CORPORATE PARTNERSHIP PROGRAM
THE UNIVERSITY OF TENNESSEE, KNOXVILLE, IS ON A JOURNEY to become a Top 25 public research university. By becoming a corporate partner with our College of Engineering, you can join us on this journey to educate the best and brightest students and promote big ideas and important breakthroughs.

Our momentum toward the top is already energizing the College of Engineering, where our strengths include:

- Increasing enrollment in both undergraduate (48 percent increase in the last five years) and PhD programs (74 percent increase in the last five years) of students who make up the intellectually sharp, diverse, and energetic core of the college;
- Conducting cutting-edge research in scintillation materials, ultra-wide-area resilient electric energy transmission (the grid), and nuclear engineering, among other fields;
- Graduating more next-generation problem-solvers who are ethnically diverse, culturally competent, skilled in teamwork and leadership, and well educated in twenty-first-century engineering challenges;
- Adding internationally respected researchers and educators to the faculty through successful joint efforts with both the public and private sectors; and
- Raising support in both the number and size of contributions from our alumni and friends, including significant funding for two new buildings.

Though our college is making large strides toward being recognized for the outstanding quality of our teaching and research, our progress is now challenged by ever-increasing demands on the public funds that once provided the lion’s share of our financial base.

Private-sector funding from partnerships and gifts is, therefore, absolutely vital if we are to continue our progress, helping the nation increase its technological and economic strength.

We appreciate your interest, as well as this chance to tell you about some advantages available through association with the University of Tennessee—an emerging leader in engineering research and education. In this publication, we offer a few details about what the support of our donors and teamwork with our partners have already enabled in the College of Engineering. We hope you will join us in our journey.

Sincerely,

Wayne T. Davis
Dean & Endowed Dean’s Chair
College of Engineering
**Departments with nationally ranked programs**
- Chemical and Biomolecular Engineering
- Civil and Environmental Engineering
- Electrical Engineering and Computer Science
- Industrial and Systems Engineering
- Materials Science and Engineering
- Mechanical, Aerospace, and Biomedical Engineering
- Nuclear Engineering

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**Undergraduate Ranking**
- 32nd
  - U.S. News & World Report ranking of public colleges of engineering

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**Graduate Ranking**
- 36th
  - U.S. News & World Report ranking of public colleges of engineering

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**Research Expenditures**
- $63.55 million

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**Enrollment**
- 3,800+
  - Total COE Enrollment

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**Faculty**
- 158
  - FT T/TT Faculty

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**Engineering Academic Success**
As freshmen, engineering students are automatically enrolled in the 9-credit Jerry E. Stoneking engage™ Engineering Fundamentals Program, our innovative, success-oriented approach to freshman engineering education. The curriculum includes an overview of the eleven engineering majors, computer tools for problem solving, teamwork exercises, communications skills, and physics. We augment the engage program with a bridge program during the summer before school starts and the Tennessee Louis Stokes Alliance for Minority Participation, both of which provide extra support and guidance for students from such underrepresented (in engineering) groups as ethnic minorities and first-generation college students.

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**Partners for Progress**

**Our Students**
The college attracts increasingly well-qualified students to its programs. Current entering freshman have an average high school GPA of 4.0 and an ACT math score of 30.5. Honors students make up more than a quarter of the class, and engineering students make up a third of the Haslam Scholars—the university’s most prestigious honors program.

**Quality is No Accident**
The college begins growing the next generation of engineering problem-solvers long before they apply for college admission. We start with precollege students—especially those from groups that are underrepresented among professional engineers. Seventh graders through high school seniors are the target audience for our Introduction to Engineering Systems Program to spark their interest in the kinds of problems solved by engineering. The Office of Engineering Diversity hosts weeklong programs with an intensive hands-on engineering introduction for minority students through the MITES, eVOL9, eVOL10, and HITES programs.

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Corporate Support

Corporate support of the college aligns industry needs and various enterprises throughout the college, creating increased opportunities for both students and faculty members. Significant support from these corporations increases professional prospects for our current and future engineers.

Pro-Spective Student Partnerships

Co-op and Internship Experiences

Since 1926, the Engineering Professional Practice office has provided educationally relevant work opportunities for thousands of the college’s students to experience real-world engineering challenges through cooperative education and internship programs. Both programs offer structured learning environments in which students assume increasing levels of responsibility by holding full-time, paid positions in a professional setting related to their academic and career goals.

Diversity

Diversity initiatives in the College of Engineering began in the early 1970s because corporate leaders identified the need to educate talented young people from diverse backgrounds, and the dean responded. Today’s Office of Engineering Diversity Programs is structured to identify minority students (beginning with middle school years), introduce them to engineering’s academic and career opportunities through a series of summer camps, and encourage their enrollment at UT. Once enrolled, staff members provide connections to the array of services for students across campus. The Pre-College Engineering Diversity summer programs are designed for middle school and high school minority students and provide weeklong age-appropriate activities that help students foster understanding of engineering careers, explore the UT campus, compete in engineering challenges, and have an opportunity to jump start their academic careers. Access to top UT faculty encourages participants to continue their exploration of engineering.

