



MECHANICAL ENGINEERING

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Autonomous
Driving

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Tennessee
TECH



A WORD FROM THE CHAIR

Welcome to the mechanical engineering (ME) department, and I am happy that you have chosen to find out more about our degree programs. Choosing the right school for you is a very important decision, and I hope this booklet helps you in that process. I firmly believe that you will not find a higher quality, more affordable program than what ME at Tennessee Tech University offers.

A LITTLE ABOUT MECHANICAL ENGINEERING

- We are the largest academic department at Tennessee Tech, with about 750 undergraduate students, plus about 70 graduate students pursuing master's or doctoral degrees.
- Our focus on hands-on student learning experiences is unique among many ME programs. We believe students should not only know how to design solutions, but also how to build what they design. This makes our graduates highly sought after by employers and graduate degree programs alike.
- Our faculty members are known as experts in a wide range of interest areas, and many also have valuable industry experience.
- You'll gain even more experience in student organizations, a few of which are featured later.
- Many ME majors take advantage of co-op and internship opportunities, gaining work experience and making career connections leading to a job after graduation.
- Our students have opportunities for research through the ME department, the Center for Manufacturing Research, and the Center for Energy Systems Research, among others.

Our mission is to prepare you for a productive career, and we are very proud that almost 100% of our graduates find employment or begin a graduate degree program within a few months after graduation. Our faculty and staff work hard to make sure our students succeed; and employers appreciate the experience, skills, work ethic, and professionalism of our graduates.

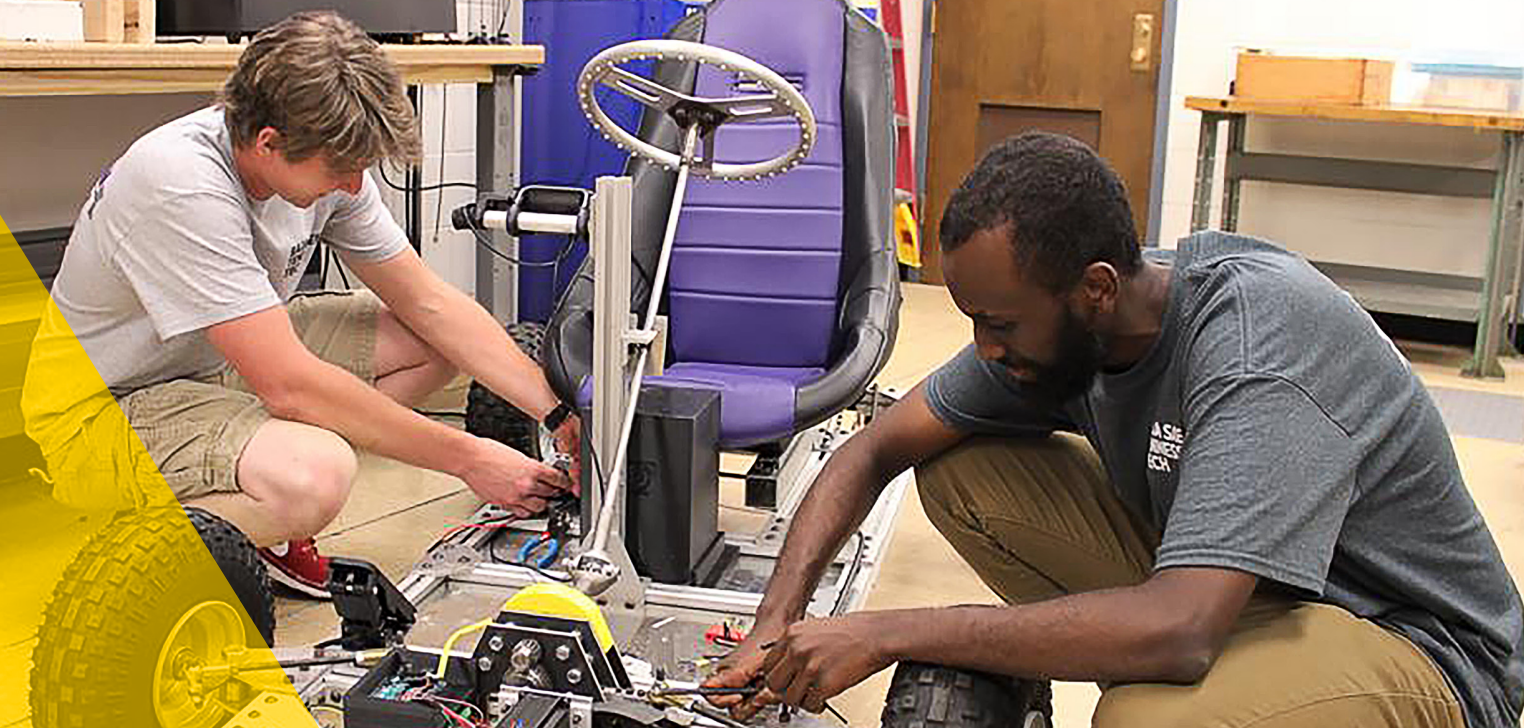
I invite you to explore ME's website at tntech.edu/me. If you haven't already, we welcome you to schedule a campus visit to learn more about the programs and take a tour of the ME department. All of us in Mechanical Engineering wish you a very bright future. **We hope to see YOU in ME!**

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Sincerely,
Mohan D. Rao
 Professor and Department Chair



WHY TENNESSEE TECH IS THE TOP CHOICE

- Tennessee Tech is the perfect size. With a total population of about 10,000 students, students will find smaller class sizes and more personal attention from faculty on this close-knit campus.
- Tech's Center for Career Development helps current students take advantage of many co-op and internships opportunities, as well as hosting huge engineering and STEM career fairs each year, which help most mechanical engineering students find employment before they graduate. They'll also help students find a job after graduation as well.
- Tech grads leave with the least amount of debt of any public university in Tennessee, and 49% graduate debt free, according to U.S. News & World Report.
- Tech grads also have the highest early career salaries of all Tennessee public universities, according to PayScale.
- The university is annually ranked as one of the top ranked universities in the nation, and Tech's College of Engineering has repeatedly earned a spot as one of the "Best Undergraduate Engineering Programs," according to U.S. News & World Report.
- Not only is Tech affordable, its hometown of Cookeville has been voted as the #1 greatest affordable college town in the country by Great Value Colleges.

