UNDERGRADUATE CATALOG
2016-2017

YOUR FUTURE STARTS HERE.

CUSTOMIZE YOUR DEGREE, CHOOSE YOUR DESTINY

YOUR LIFE IN THE ENERGY CAPITAL OF THE WORLD

ENGINEERING BY THE NUMBERS: SALARY & EMPLOYMENT FORECAST
What is an engineer? What kinds of careers are available in engineering?

College facts and everything you need to know about your life as an engineering student at UH.

Learn about the different departments in UH Engineering and how to customize the right degree for you.

Money matters. Read information on tuition, financial aid, scholarships and freshman requirements.

Imagine your future at UH Engineering in the city of Houston, the energy capital of the world.
As you move through this world, we ask you to take a second look at the infrastructures, technologies, tools and machines that shape your daily life: the cars, cell phones, lights, bridges, buildings, clean water, cameras, computers – even the very fuel powering your planet. Is there anything that an engineer has not touched?

WHAT IS AN ENGINEER?

Engineers are the thinkers, doers and creators of the modern world we so often take for granted. They are the designers, builders, problem-solvers and inventors of our yesterday, today and tomorrow.

Engineers aren’t just experts in science, mathematics, physics and chemistry – they are experts at applying these sciences to the real world in order to solve problems, overcome challenges, or simply improve the quality of life for current and future generations.

Engineers generally focus on one of the following fields: biomedical engineering, chemical engineering, civil engineering, electrical and computer engineering, industrial engineering, mechanical engineering and petroleum engineering.

To learn more about the different engineering professions and fields of study, turn to page 4.
CAREERS IN ENGINEERING

Careers in engineering vary depending on which field of study you choose to pursue. However, due to a shortage of qualified engineers in the U.S., all engineering professionals are well-paid and jobs are very easy to come by – especially in the city of Houston, the energy capital of the world. Below is a breakdown of the different types of engineering majors and their average annual salaries.

AVERAGE STARTING SALARIES FOR RECENT B.S. GRADUATES IN 2015*

<table>
<thead>
<tr>
<th>Field</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical</td>
<td>$60,100</td>
</tr>
<tr>
<td>Chemical</td>
<td>$67,814</td>
</tr>
<tr>
<td>Civil</td>
<td>$60,018</td>
</tr>
<tr>
<td>Electrical</td>
<td>$64,081</td>
</tr>
<tr>
<td>Computer</td>
<td>$62,553</td>
</tr>
<tr>
<td>Industrial</td>
<td>$62,184</td>
</tr>
<tr>
<td>Mechanical</td>
<td>$63,501</td>
</tr>
<tr>
<td>Petroleum</td>
<td>$80,600</td>
</tr>
</tbody>
</table>

*Salary information based on the 2015 salary survey by the National Association of Colleges and Employers

BIOMEDICAL

Without engineering, the world would not have X-rays, ultrasounds, heart monitors or many of the life-saving devices and equipment used in modern medicine. Many of the tools and technologies used in our hospitals and clinics are products of engineers and engineering. Biomedical engineers not only develop these cutting-edge devices and technologies, but also find new ways to diagnose conditions, fight diseases and improve patients’ overall quality of life.

CHEMICAL

The foundation of the world boils down to chemistry, and chemical engineers harness that power to improve the lives of others. Their work ranges from developing more effective medicines to finding safer and more efficient ways to retrieve oil and gas. Chemical engineers also play a lead role in the discovery of new, alternative fuels and energy sources that are less harmful to our environment.

CIVIL

When you make it safely across a bridge, thank a civil engineer! They are responsible for designing and constructing structures and infrastructure that we use in our daily lives – from the roads we drive on, to the buildings we work in, to the clean drinking water that flows from our faucets. Environmental engineers are vital to maintaining the health of our planet by finding new ways to curb pollution and by ensuring our environment remains as clean and healthy as possible. Their influence touches most of our daily lives!