International Student Opportunities

The environment in which our graduates will practice their profession grows bigger and more diverse every day.

To function in that global environment, our students must be competent in other languages, as well as the customs and courtesies of other cultures. UT recognized this new reality by implementing its campus-wide Ready for the World international and intercultural awareness initiative in 2004, and we equip our students for success by enabling international experiences.

Since the courses of study in engineering are highly structured and offer limited flexibility to plan for extended stays abroad, we created the international coordinator position to help arrange international experiences for our students. The coordinator works closely with the study abroad programs available at UT and through the Global Engineering Education Exchange Consortium to develop experiences for engineering students that will allow them to develop cultural competence as they continue timely progression toward degrees. There are also opportunities for companies to sponsor students to intern at their international offices or to link with the college for faculty-led international site visits and tours.
The intellectual energy of our researchers has produced outstanding projects in every department as well as papers published in well-respected peer-reviewed journals and patents that promise economic returns to patent-holders and licensees.

Our researchers are currently principal investigators on project grants with annual expenditures of more than $63 million. Here’s a glimpse of what we are doing.

Institute for Advanced Composites Manufacturing Innovation (IACMI)

This federally funded institute for manufacturing innovation is focused on advancing innovation in the manufacturing of composites used in automobiles, wind turbines, and compressed-gas storage tanks.

UT is a growing force in the field, as evidenced by its ongoing partnership with Oak Ridge National Laboratory (ORNL), its long history in nonwoven composites, its extensive collaboration with the federal government on composites research and development, and the addition of Suresh Babu as the UT–ORNL Governor’s Chair in Advanced Manufacturing.

Center for Ultra-Wide-Area Resilient Electric Energy Transmission Networks (CURENT)

Founded in fall 2011, CURENT is a collaborative effort between academic institutions, national laboratories, and industry partners that draws upon the unique strengths of each of its participants. From its space in the new state-of-the-art Min H. Kao Electrical Engineering and Computer Science Building, the program has access to the combined resources of UT and nearby ORNL.

Whether developing devices to prevent large-scale power outages or expanding the potential of wind energy, CURENT, a $20M–$40M project housed in the College of Engineering, is focused on spotting and addressing long-term energy needs for an increasingly global market. CURENT is the first National Science Foundation Engineering Research Center dedicated to addressing electric power transmission systems and is jointly sponsored by the Department of Energy.

Reliability and Maintainability Center (RMC)

The RMC is a center within the College of Engineering that draws support from a diverse range of companies, organizations, and industries. Initiated in 1996 with twelve original companies participating, the RMC continues to grow and now has over fifty member companies and organizations. The RMC bridges industry and academia to provide education, research, and development, and information exchange in the application of reliability and maintenance engineering tools and concepts. The RMC’s purpose is to improve industrial productivity, efficiency, safety, and profitability through advanced reliability and maintenance practices, technologies, and management principles that are being taught to students involved with the center.

Scintillation Materials Research Center (SMRC)

The SMRC is the realization of nearly two decades of public–private collaboration that transcends any typical partnership. Nearly three decades ago, four College of Engineering alumni founded CTI Molecular Imaging and worked with researchers at UT and ORNL to produce award-winning, innovative medical-imaging research. CTI merged with Siemens Medical Solutions in 2005 to become Siemens Medical Solutions Molecular Imaging (SMSMI).

Several years ago, UT and SMSMI partnered to create the SMRC, a multidisciplinary research facility in the College of Engineering that specializes in discovering and developing materials that will help lay the groundwork for the next generation of gamma-ray, x-ray, and neutron detectors. The SMRC is funded through a variety of sources, including Siemens, the US Department of Energy, and the National Science Foundation. In addition to medical imaging, the SMRC is active in exploring applications in homeland security and geophysical exploration for energy reserves.

Corporate Research Funding

Many corporations fund research at the College of Engineering. Below is a small sample of our corporate research partners.

ABB
Analysis and Measurement Services
The Boeing Company
BP America
DePuy Products Incorporated
Dominion Power
High Performance Technologies of Charlotte, NC
Intel Corporation
Joint Vue
Los Alamos National Security LLC
Materials Properties Council Inc.
Stryker Orthopaedics
Tetra Tech Incorporated
Wyle Laboratories Inc.
Zimmer Orthopedics
PHILANTHROPY

Corporate Gifts
Among our strongest corporate leaders

Eastman Chemical Company
We enjoy a strong partnership with Eastman, headquartered in nearby Kingsport, Tennessee. Eastman’s recent corporate philanthropy allowed the college to renovate lab space to create the Eastman Unit Operations Laboratory and the Eastman Student Commons for Chemical and Biomolecular Engineering students. Eastman also has created three Eastman Professors of Practice in the College of Engineering to focus on chemical engineering, electrical engineering, and mechanical engineering.

Eastman also continues to support scholarships that encourage excellence, an endowed fellowship that helps the college attract top graduate students, and gifts that support the Process-Control Lab.