MECHANICAL ENGINEERING IS FOR YOU

- As a mechanical engineer, you'll be among the most versatile of all engineers, with career options in an almost endless list of industries, agencies and organizations.
- If you enjoy knowing how things are made and work, then you'll love the hands-on learning experiences in our project courses. You'll not only know how to design solutions the world needs, you'll be building them here in our workshops and laboratories.
- Our faculty are here to help! We ensure that they are accessible, friendly and focused on your success. Our faculty members are known experts in their respective fields, and many have valuable industry experience, both of which can help you discover the right career path for you.
- Mechanical engineering is a great career choice! You can design products and processes that can make life safer and better for everyone, and earn a great salary at the same time. According to the U.S. Bureau of Labor Statistics,* entry-level mechanical engineers can expect to earn between \$57,130 to \$70,280 per year. The average annual salary for all mechanical engineers in the U.S. is \$93,400,* based on online 2019 data; the most current available at printing.
- Tennessee Tech's Bachelor of Science in mechanical engineering degree is accredited by the Engineering Accreditation Commission of ABET, <http://abet.org>



LEARN ABOUT THE BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Ready for anything! Because mechanical engineers are so versatile, this degree helps prepare students to meet the needs of an evolving technological, solution-driven world. It encompasses meeting the needs of the design and analysis of machines and processes to meet the expanding needs of a changing, technological,

energy-based society. Mechanical engineers work in many areas, such as governmental agencies and laboratories, manufacturing facilities, power and energy production, consulting firms and universities. Almost everyone needs a good mechanical engineer or a team of them.

