

Edward E. Whitacre Jr. College of Engineering

Engineering and the Honors College

Honors Graduate Profile



DR. MICAH GREEN

ASSISTANT PROFESSOR OF CHEMICAL ENGINEERING TEXAS TECH UNIVERSITY

For Dr. Micah Green, college was more than just a desire to gain an engineering degree and find an engineering job. He also wanted the "renaissance man" experience – a study of literature, history, art, and philosophy. However, it seemed he had to choose between the two paths – the focused, practical engineering path or the well-rounded, broad path.

He discovered the solution to this dilemma while still in high school. He visited a colloquium that was hosted by Texas Tech's Honors College and was amazed by the environment and education that was offered there.

At Texas Tech, Green soon became highly involved in Honors studies, taking advantage of small class sizes, career counseling, and undergraduate research opportunities while participating in activities ranging from College Bowl trivia competitions to literature discussion groups. These activities helped him build an academic community with both professors and Honors students from disciplines across the university. Honors classes such as "Science Fiction as Literature" and discussion groups like "Nietsche vs. Augustine" perfectly complemented his experience in chemical engineering.

Through his undergraduate research experiences, collaborations with graduate students, and conversations with professors, he was able to map out his graduate studies and career with confidence.

Graduating from Texas Tech with a Bachelor of Science in chemical engineering with honors, he then attended the Massachusetts Institute of Technology, earned a Ph.D. in chemical engineering, and received a minor in the history of Christianity from Harvard Divinity School.

Now back at Texas Tech as a faculty member, Green is teaching Honors courses. His goal is to facilitate the exciting discussions, the student-professor engagement, and the comprehensive education that was pivotal to his career. This involvement extends beyond the classroom to the laboratory, where a number of undergraduate researchers are making new discoveries in the exciting field of nanomaterials. For Green, an Honors education is not about resume boosting; it is a way to take ownership of your education, broaden it, and lay a foundation of success.



The Honors College offers enriched and stimulating courses that are designed to encourage critical thinking, broaden your education, and examine interdisciplinary and international perspectives. In addition, the Honors College supports undergraduate research, study abroad, academic scholarships, and a variety of academic and social activities.



Ways to Take Advantage of the Honors College

As an engineering student, you have three ways to combine your engineering degree with Honors:

Earn a bachelor's degree with Honors or Highest Honors.

Earn a bachelor's degree with Honors or Highest Honors and a master's degree in only five years through the Honors College Access Program.

Take smaller, more dynamic Honors sections of courses required for your degree program

Benefits of Honors Membership

As an honors student, you are eligible for perks that include the opportunity to live in Murray or Gordon Halls, the Honors residence halls and learning community; first-day registration for classes; early admission programs with the Texas Tech School of Medicine and Texas Tech School of Law; and many more:

WAIVER OF GRE FOR HONORS STUDENTS

The Whitacre College of Engineering will waive the GRE for graduate studies at Texas Tech if you enter Texas Tech with a 1300 SAT or greater on the reading and math sections (or ACT equivalent) and maintain a 3.5 GPA.

HONORS COLLEGE ACCESS PROGRAM

See the other side of this brochure for information on how to earn both a bachelor's degree and a master's degree by completing 150 hours in your chosen field of study.

CROSS-LISTED CLASSES (5000/4000) FOR SENIORS

Two options for cross listing are available to you. Seniors can register for 4000-level cross-listed courses but sit in on the 5000-level class; or seniors can register for a 5000-level class and receive credit toward your undergraduate program. Up to six hours of graduate credit can be applied.

FACULTY MENTORS FOR URF AND HONORS THESIS

The Honors Undergraduate Research Fellowship (URF) Program encourages undergraduate participation in significant research experiences in all disciplines by fostering collaboration with faculty across campus and by providing funding for student researchers. If you are selected as a fellow, you can work up to 20 hours per week on research and earn wages determined by available funding. More information is available at www.honors.ttu.edu/urf

STUDY ABROAD FUNDING

You are encouraged to participate in study abroad as part of your undergraduate education. The Honors College offers Study Abroad Scholarships to help offset the costs of travel and living expenses. In addition, you can obtain Honors credit through reading and writing assignments.

