always felt a sense of belonging at UT. My co-op experience put me in touch with the company where I have been working as a full-time employee for 11+ years. It set me up for success."

> Travis Brubaker, Equipment Manager, Ulliman Schutte Construction (alumnus)

"The job market is such a competitive world these days; having something to set you apart from other potential hires is critical. The co-op program is an extremely beneficial tool for our company to get a chance to work with and teach soon-to-be graduates.

As an alum, I would say my co-op experience was an immensely important part of my educational experience. The co-op program at UT was one of the main deciding factors for me when choosing which college to attend. For me, I can't say enough about how valuable these experiences have been."

> Kevin Thome, Project Manager, Ulliman Schutte Construction (alumnus)

Digi Robotics Technologies

"The co-op experience really gave me knowledge of the field and helped me apply my studies to it. Without them, I have seen many engineers unable to easily transition into a workplace or utilize their school knowledge at their jobs. I continued onto graduate school at Georgia Tech, and I always look back at the teachers and environment at The University of Toledo in envy. The programs, organization and staff there are what I would consider world-class, and I only hope that the college continues to grow in the right direction."

Stephen Marone, Aerospace Engineer, Digi Robotics Technologies

DTE Energy

"It was the UT co-op program that led me to my career. Although I did not stay with the same company, I had a 15-year career at another company in the industry and recently went back to my co-op company in a different area. I chose to attend The University of Toledo because of the co-op program. Knowing I am more of a visual, hands-on person, I don't think I would have continued my studies if it wasn't for the co-op experience."

Shane Gatter, Principal Engineer, DTE Energy (alumnus)

Illinois Department of Transportation

"It has a large impact on how I conduct myself professionally. I currently work for a DOT, but did my co-ops with consulting firms, and it really gave me a leg up on the technical portions of the job. With the low funding that many DOTs have, they don't have as much training for new engineers, so having some training during the co-op program definitely helped propel my career. From an early stage in my career at IDOT, I had a good sense of how to conduct myself in a workplace. They are skills that not many people have, and can't necessarily be taught. They must be learned, and the co-op program allows students to learn those skills while still in school so they aren't learning on the fly on their first real job. It really gave me a leg up on the competition here at IDOT, since they have been hiring new engineers at an unprecedented pace. It was awesome! I'm so glad I did it! It was the main reason I picked UT for engineering."

> Christopher Beckert, Area Mixtures Control Supervisor, Illinois Department of Transportation (alumnus)

INEOS

"My co-op experience helped shed light on different industries and career paths with my engineering degree. I learned so many things that could not be taught inside the classroom and was able to apply my co-op experiences to the classroom. It opened numerous doors and opportunities for full-time employment before graduation. The co-ops allowed me to show my skills and work ethic to employers and colleagues to show I was prepared for a full-time engineering position, technically and socially. UT is a great educational institution! The College of Engineering prepared me to be a competent engineer right out of school, and set me on a path for long-term success."

Kurtis Staup, Mechanical Integrity Specialist, INEOS (alumnus)

Jones & Henry Engineers, Ltd.

"Co-op gave me a broad set of experiences within the civil engineering field. I used my co-ops as an opportunity to see transportation, wastewater, surveying and site development. I had no idea exactly what I wanted to do in the field, and without co-op I likely would have drifted aimlessly for awhile after graduation. I fell in love with water, particularly pumped systems. Without the diverse co-ops, I might not have ever found a passion. I went into the workforce with a resume packed with relevant experience, and I had an understanding of what was expected. I think it put me steps ahead of the other entry-level engineers I started with, and I certainly exceeded them in terms of career ascension. I appreciated the opportunity to see so many sides of the business. If it hadn't been for UT, I might not have found how rewarding a career designing and building things that positively impact society could be. I love my job, I love my company and I love UT. I work hard at the first, I try to leave the second better than I find it each day and I will forever be indebted to the third. GO, ROCKETS!

> Aaron Davenport, Principal Project Manager, Jones & Henry Engineers, Ltd. (alumnus)

Nissin Brake Ohio, Inc.