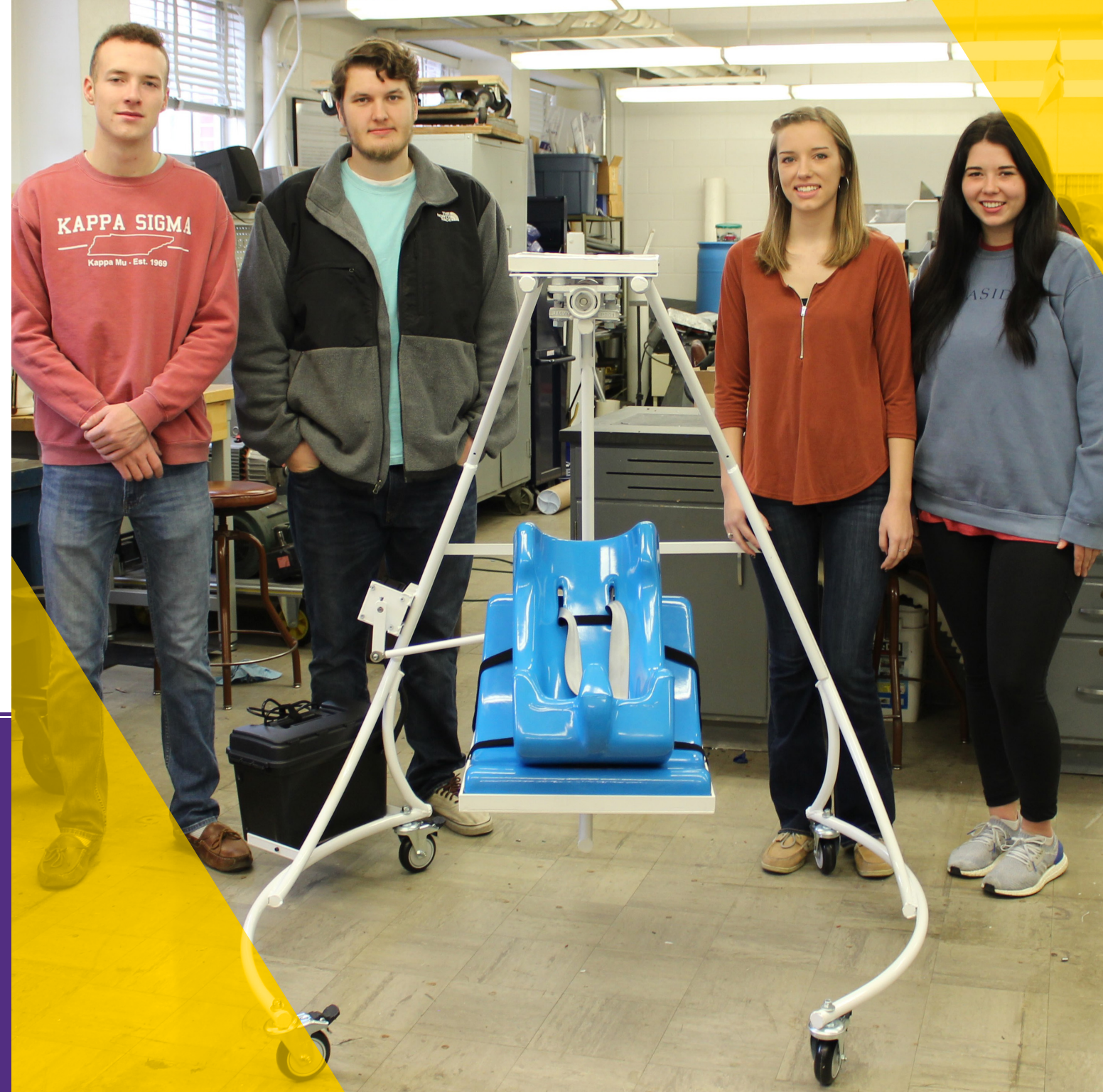
PROGRAM HIGHLIGHTS

- Prepare to succeed in smaller classes taught by dedicated and expert faculty who are committed to helping students.
- Discover many networking and co-op opportunities that can help students land a great job through the university's many partnerships with local, state and regional companies.
- Select from a wide variety of electives that allow students to focus on what they are interested in and personalize their degree experience. Our area of emphasis courses let students study what they want to know!

CAREER OPTIONS

As a mechanical engineering student, versatility will pay off! Students will be ready for careers in many fields, such as:

- Acoustics and Vibrations
- Aerospace
- Appliances
- Biotechnology / Medical Devices / Prosthetics
- Design and Manufacturing
- Energy Conservation and Harvesting
- Ergonomics
- HVAC
- Oil and Gas Industries
- Thermal Science and Fluid Mechanics



EXPLORE THE MECHATRONICS CONCENTRATION

Robotics is a booming industry! Mechatronics is the interdisciplinary field of engineering that deals with the design of products whose function relies on the integration of mechanical, electrical and electronic components connected by a control scheme. Mechatronics is a vital component in modern product design and advanced manufacturing, and these skills are in high demand with employers!

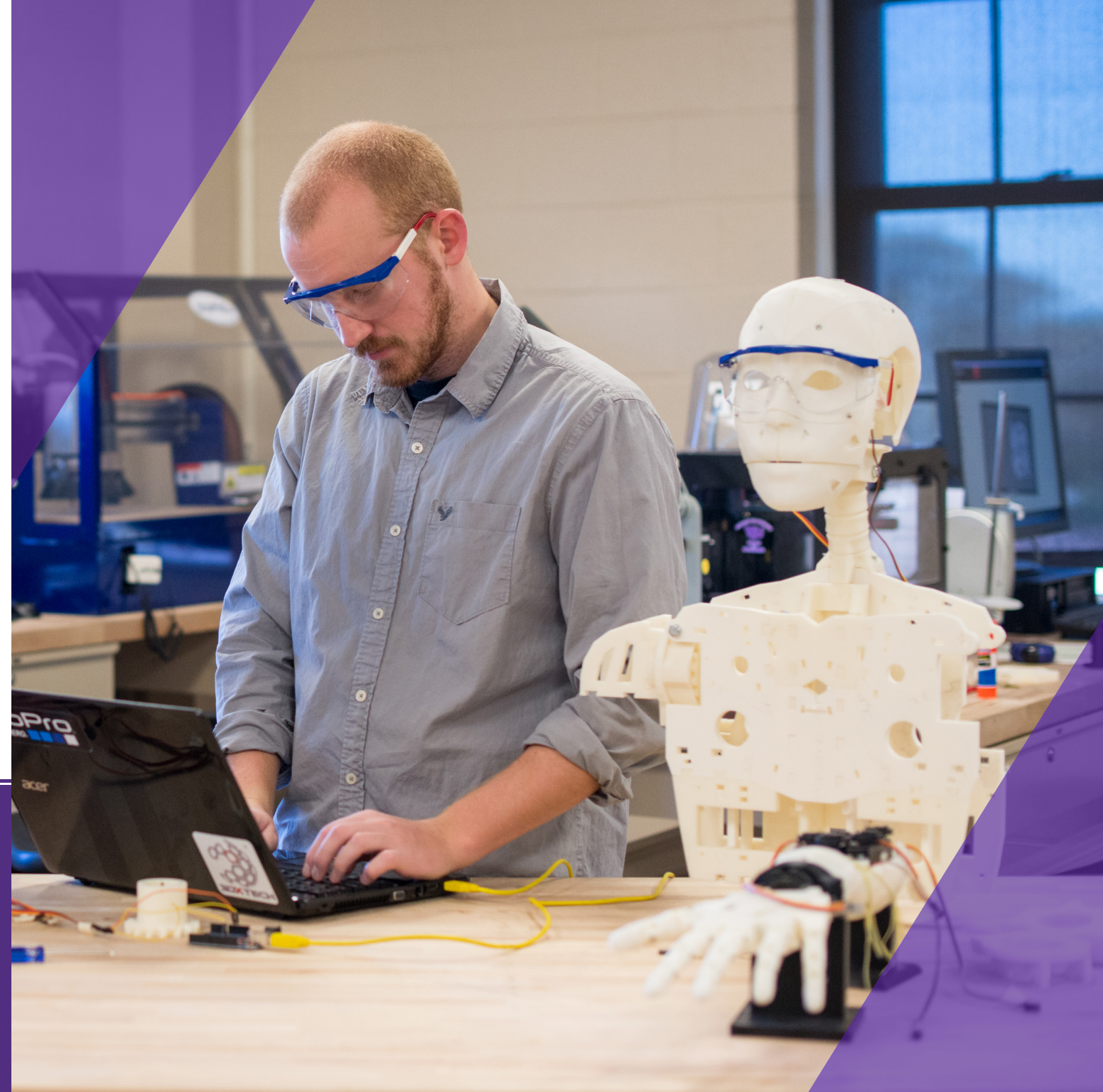
PROGRAM HIGHLIGHTS

- Understand the role of mechatronics in product design and manufacturing.
- Obtain and integrate knowledge from various engineering disciplines to achieve a successful solution to complex technical problems.
- Analyze and design mechanical and electrical subsystems that make up a mechatronic system.
- Engage in a complex project, and perform effectively as team members within an interdisciplinary group.
- Perform multiple levels of data acquisition with signal conditioning.
- Understand the basic architecture of common commercial microcontrollers and develop embedded-control products with these.
- Learn about a wide variety of sensors and actuators and design manufacturing or products based on these.
- Gain experience creating an engineering system that integrates multiple sensors and actuators, and provides supervisory autonomous control through an embedded microcontroller unit.