ELECTRICAL & COMPUTER

Electrical and computer engineers are responsible for some of our favorite toys, such as smartphones and video games, and many of our most crucial systems, including electrical grids and telecommunications. As innovators and creators at the forefront of technology, electrical and computer engineers have an extremely wide array of employment options available to them. Anywhere you find electrical or computer systems – from energy and medical industries to aviation and computer gaming – you’ll find electrical and computer engineers.

INDUSTRIAL

Industrial engineers are on the front lines of engineering processes, working to make things run smoothly across all of the engineering disciplines. If there’s a way to optimize a system or make a process more efficient, industrial engineers will find it. They take a holistic approach to problem solving by considering people, places, equipment and information in systems or processes to find new ways to optimize them. For example, some industrial engineers design the lines for rides at Disney theme parks to ensure park-goers are comfortable and entertained while they wait. Others design and organize warehouses so that products can be identified and delivered to consumers more efficiently.

MECHANICAL

Mechanical engineers are masters-of-all-trades in the engineering field. Most of our daily activities involve mechanical processes, and anything with a mechanical process is the business of a mechanical engineer. These engineers build cars, computers, airplanes and toys. Their contributions to our world include new technologies and devices for the energy, medical, aerospace and biotechnology industries.

PETROLEUM

Petroleum engineers solve the most critical and pressing global energy challenges facing humanity, including how to meet increasing global demand for energy while ensuring the safety and health of our environment. Petroleum engineers are entrusted by the public to implement solutions to these problems in a safe, ethical and environmentally responsible manner. The field sets high standards for competency as well as ethics.
CULLEN COLLEGE OF ENGINEERING

BY THE NUMBERS

TOP 100 🏆
ENGINEERING SCHOOLS IN THE U.S.
(As Rated by U.S. News & World Report)

28 ✗
ENGINEERING STUDENT ORGANIZATIONS

22:1 📚👥
UNIVERSITY-WIDE STUDENT TO FACULTY RATIO

$25.8M ☛
IN RESEARCH EXPENDITURES

80% 🎓
OF UH ENGINEERING B.S. STUDENTS ARE EMPLOYED IN TEXAS WITHIN 1 YEAR OF GRADUATION

$103,334 💲
AVERAGE SALARY OF ENGINEERING PROFESSIONALS IN HOUSTON, TEXAS

11 👤🔍
NATIONAL ACADEMY OF ENGINEERING FACULTY MEMBERS

18,045+ 🧕
TOTAL ALUMNI OF THE CULLEN COLLEGE OF ENGINEERING

CULLEN COLLEGE 2015 FAST FACTS

• FACULTY: 121
• GRADUATE STUDENTS: 1,311
• UNDERGRADUATE STUDENTS: 3,764
• ALUMNI: 18,045+
• DEGREES AWARDED (FY 2014):
  • B.S. 339
  • M.S. 194
  • PH.D. 50
  • TOTAL 583
BRAGGING POINTS

We’ve got everything you’d expect from a top engineering college – outstanding faculty, cutting-edge research and state-of-the-art facilities. But just how good are we?

- UH engineering students ranked 15th in the U.S. for salary earning potential (Source: PayScale.com)
- Named one of Princeton Review’s “Best Value Colleges” and “Nation’s Best Colleges” (2013, 2014)
- Located in “America’s Coolest City” and “One of the best places for 20-somethings” (Source: Forbes.com and CreditDonkey, 2013)
- Listed as one of the world’s top universities for grads who go on to become CEOs (Source: The Times Higher Education of London)
- Ranked #4 in the nation for “Top Colleges Where Students Get the Best Bang for Their Buck” (Source: PolicyMic, 2013)
- Ranked among the top 75 in the nation and #1 in Houston for engineering research and development expenditures (Source: National Science Foundation, 2011)

DID YOU KNOW?