Alcoa
Alcoa has supported the college for decades, including funding for the Office of Professional Practice. Alcoa’s recent gifts include funding to enhance international opportunities, which provide students with a crucial perspective on the global business environment they’ll enter after graduation.

URS
The Engineering Global Initiatives Fund is supported by URS and helps us develop international experiences for students in the Engineering Honors Program. An international experience is a required component of our honors students’ education, and it helps students learn about engineering practices in many different countries.

ExxonMobil
For decades, ExxonMobil has supported our college’s departments and hired many of its graduates. By providing department-specific gifts, ExxonMobil has enabled college leaders to respond with agility to emerging priorities.

Strongwell
Strongwell and its chairman, John Tickle, have been longtime partners and friends with UT. John and Ann Tickle have supported facility improvements, most recently with the John D. Tickle Engineering Building, which now houses the Department of Civil and Environmental Engineering and the Department of Industrial and Systems Engineering. Strongwell supplied the materials for the pedestrian bridge which connects the Tickle engineering building to the Hill. Projects such as these significantly impact the future of our students and provide them access to top laboratories and facility space while attending UT.

UCOR
As part of UT’s journey to the Top 25, Chancellor Jimmy G. Cheek recognizes investments must be made to recruit and retain outstanding faculty who can provide a quality educational experience for our students, thus creating the next generation of leaders for our state and nation. When an investment is made, Cheek has pledged to provide immediate endowment income to be used for salary support—instantly helping our faculty recruiting and retention efforts.

Recognizing the power of this leveraged funding, UCOR stepped up quickly to support the chancellor’s challenge and created the UCOR Faculty Fellowship in Nuclear Engineering. Jason Hayward, one of our most productive young faculty members, has been awarded this fellowship.

MATCHING GIFTS
Corporate philanthropy through matching gifts encourages private philanthropy as it augments an employee’s gift. At UT, the matching gift goes directly into the academic fund to which the employee’s original gift was given.

Over the past two years, more than sixty companies matched gifts from our UT engineering donors.

Example list of matching gift companies:
- ALCOA Foundation
- Alstom Power Inc.
- Atmos Energy Corporation
- Bechtel Group Foundation
- Boeing Company Foundation
- Bristol-Myers Squibb Foundation Inc.
- Chevron Phillips Chemical Company LP
- Cisco Systems Inc.
- DENSEO Manufacturing TN Inc.
- DOW Chemical Company Foundation
- Duke Energy Foundation
- Eaton Corporation
- ExxonMobil Foundation
- General Electric Foundation
- Google Inc.
- IBM International Foundation
- Kimberly-Clark Foundation
- Levi Strauss & Company
- Lockheed Martin Corporation
- Medtronic Foundation
- PepsiCo Foundation Inc.
- Procter & Gamble Fund
- Southern Company Services Inc.
- Texas Instruments Foundation
- Verizon Foundation
Covering the nation and the globe, our alumni work in all fifty states, and more than 900 graduates work in eighty-four other countries around the world.
SELECTED UT ENGINEERING ALUMNI IN EXECUTIVE POSITIONS

Leaders emerge at Tennessee. We are proud to name several of our nationally and internationally renowned engineering graduates.

Tony Buhl
President and CEO, EnergX

Joe Cook
Founder and principal, Mountain Group Capital

Mark Cox
Senior vice president, Eastman Chemical Co.

Steve Crawford
Senior vice president and CTO, Eastman Chemical Co.

Bennett Crosswell
President, Pratt & Whitney Military Engines

Terry Douglass
President, ProVision Health Care

Bob Dunn
President, Prism Midstream

Jim Flood
Vice president, Arctic & Eastern Canada, ExxonMobil Development Company

Kim Greene
Executive vice president and COO, Southern Company

Sharon Habibi
President and CEO, Sycom Technologies

Robbie Hakaem
CEO, Radephys Oncology Services

Hash Hashemian
President and CEO, AMS

Chad Holliday
Chairman, Royal Dutch Shell

Mike Howard
President and CEO, EPRI

Dwight Hutchins
Asia Pacific managing director, Accenture

Min Kao
Executive Chairman and co-founder, Garmin International

Melvin Kirk
CEO, Ryder

Robert Lewis
Senior vice president, PepsiCo Global R&D

Cavansa Mims
President, Visionary Solutions

Ron Nutt
Retired CEO and co-founder, ABT Molecular Imaging Inc.

Mitch Patel
Founder, president, and CEO, Vision Hospitality Group

Tony Sciotto
President, Custom Steel Fabricators

Ganney Scott
CEO, Scepter Inc.

Jim Tankersley
President, Pictsweet Company

John Tickle
Chairman and owner, Strongwell

David Walker
Chief Operating Officer, ABS Group of Companies

Eric Zeanah
President and owner, American Accessories International

As you can see, the UT College of Engineering is on its way to the top, ready to confirm the confidence of our alumni, donors, and partners in our ability to stand with the nation’s top engineering education and research institutions.

For more information on any of our research or education programs and how joining with us can help implement your corporate strategies or giving plans, please contact:

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