CAREER OPTIONS

Employers are actively seeking graduates with mechatronics skills, and students from Tennessee Tech will be ready to fill that need. Careers include:

- Automation
- Data Science
- Control System Design
- Electronics Design
- Robotics
- Mechanical Design
- Instrumentation
- Software Engineering



DRIVE YOUR CAREER WITH THE VEHICLE ENGINEERING CONCENTRATION

Vehicle engineering is more than just automotive engineering! The concepts and technologies in vehicle engineering are applied to all modes of transportation, from golf carts to race cars to spaceships and everything in between. Vehicle engineering covers a wide range of vehicular types, including traditional combustion engines, but also hybrid and electric vehicles, automated and connected vehicles, and subsystems of those like engines, after-treatment systems, transmissions, batteries, electric and control systems.

Be ready to stand out with this concentration. As the only undergraduate degree program of its kind in the region,

Tennessee Tech's new vehicle engineering concentration is a unique combination of mechanical, electrical and computer engineering. Students will be prepared to be a leader in the automotive and vehicle industries and build the next generation of innovative vehicles. Plus, students design innovative vehicle products and work in well-equipped lab facilities. Students will also enjoy engaging with cutting-edge technologies while gaining valuable experience that will make them stand out in employers' eyes when they graduate.

PROGRAM HIGHLIGHTS

- Discover a wide array of networking and co-op opportunities that can help students land a great job after graduation through Tennessee Tech's many partnerships with local, state and regional companies in various vehicle industries.
- Learn state-of-the-art automotive technologies being used in autonomous vehicles, electric vehicle technologies, and learn about the operating principles of these and other vehicle systems.
- Help transform a regular human-driven, electric vehicle to one with increased levels of autonomy while completing the degree program.
- Gain additional, valuable hands-on experience while having fun participating in Tech's award-winning student organizations such as Baja SAE, Formula SAE, the Autonomous Robotics Club and more.



CAREER OPTIONS

Be ready to succeed! Tennessee Tech's vehicle engineering concentration prepares students to join the next generation of engineers, ready to meet the huge demand for research, design, development and manufacturing skills in advanced and autonomous vehicles. Students are primed to help companies cultivate and create innovations that could improve traffic efficiency, energy efficiency, air quality and more, plus making us all safer at the same time.

The growth and revolutionary diversity in the vehicle industry right now is expected to drive more change in the global market in the next 10 years than during the previous 50 years. The autonomous vehicle revolution is already underway, and the demand is increasing every day for the skills Tech students learn in this program. Tennessee and the entire Southeast region are the new hub for automotive manufacturing, and Tech developed this degree program based on input from top industry partners who need employees that are ready to help shape the future of the industry.

CAREERS INCLUDE:

- Automotive Technology
- Autonomous Vehicle Systems
- Product Design
- Electric and Hybrid Vehicle Design

COMPANIES THAT HIRE TECH'S MECHANICAL ENGINEERING GRADUATES

- Boeing
- Bridgestone/Firestone
- Caterpillar
- Cummins
- DENSO
- General Electric
- General Motors (GM)
- Honda
- John Deere
- Lockheed Martin
- NASA
- Nissan
- Oak Ridge National Laboratory
- Oshkosh Corporation
- Penske Racing
- Proctor & Gamble
- Tesla
- TRANE Technologies
- U.S. Army Corps of Engineers
- Volkswagen



GET INVOLVED WITH DIVERSE STUDENT ORGANIZATIONS

AUTONOMOUS ROBOTICS CLUB

Love robots? The Autonomous Robotics Club is a student group dedicated to the hardware and software of robots. Students have an opportunity to work with other club members on designated projects or their own.



SOCIETY OF WOMEN ENGINEERS

The Society of Women Engineers is a global non-profit educational and service organization promoting the field of engineering for women. Tech's student chapter goal is to support engineering students by facilitating connections and helping them build an academic and social network among peers.



AMERICAN SOCIETY OF MECHANICAL ENGINEERS

The American Society of Mechanical Engineers student chapter at Tennessee Tech meets throughout the semester on designated Thursdays. These students gain skills and practical experience outside the classroom along with networking opportunities with professional engineers.



BAJA SAE TEAM

Baja SAE is a competition club that challenges students to work as a team in the designing, building, testing and competing of an off-road vehicle that is capable of negotiating rough terrain. Baja team members meet weekly during the semester in Brown Hall. This is a university-wide club, and all majors are welcome. Tech even hosts competition events in Cookeville.



AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR-CONDITIONING ENGINEERS

The American Society of Heating, Refrigerating and Air-Conditioning Engineers student chapter at Tennessee Tech meets throughout the semester. These students have opportunities to participate in local branch activities like site visits, are eligible for scholarships and have access to engineering professionals in the HVAC field.



PI TAU SIGMA

Pi Tau Sigma is an international honor society for mechanical engineers. These members are chosen on a basis of sound engineering ability, service, leadership and integrity. They begin the selection of new inductees who meet the criteria for membership at the beginning of the fall and spring semesters.