.01-0810



Edward E. Whitacre Jr. College of Engineering

Engineering and the Honors College

Earn a Bachelor's Degree with Honors or Highest Honors

Students must complete 24 hours in Honors courses to graduate from Texas Tech University with the transcript designation "with Honors." These 24 hours generally consist of 12 hours of lower division Honors classes, 6 hours of upper division Honors classes and 6 hours of Honors seminars. A student who wishes to graduate with the transcript designation "with Highest Honors" must complete a Senior Thesis and 30 hours of Honors coursework. Many of these courses fulfill core curriculum requirements such as math, history, and science. Twelve hours of qualifying Honors coursework are available in the Whitacre College of Engineering. These courses can be applied to most undergraduate engineering degree programs.

ENGINEERING HONORS COURSES

The Whitacre College of Engineering offers several courses specifically for Honors students and many courses are available with an honors component. The following courses are currently available for Honors credit:

ENGR 1		INTRODUCTION TO ENGINEERING (FYE COURSE)
IE 3	301	ENGINEERING ECONOMIC ANALYSIS
ME 2	322 I	ENGINEERING THERMODYNAMICS I
ME 2	301	STATICS
ME 4	360	SUSTAINABLE ENERGY

ADDITIONAL HONORS COURSES

The following courses are currently available for Honors credit and are a part of the degree requirements for most degree programs within the Whitacre College of Engineering:

 MATH 1451
 CALCULUS I WITH APPLICATIONS

 MATH 1452
 CALCULUS II WITH APPLICATIONS

 MATH 2450
 CALCULUS III WITH APPLICATIONS

 MATH 3350
 HIGHER MATHEMATICS FOR ENGINEERS AND SCIENTISTS I

 PHYS 1408
 PRINCIPLES OF PHYSICS I

 PHYS 2401
 PRINCIPLES OF PHYSICS II

For more information on Honors courses, see your academic advisor.

Additional Honors credit can be earned through graduate courses and cross-listed courses. (See the other side of this sheet.)

Honors College Access Program

The Whitacre College of Engineering, in collaboration with the Honors College, provides a 150-hour dual degree program allowing you, if you are eligible for graduate school, to earn both a bachelor's and master's degree by completing 150 hours in your chosen field of study. You are allowed to count up to six hours of graduate courses simultaneously for the completion of both your bachelor's and master's degrees for closely matched fields of study.

If you are interested in the Access Program, you must apply to the Honors College early in your undergraduate career and then to the Graduate School before taking graduate courses. Early planning and contact with your engineering department advisor is essential to ensure that you are able to integrate undergraduate research, the completion of a senior thesis according to Honors College requirements, and graduate program and research publication requirements.

PURPOSE

The purpose of the Access Program is to fast-track Honors engineering students to a master's degree in their chosen discipline. Upon completion of the Access Program, you will earn a bachelor's degree with Honors or Highest Honors and a master's degree in your engineering discipline.

ELEMENTS

HONORS ENGINEERING UNDERGRADUATE COURSES

MASTER'S PROGRAM REQUIREMENTS AND TRANSITION

- You will earn a master's degree in your chosen discipline using the report option with the three hours of report in the final semester of your study. The Access Program aims to prepare you to write a peer-reviewed article under the guidance of a faculty advisor.
- A minimum of 30 graduate-level hours are required.
- All coursework must meet the degree requirements of your selected field of study and you must work with your graduate advisor to ensure completion of the graduate degree components.
- The GRE is waived for Honors students if you entered Texas Tech with 1300 SAT or greater and maintained a 3.5 GPA.
- You will be automatically accepted to graduate school if your GPA is 3.5 or more in your major. If your GPA is less than 3.5, you will apply to enter the graduate program the semester before completing the undergraduate degree program through the Graduate Admissions office: www.depts.ttu.edu/gradschool/admissions/
- The bachelor's and master's degrees will be conferred upon your completion of the degree program requirements.



TAKE THE NEXT STEP

Go to <u>www.coe.ttu.edu/honors</u> or scan the QR code at left with your mobile device.

CONTACTS

Engineering Advising 102 Engineering Center 806.742.3451 info.coe@ttu.edu Honors Advising McClellan Hall 806.742.1828 honors@ttu.edu

Texas Tech University | Whitacre College of Engineering | Box 43103 | Lubbock, Texas 79409-3103 | 806.742.3451 | www.coe.ttu.edu