"My life was impacted by co-op largely because I chose to attend UT based in part on the co-op program. Had UT not offered the co-op program, or not promoted it so well, I may have ended up somewhere else. Once on co-op, the experience really helped me see myself as an adult ready to enter the workforce and no longer as just a college kid. The biggest thing I got out of the co-op was the understanding of what to expect as an engineer. I think that's the toughest part of being a student; not knowing what to expect after graduation. Seeing the other engineers as real people doing things that you are learning to do gave me a lot of confidence leading to graduation. Of course, I didn't have anything to compare my experience to, but always felt I was well prepared for my career. Now that I take part in hiring other engineers, I can see how the UT alums compare to engineers from elsewhere, and I can honestly say that there's a consensus between my department and others: UT grads are the best. Like myself, these new engineers are prepared by co-op and are ready to hit the ground running on day one (with little direction required)."

> James Born, Senior Staff Engineer, Nissin Brake Ohio, Inc. (alumnus)

Perficient, Inc.

"Co-op was the reason I selected UT and I believe co-op/internship is really important to the industry I'm in (software development). The real-world experience as a software engineer co-op allowed me to start contributing at work immediately after graduation."

Scott Stocker, Solutions Architect, Perficient, Inc. (alumnus)

Qurate Retail Group/Cornerstone Brands

"My experience was incredible. I was able to work on a world-class project for three years, trying out many aspects of my education in a real-life setting. I was also afforded the opportunity to work with at-risk students to help them discover STEM careers (before teaching STEM was a 'thing'). It exposed me to the many facets of engineering - from building relationships, to team work, crisis management, project management, inspection, design, correction and much more."

> Carrie Hurley, Project Engineer, Qurate Retail Group/ Cornerstone Brands (alumna)

Xylem Inc.

"Great experience, met connections I still interact with to this day. Why be an intern or student teach for free? Co-op like an engineer and get PAID!"

> Robert Buchman, Market Development Manager, Xylem Inc. (alumnus)

Universal Orlando Resort

"It was my dream to work professionally in the theme park or the 'themed entertainment industry' as an engineer. The co-op program at Toledo, along with the support of the UT engineering faculty and staff, endorsed my dream and encouraged my pursuit to obtain co-ops at the Walt Disney World resort in Orlando, Fla. I was able to work with four different operations, maintenance, engineering and project construction-management departments as part of the co-op program. I was hired full time at Disney a week after graduation, which would have never happened without the UT co-op program. The co-op program prepares you for the professional, working atmosphere and provides exposure to the realities of the expectations and demands of an engineering or technical career. By participating in multiple co-ops, this provided exposure to a diversity of managers, projects and job responsibilities that enabled the ability to refine or identify a more ideal career path, as well as provide exposure to future job possibilities in multiple departments. I would not have gotten to where I am today and been able to fulfill my dream of becoming an engineer in the theme-park industry without the UT College of Engineering co-op experience."

> Jeff Piggrem, Civil Engineer, Universal Orlando Resort (alumnus)

UT ENGINEERING CORPORATE PARTNERS PROGRAM

We strongly believe highly engaged relationships with our corporate stakeholders, alumni and friends enable outstanding outcomes for our students and our programs. UT Engineering has continued to gain national and international reputation as a leader in engineering education as a result.

The UT Engineering Corporate Partners Program provides tremendous value for our partners. All members enjoy the following benefits:

Annual College-Industry Dialogue:

Members are invited to attend college-industry dialogue where industry, college administration and key faculty discuss new and improved educational and training opportunities.

More Effective Recruitment Opportunities:

Members have opportunities to pre-interview select students prior to each semester's Career Expo at our Corporate Partner Mixer. Your company also is encouraged to offer corporate seminars and information sessions to select groups of students regarding career development and workforce preparation.

Focused Partnership Opportunities with Key Student Organizations:

We facilitate special partnership opportunities with key student organizations such as the National Society of Black Engineers, Society of Women Engineers, Engineering Leadership Institute, Engineers Without Borders, UT Formula SAE Race Car Team, UT Concrete Canoe Team, First Year Rocket Engineers and others.

For more information on the Corporate Partner Program, and how your company can become more involved, please call 419.530.8000.

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