MAKING A DIFFERENCE – MECHANICAL ENGINEERING IN ACTION

When ME majors enroll in Dr. Stephen Canfield's Dynamics of Machinery class, they know they will be completing a project; but they usually aren't sure what that will entail. Still, they all quickly learn that whatever project it is, that their work will have a profound impact on a family in the Upper Cumberland region of Tennessee.

The Early Intervention and Mechanical Engineering (EIME) Project employed in this course provides innovative, engineered products to children with special needs and their schools and families while offering valuable, real-world design experience to the mechanical engineering students enrolled each semester. Students are assigned to teams; and each team works with a family to develop, design, and build a custom-engineered solution to help with mobility, feeding, development, play, transportation and other needs the child may have. At the end of the semester, the projects are delivered to the children and families and any final adjustments are often done on site to ensure the device is the best it can be. The families' lives are changed for the better, and the lessons the students take away are impactful.

"These projects are exemplary, but not unusual, demonstrations of the skills and capabilities of our engineering students," said Canfield. "There were 17 similar projects in the EIME program this past semester alone to help children and families in our Upper Cumberland region. These students bring creativity, skill, energy and caring to help these families. These projects also provide assistive solutions for special children and families that simply would not be available otherwise. These projects

are very important to the development and growth of these children. Plus, the students find great reward in helping the families on the projects. I can see it in the amount of time they spend on the project and attention to detail in fabricating and delivering the results. I know it's a big challenge for the students, but it's part of their learning as an engineer to take on the technical details and all the details of the family."

In ME, we want our students to see how their skills and knowledge can make a critical, positive difference in someone else's life. Their own words say it all. The two following quotes are from students who recently created a custom-made hybrid spinal support to help Miracle, a little girl with cerebral palsy.

"I am so appreciative. It is astounding and life-changing to see how this affects her life," said team member Megan Wesemann. "This is what I want to do for my life. I want to design different products for people with disabilities and help them be their best."

"My mom is in the medical field, so helping people is something I've always wanted to do," echoed Shelby Kilgore. "It's cool to see it going from the designer style of it, and then actually seeing it help a kid, is crazy. I like it a lot."

As just another example, a team built and installed a sensory swing in the home of Aiden, the two-and-a-half-year-old son of a Tech alum who studied occupational therapy and graduated in 2017. Like so many, the mom and



son had an especially rough 2020. In February, she found out that Aiden was autistic. A few weeks later, they lost everything, including all of Aiden's therapeutic items, in a deadly tornado that slashed through Putnam County.

When the students found out that one thing Aiden really needed was to have a sensory swing, the students went to work. Then after months of meeting, planning, creating, modifying and tweaking, the sensory swing was finally complete and ready to be delivered. When Aiden saw the swing, he yelled "swing," ran over to it and climbed inside. Everyone in the room smiled and held back tears, knowing the sensory swing project was a success.

"Knowing that they had lost so much during the tornado and that their house was completely destroyed and we would be invading their privacy, and with Aiden's personal challenges he may not take to us, we had to consider

different aspects of the project before ever thinking we were going to build a swing," said teammate John Wagner. "The mother requested a swing, but we weren't 100% sure how to go about it. Seeing the mom's and Aiden's reactions in the end made it all worth it."

"It was good to finally get to do a hands-on project than just working on paper for the past two years," said Gabriel DaSilva, another team member. "It was very unique. The whole process – collaborating with my team members and getting our design on paper and doing the math and the calculations and actually building it in the shop and seeing it come together piece by piece – was really cool."

It's one thing to complete a school project for a grade. It's something totally different to complete a project that can change a person's life. Let ME show YOU how!

