Welcome to the Tickle College of Engineering(TCE)!

It’s time to take the next step in your journey toward becoming an engineer, and we are happy that you have chosen to take it with us at the University of Tennessee, Knoxville.

TICKLE
COLLEGE OF ENGINEERING
THE UNIVERSITY OF TENNESSEE, KNOXVILLE

Goals of this Powerpoint

- Acquaint yourself with the Tickle College of Engineering
- Understand basic requirements of our college and how to get involved at UT
- Familiarize yourself with degree requirements and frequently used terminology
- Complete the worksheets to prepare for orientation advising
- Devise a tentative schedule (this will be approved and possibly refined during orientation advising)

Welcome to the Tickle College of Engineering

Welcome to the University of Tennessee! Now is a great time for our college, and an even better time to be a student. The Engineering Vols community is a place where students feel supported in pursuing their individual passions. Today is only the start of your journey to a superior and meaningful educational experience. Go Vols!

Matthew Mench,

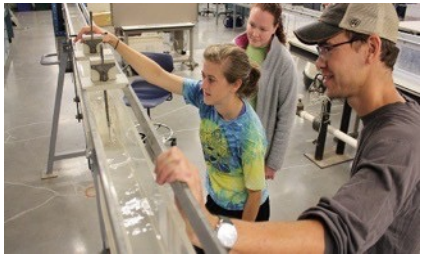
Dean

Michael Danquah Associate Dean for Academic & Student Affairs

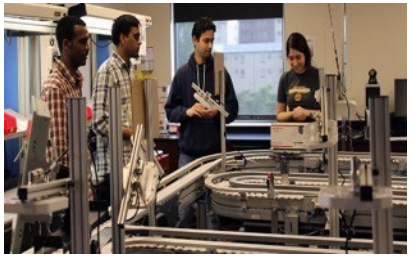
Majors Offered- visit departmental website to learn all about our majors!

Biosystems Engineering
bess.tennessee.edu

Materials Science and Engineering
mse.utk.edu



Civil and Environmental Engineering
cee.utk.edu



Industrial and Systems Engineering
ise.utk.edu

Electrical Engineering and Computer Science
eecs.utk.edu

Nuclear Engineering
ne.utk.edu

Chemical and Biomolecular Engineering
cbe.utk.edu

Mechanical, Aerospace, and Biomedical Engineering
mabe.utk.edu

Your Engineering Orientation Advising To-Do List:

1. Complete the AP/IB/Dual Credit worksheet. Share during orientation advising.
2. Complete the Volunteer Core website. List courses of interest to you in the various categories. Share during orientation advising.
3. Use the Academic Plan form to create a tentative semester plan to share during orientation advising (more information on this in subsequent slides).
4. Be sure to accept and zoom into your orientation advising appointment. Check your UT email for that invitation link.
5. Review requirements for your degree (read next slide)

Requirements for Your Degree

- Volunteer Core Requirements (available in the 2025 Undergraduate Catalog online early May)
  - See 'terms to know' on the next screen
  - Required by the University of Tennessee for all students
  - Review at https://catalog.utk.edu/ and choose 'Volunteer Core Requirements' from the navigation bar
- Major Requirements (available in the 2025 Undergraduate Catalog online early May)
  - Required by your individual engineering major
  - Review at https://catalog.utk.edu/. Choose 'Majors A-Z' from the navigation bar
  - Options for minors exist (and are not required), but this topic is best addressed after you have begun your first semester

All requirements are specific to your catalog year, which is generally the fall catalog for the year you began studying at the University of Tennessee.

Course descriptions can be found on the website listed above, from the same navigation bar. These course descriptions include pre-requisites or co-requisites (see 'terms to know' on next screen) for any given course.

Terms to Know

- **Pre-requisite** – a course that must be completed successfully before enrolling in another course that requires it.
- **Co-requisite** – a course that must be completed before, or taken alongside, a course that requires it.
- **Credit Hour** – a unit of academic credit received for 100 minutes of weekly classroom instruction or two-three hours of laboratory instruction. In general, a large portion of college courses are three credit hours each.
- **Volunteer Core (Vol Core)** – a common set of requirements all students at the university must meet to earn an undergraduate degree. See the Undergraduate Catalog for a full description of these requirements.
- **Course Number** – The three-digit number that identifies a specific course, such as 101 in ENGL 101. Courses at 100 and 200 level are best for first year students. Courses at 300 and 400 level are best for upper-class students.

Abbreviations to Know

- Advanced Placement credit earned from exams (AP)
- Dual Enrollment (DE)—collegecredit earned while in high school
- Degree Audit Reporting System (DARS)
- Course Registration Number (CRN)
- Engineering Fundamentals (EF)
- International Baccalaureate credit earned from exams (IB)
- Grade Point Average (GPA)
- FA, SP, SU – refers to semesters when a course is taught (fall, spring, summer)

Volunteer Core Categories

First Year Composition (FYC)
Written Communication (WC)
Oral Communication (OC)
Applied Oral Communication (AOC)
Quantitative Reasoning (QR)
Natural Sciences (NS)
Global Citizenship United States (GCUS)
Global Citizenship International (GCI)
Arts & Humanities (AH)
Applied Arts & Humanities (AAH)
Social Sciences (SS)
Engaged Inquiries (EI)
Expanded Perspectives (choose from AH, AAH, GCI, GCUS, or SS)

You can view these categories and the course choices in the Undergraduate Catalog for 2025 when it is available in May 2025.