- 3,500+ UH alumni are presidents, CEOs, or heads of their own companies
- 63% of all University of Houston alumni live and work in Houston
- UH students spend over 1 million hours volunteering and interning in Houston each year
- 14% of all Houstonians with bachelor’s degrees received them from UH
The admission standards for entering the Cullen College are very high – but the hard work doesn’t end once you’re admitted. It takes a great deal of hard work, studying and perseverance to make it through to graduation.

Luckily, your engineering classes will be small, averaging 22 students per class, and teaching assistants or graduate students rarely teach engineering courses. Most engineering courses are taught by full-time faculty members, even at the freshman level.

The Cullen College offers eight undergraduate majors: biomedical engineering, chemical engineering, civil engineering, computer engineering, electrical engineering, industrial engineering, mechanical engineering, and petroleum engineering. Learn more about choosing the right major for you on page 24.

Achieving and maintaining academic excellence at the UH Cullen College of Engineering is serious business.

It’s not an easy road, but it’s a worthwhile one. After graduation, career opportunities for engineers are limited only by their imaginations, and there’s no better place than Houston to begin an engineering career.
At the UH Cullen College of Engineering, you’re exposed to hands-on, real-world training with cutting-edge technologies inside state-of-the-art facilities starting on your very first day as a freshman.

By the time you earn your bachelor’s degree from the Cullen College, you will have years of laboratory training, real-world experience and professional development under your belt. You will be confident and well-prepared to take on the future, no matter the direction your engineering career path takes you!

Several undergraduate research opportunities and scholarships are available in the college’s many research laboratories, centers and industry consortia. Moreover, many engineering faculty members welcome and encourage undergraduate students to join their research groups. Just ask!
YOUR CAMPUS LIFE
AS TOLD BY UH ENGINEERING STUDENTS

Being an engineer in the 21st century is the most exciting profession you could choose, and there’s no better place than the city of Houston to begin your engineering career. The University of Houston, also known as The Energy University, is renowned for educating the next-generation of global, entrepreneurial energy leaders. So, what is it like to be an engineering student at a campus as diverse and vibrant as UH?

Watch the video at:
www.eegr.uh.edu/video-undergrad-life

DID YOU KNOW?

UH is #2 in Texas for number of beds in campus housing

UH has 7 residential communities, with more to come

UH has 30 campus restaurants and dining halls

UH has a First Year Residential Experience (FYRE) to help with the transition to college life
Houston was named the 3rd best city for young professionals by Forbes Magazine.

Houston is the 4th largest city in the nation.

Houston has the largest medical center in the world.

Houston ranks 2nd in employment growth in the nation.

The UH Cullen College of Engineering is centrally located in the Energy Capital of the World. The city of Houston is home to the world’s largest medical center, NASA, the Port of Houston and the second-most Fortune 500 headquarters of all major U.S. cities.

The University of Houston’s location in the heart of Houston makes maintaining jobs, internships or fellowships while pursuing an undergraduate degree very doable. Cullen College students are strongly encouraged to take on internships or other professional development opportunities while they are still in school. Dedicated staff members in the Engineering Career Center provide students with direct access to internships, fellowships and full-time positions throughout the region. We want you to turn your dream job into a reality! Visit career.egr.uh.edu to learn more.
If you’ve been accepted into the UH Cullen College of Engineering, then one thing is certain: you have what it takes to be a world-class engineer. It is our job to make sure you have all the tools and support you need to make it through your degree and on to the next steps of your career.

The Program for Mastery in Engineering Studies, or PROMES, is a student success program dedicated to providing the help and support you need to succeed in engineering. PROMES provides engineering students with academic advising, workshops, scholarships, and professional and personal development opportunities. We help you keep up with your classes, study for your exams, discover where you best fit in the college community, and find balance between your personal and academic lives.

PROMES is open to all undergraduate students in the college and provides a positive learning environment that supports their needs. For more information, please visit promes.egr.uh.edu.