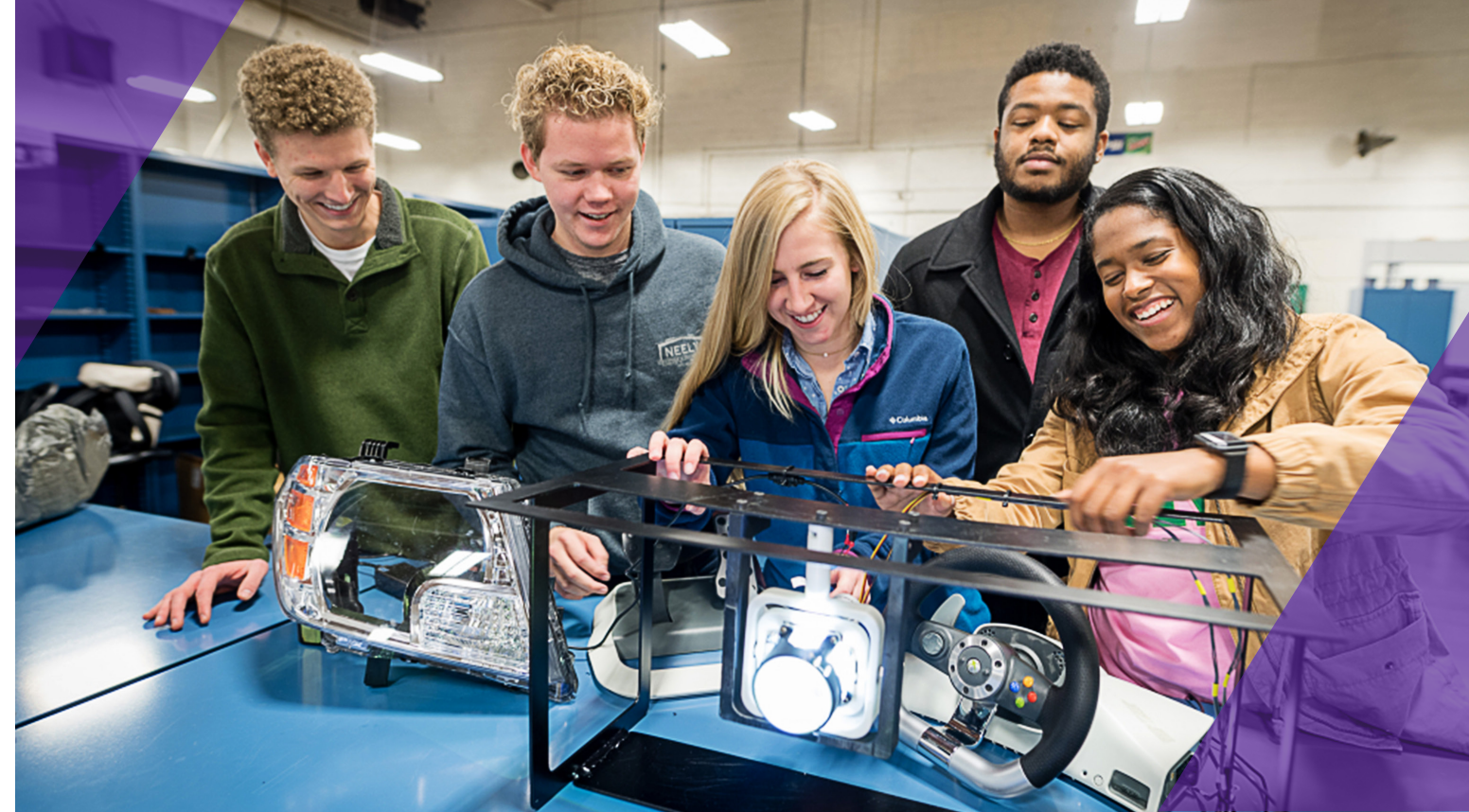
MASTERING SENIOR DESIGN PROJECTS

AT Tennessee Tech, students will learn not only how to design solutions, but also have experience building the solutions. This hands-on experience makes students become better engineers. Yet another way Tech's Mechanical Engineering department incorporates this learning experience is in two senior capstone design project courses, which all students take. Students select projects and begin making progress in Mechanical Engineering 4410, where they start the development phase by creating the preliminary design, supporting analysis for the design and drawings with a list of needed supplies and associated costs for the project. In Mechanical Engineering 4420, the student teams continue with the design build, prototyping and testing phases to complete the project.

As part of the courses and lab, students are provided with experience in the use of mechanical engineering design

for the solution of engineering problems. Students work in a team environment on selected mechanical engineering projects emphasizing both mechanical systems and thermal science design aspects. Important parts of the two-semester design projects include a formal project proposal, design analysis report, engineering drawings, project construction and project testing. Formal written and oral presentations about the projects' results are made at the completion of the project. Time scheduling and project costs are also important considerations.

Mechanical engineering students at Tennessee Tech have access to leading-edge laboratories, which are well outfitted with the latest equipment, hardware and software. Undergraduate students in the senior capstone design courses use these labs to help gain valuable, hands-on experience as they complete their projects over



UPON COMPLETION OF THIS CLASS, STUDENTS WILL HAVE:

- Engaged in the various elements of the engineering design process.
- Completed a group-based, hands-on, capstone design project.
- Employed basic computer-based data acquisition.
- Used programmable logic controllers and ladder-based programming.
- Worked in a team environment on an engineering design project.
- Determined the potential impact of ethical and societal concerns on the engineer and engineering design process.
- Prepared and delivered and/or submitted a written report and an oral presentation.
- Communicated with a variety of non-academic contacts, such as technicians, vendors and other professionals for the purpose of gaining factual information and making component purchases.

the course of two semesters. This is precisely the kind of experience that many of the top companies in the nation are looking for in new employees, helping to make Tech graduates more competitive in the job market.

Senior design projects can also help students discover new career options. Many mechanical engineering students may not initially think of the medical device field as a career opportunity, but some recent senior design capstone projects are helping to change that. Several of the recent projects that student teams tackled involved medical-related designs. Some students worked on ways to mechanically simulate edema, a condition where fluids build up under skin and other tissues. Typically, edema training requires applying gentle pressure to the patient's

skin. Tech students were seeking to mimic what the excess fluid would feel like under skin to help healthcare professionals learn to assess and diagnose this condition without always requiring a human patient be present.

Another project explored ways to improve IV poles, to make them just as stable, but less of a trip hazard for patients and medical staff. Other projects included a mechanism to help simulate skin-to-skin contact between very premature infants and their mothers. The design simulates the feeling of contact through heating a specific material to a designated temperature, playing the sound of the mother's heartbeat and gently lifting and lowering to simulate the mother's breathing as she holds the child. Innovations in healthcare benefit everyone, and projects like these help inspire students.

ELECTRIC VEHICLE RESEARCH HELPS RURAL AREAS

Electric vehicles are changing the automotive landscape, and Tennessee Tech is leading the way! Tech is conducting a unique research project focusing on electric vehicles (EVs) in rural communities in the Upper Cumberland, and the U.S. Department of Energy is funding this research.

The DOE has approved \$779,823 for the project “Developing an EV Demonstration Testbed in the Upper Cumberland Region of Tennessee, an Economy Distressed Rural Region.” The study, which is the first of its kind, is to develop a rural EV testbed to demonstrate and evaluate electric vehicles over a diverse range of activities serving a rural and largely economically distressed part of Tennessee. Previous research has been based solely on urban and suburban use of electric vehicles.