You can also run your DARS report in your MyUTK to view degree requirements during the Fall 2025 semester.

Crafting Your Upcoming Academic Plan

- You are asked to create a tentative academic plan and share it with your advisor during orientation advising.
- For now, you need only plan out the course names and numbers (for example, English 101) that you plan to take. You do NOT need to select the exact section (days of the week/time) of each course that you plan to register for. You do that when you register with your advisor.
- Courses associated with various honors programs will be addressed during your orientation advising appointment.
- The courses that you plan are largely based on the math classes that you are qualified to take, determined by your highest Math ACT/SAT score, Math Placement Exam, or college credits you have already earned.

Crafting Your Upcoming Academic Plan (cont.)

- If your highest ACT/SAT math score does not place you into the level of math you had expected, please review your options below:
  - AP credits, IB credits, required score on a Statewide Dual Credit Exam, and/or Dual Enrollment credits override the ACT/SAT Math scores. You MUST provide verification of any of these credits, and/or the score/grade earned.
  - Successfully pass the online math placement test Level 4 through the math department to demonstrate readiness for Math 141 or Level 3 for Math 131 readiness.

Math Placement Guide:

Course Numbers	Course Description	Credit Hours	Placement Guide
Math 119	College Algebra (S/NC Grading only)	3	Math ACT 24 or lower (SAT Math 580 lower)
Math 131	Calculus 1A infused with precalculus	3	Math ACT Scores of 25, 26, 27 (SAT Math 590 to 650)
Math 141 or 147	Calculus 1 or Honors	4	Math ACT 28 or higher (SAT Math 660 to 710) Honors- Math ACT 32 or higher (SAT Math 720 or higher)
Math 142 or 148	Calculus 2 or Honors	4	Credit for Math 141 or 147 (AP, IB, Dual Enrollment)
Math 241 or 247	Calculus 3 or Honors	4	Credit for Math 142 or 148 (AP, IB, Dual Enrollment)
Math 231 or 237	Differential Equations 1 or Honors	3	Credit for Math 142 or 148 (AP, IB, Dual Enrollment)
Math 251 or 257	Matrix Algebra 1 or Honors	3	Credit for Math 142 or 148 (AP, IB, Dual Enrollment)

Tentative** Semester Classes:

Math ACT Scores of 25, 26, 27 (SAT Math 590 to 650)

Course Numbers	Course Description	Credit Hours
English 101/112/131	English Composition I	3
Math 131	Calculus 1A infused with precalculus	3
Engineering Fundamentals 141	Introduction to Physics and Modeling for Engineers I	4
Volunteer Core Course OR Computer Science 101 (for Electrical, Computer, and Computer Science Majors Only)	Choose from Social Science, Arts & Humanities, Global Citizenship-United States, or Global Citizenship-International lists in Undergraduate Catalog (pending any earned college credits)	3
** advisor and student will review the courses prior to registration		Total: set with advisor

Tentative** Semester Classes:

Math ACT Scores of 28 or higher (SAT Math > 660)

Course Number	Course Description	Credit Hours
English 101/112/131	English Composition I	3
Math 141/147	Calculus I/Honors	4
EF 151/157	Physics for Engineers I/Honors	4
EF 105 **OR** COSC 101 (for Electrical, Computer Engr. and Computer Science majors only)	Computer Methods in Engineering Problem Solving **OR** Introduction to Programming	1 **OR** 3
Chemistry 122-123/128 (depending on major choice)	General Chemistry I and Lab/ Honors	4
Engineering Fundamentals 102 or First Year Studies 101 or 129	Introduction to TCE or The UT Experience or Special Topics Seminar	1
**advisor and student will review the courses prior to registration		Total: set with advisor

Success Tips for Engineering Majors

- Focus on time management and prioritization skills.
- Attend class regularly.
- Find a productive study location and form study groups.
- Keep up with homework daily.
- Utilize tutoring and support provided on campus (Vol Study Hall).
  - Go regularly, not just once.
- Introduce yourself to your professors—ask questions about class expectations and requirements.
- Connect with your advisor—ask questions and share your plans.

Experience Engineering

There are many ways to begin planning for a deeper level of involvement within the Tickle College of Engineering (TCE) outside the classroom. Consider opportunities such as honors programs, minors, studying abroad, career development, co-op or internships, global initiatives, undergraduate research, and more.

On the next page, read about some of the opportunities available to you and be prepared to begin discussing the ones you are most interested in with your advisor.

Experience Engineering

Center for Career Development & Academic Exploration
- Explore majors, develop career readiness, participate in job fairs

Cook Grand Challenge Engineering Honors Program
- Provides greater intellectual challenges and broader educational experiences for engineering students

Dwight Hutchins Engineering Diversity Programs
- Check out the programs, support services, and student organizations

Engineering Faculty Led Study Abroad
- Study abroad in engineering courses with our faculty

Engineering Student Organizations
- Consider joining a student organization in engineering

Engineering Professional Practice (co-ops/internships)
- Enhance your classroom learning with real world work experience, participate in hiring expos in Fall and Spring semesters

Innovation & Collaboration Studio (maker space)
- Hands-on maker space to create personal and classroom projects

Office of Undergraduate Research
- Attend a "getting started" seminar, connect to research opportunities

Veteran Student Services
- Connects veterans to support services

The advising team looks forward to zooming with you during orientation. Go Vols!

If you have questions about the information in this powerpoint that you feel need to be answered prior to orientation, contact the Engineering Advising office at (865) 974-4008 or by e-mailing engradvising@utk.edu.

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