“We are one of the first to implement electric vehicles in a rural community,” said Pingen Chen, an assistant ME professor. “In many rural areas, there are no charging stations. It prevents our rural communities from using electric vehicles. Our study will study how many charging stations are needed in rural areas, including the Upper Cumberland.”

Besides Tech, other research partners include the University of Texas at Austin, Nissan North America, Lightning Systems, East Tennessee Clean Fuels Coalition, Seven States Power Corporation, ChargePoint and the Upper Cumberland Human Resource Agency. The project’s total budget is \$1,559,686 with the DOE funding almost half and the rest coming from the project team. The research includes a small electric vehicle fleet of three Nissan Leafs,

one plug-in light-duty truck, and one battery electric transit bus along with a charging station network.

“This is a team project and the DOE is supporting us with a significant amount of money,” said Chen. “We are going to use these resources to develop complete charging stations in a charging station network open to the public.”

The project objectives are to address the challenges of adopting electric vehicles into rural regions. The proposal integrates EV demonstration into the newly-formed vehicle engineering program at Tech. This degree program educates engineers to use the latest technologies to design and manufacture modern vehicles, including electric ones.

“We try to give our rural communities more experience with electric vehicles to understand the advantages of using EVs,” said Chen. “But with almost no charging stations in rural areas, this currently limits the use of electric vehicles. It’s the same situation in other rural areas in the United States.”

The charging stations were part of the first project phase in 2020. The second phase in 2021 and 2022 includes electric vehicle demonstrations, data analysis, information exchanges, and outreach and education activities. The project wraps up in 2022 with the deployment of five vehicles to different fleets, along with meetings with the public and private fleet partners, government agencies and the local communities.

Want to study EV technology? Learn more about the Vehicle Engineering concentration on page 9.





STUDENT SPOTLIGHT – LEANNE TURPIN

First-generation mechanical engineering student Leanne Turpin is a rising senior from Decherd, Tennessee. In addition to her active role in the student chapter of the American Society of Mechanical Engineers, Turpin also won an Engineering, Computing and Technology Spectrum Award in 2019. The spectrum awards recognize a diverse body of students across all the degree-granting departments in the college of engineering for their initiatives and achievements in educational (projects related to course work), research (projects relevant to their discipline) and professional development activities (internship, co-op, or summer job).

Turpin's love of Tech is what led her to come here, as she said, "I fell in love with Tennessee Tech when I attended a STEM camp as a sixth grader. I am living out my dream of being a Golden Eagle, and this experience has already surpassed all of my expectations. My favorite part of the program so far is getting the opportunity to work in the mechanical engineering workshop because of all the hands-on machining and fabricating skills I'm developing."

PLANNING UNDERWAY FOR NEW ENGINEERING BUILDING

In Fall 2020, Tennessee Tech unveiled the preliminary designs for the new engineering building seen here. The current plan is to break ground on the site in Sherlock Park in 2021, with the completion of this innovative learning space expected in late 2023.

The new facility will be a fusion of innovation along with the historic Georgian style of campus buildings, featuring something for all of Tech's engineering disciplines to promote cross-disciplinary functions. Along with the main building, there will be a student lab building for groups like mechanical engineering's championship Baja SAE team, as well as the award-winning Formula SAE team, a state-of-the-art autonomous electric vehicle platform, and machine shops for student projects, faculty and student research and more. The new building project will also include a unique water feature, dubbed Sherlock Lake, which will add to the visual appeal of campus and also serve as an outdoor classroom for students studying environmental engineering.

An architectural rendering of the new engineering building coming to Tennessee Tech's campus. The site will also include a body of water that will be used as an environmental classroom.

STUDENT SPOTLIGHT - HENRY PACE

Henry Pace enjoys his role as a resident assistant in the residence halls and his studies as a senior mechanical engineering major. "What's not to like about Tennessee Tech?! I looked at other schools, but I know I made the right choice coming to Tennessee Tech. It's a great school – the perfect size, with a great engineering reputation, and there's lots of things to do on campus and off. I really like the community feeling we have, and I've made some great friends on campus and in Cookeville. Plus, it's affordable to go to school here, so I won't have to graduate owing a ton of money in student loans. I plan to go on to get my master's after I graduate, and this program is preparing me for that next step."



DISTINGUISHED ALUMNI ON EXTERNAL ADVISORY BOARD



Front row (L-R): Mohan Rao - ME Chair, Arnold Lumsdaine - Oak Ridge National Laboratory, Keith Kirkpatrick - McHale & Associates, and Jon Callies - DENSO. Middle row (L-R): Jie Cui, ME Associate Chair, Lito Mendoza - Cummins Filtration, David Nesbitt - Retubeco, Inc., Navya Raghaji - Nissan, and Scott Bartlett - Arnold Air Force Base. Back row (L-R): Robert Wiseman - Lochinvar LLC, Brad Long - Cummins Filtration, and Mike Clemmer - Nissan. Those not available for the photo include David Ballard - Turner Construction Co., Christina Bechard-Walker - ITW, Amy Elliott - Oak Ridge National Laboratory, Jared Moore - Eastman Chemical Company, Karen Ramsey-Idem - Cummins Global, Esra Roan - Somavac Medical, and Scott Smith - University of North Carolina.

Tech's ME graduates enjoy very successful careers, and many become leaders in their respective industries. Some of our most outstanding ME alumni are asked to serve as members on the Mechanical Engineering External Advisory Board. These industry professionals provide

invaluable insight and input into our academic programs and help us make sure our grads are ready for careers in a wide variety of fields. We deeply appreciate the time and effort these alumni give in service to our department.

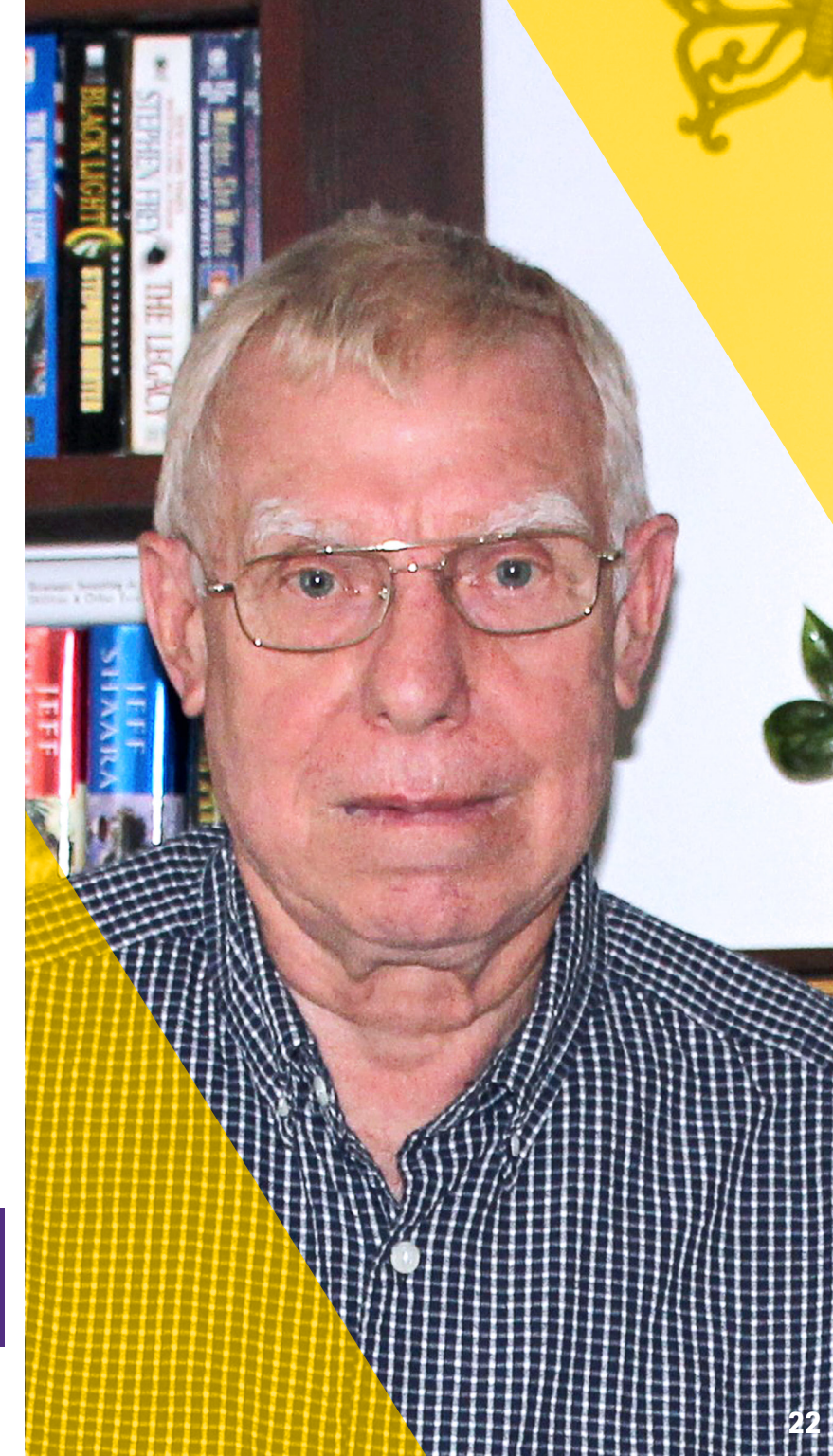
THANK YOU TO ALUM RAY SELLS

Harold Ray Sells ('57 mechanical engineering) made his first gift to Tennessee Tech in 1983 and since then, has become one of the Department of Mechanical Engineering's most generous supporters. From scholarships to classroom renovations, his philanthropy has impacted generations of engineering majors and faculty.

In 2008, Sells and his late wife Doris established the Ray and Doris Sells Family Mechanical Engineering Program Development Endowment to support the Mechanical Engineering Department. Then in 2016, in appreciation for the Sells' generosity and belief in lifelong learning, Mechanical Engineering named a newly-renovated, high-tech classroom in Brown Hall in their honor. The Ray and Doris Sells Multimedia Classroom will have a lasting impact on the faculty and students who are fortunate enough to utilize the space.

Through his philanthropy, Sells says he hopes to enhance the quality of training mechanical engineering students receive, provide better classrooms and equipment, assist faculty and set an example for others.

Ray Sells is indeed paying it forward, and we are deeply grateful for his generous support. He has graciously donated the funds to produce this brochure, hoping to encourage the next generation of engineers to attend his beloved alma mater.



GET ON THE FAST TRACK TO AN ADVANCED DEGREE!



THE MECHANICAL ENGINEERING FAST TRACK PROGRAM CAN HELP YOU GET A MASTER'S DEGREE IN LESS TIME.

Qualified undergraduate students with at least a 3.5 GPA can earn six graduate credit hours that satisfy both undergraduate and graduate degree requirements, so you'll get a serious head start on that master's degree. You'll enjoy unique opportunities to get hands-on research experience working with graduate students and faculty. As a Fast Track student, you'll have a better chance of getting into a graduate degree program as soon as you complete your bachelor's degree.

TENNESSEE TECH UNIVERSITY - DEPARTMENT OF MECHANICAL ENGINEERING
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