Honors Engineering Program (HEP)

The UH Cullen College of Engineering and the UH Honors College jointly offer a challenging program for Honors College students with majors in engineering. The Honors Engineering Program (HEP) offers courses that are tailored to the needs of high-achieving students.

Freshman-level HEP courses emphasize team-based, project-oriented learning in small classes that are restricted to HEP students. These fun, hands-on courses focus on fostering creative, open-ended thinking and engineering design. HEP students will fulfill many required courses in Honors sections of required engineering courses. All in all, the HEP provides the academic environment of a small college with the resources of a large university.

ENGI 1100: Introduction to Engineering offers first-semester engineering students the opportunity to learn about each of the eight undergraduate majors. The course helps students develop problem-solving, engineering design and communication skills. Students work in teams to complete several design projects throughout the semester.

The road to earning your engineering degree may be bumpy at times, but the Cullen College offers a variety of resources to make your ride as smooth as possible. Here’s our advice to you for making it through your undergrad degree:

GET INVOLVED.

Getting involved in student organizations and professional societies not only increases your chances for success in engineering – it gives you access to leadership and networking opportunities that help to prepare you for life after college. Joining student organizations and professional societies is also a great way to meet fellow engineering students and connect with your classmates for study groups and academic support. For more information, please visit www.egr.uh.edu/people/engineering-student-organizations.

GET HELP.

When the going gets tough during your engineering education, the tough get help.

The University of Houston offers a wide variety of resources to help you through any academic, personal, social or professional struggles you may have during your time on campus. UH students have access to free tutoring services, student advocacy and support services, accommodation and support services for students with disabilities, and wellness, recreation and health services.

As an engineering student, you will also have special access to the Engineering Computing Center, the Engineering Career Center, the various engineering student organizations and professional societies, and, of course, the PROMES program!
Although getting through your engineering degree will require you to spend a lot of hours with your nose in a textbook or your eyes glued to a computer screen, it’s important to look up from your research, studies or homework for a break every now and then. And when break time rolls around, you’ll have no shortage of fun activities to help you blow off steam and clear your mind before the next big exam or project.

So after a long day of classroom lectures and studying, make sure you take the time to climb the 53-foot climbing wall before taking a dip in the 70-meter indoor pool, sauna or whirlpool inside the UH Campus Recreation Center – or sign up for an intramural sports team, join an aerobics class, or see a concert on campus with your friends and classmates.

Stress management isn’t only important while earning your engineering degree – it’s important for your life after college as well. That’s why UH offers a wonderful array of free support services for students, such as:

- UH Wellness, where you can take part in individualized programs or group fitness activities that help with improving both mind and body;
- Counseling & Psychological Services, where you can access mental health professionals any time you’re feeling overwhelmed or just need someone to talk to;
- The OmbudService, where you can get the help you need resolving any academic or nonacademic issue you might have, such as residency status, registration, fees, payroll, housing, financial aid, grades, parking and more.

DID YOU KNOW?

UH HAS:

- 581 student organizations
- 46 fraternities and sororities
- 2,500+ on-campus jobs and internships posted annually by University Career Services
- 60+ group exercise classes (per week each semester)
- 22 clinic/workshops (each semester)
- 16 intercollegiate sports teams
- 21 outdoor adventure trips (each semester)
- 2,500+ on-campus jobs and internships posted annually by University Career Services
- 60+ group exercise classes (per week each semester)
- 22 clinic/workshops (each semester)
- 16 intercollegiate sports teams
- 21 outdoor adventure trips (each semester)
- 264,000 square foot Campus Recreation and Wellness Center
- 667 acre park-like campus, full of lush trees, gardens and lawns
- a stunning public art collection at the Blaffer Art Museum
Engineers are artists, writers, scientists, musicians, communicators, inventors, athletes, leaders, composers, dancers, poets, entrepreneurs and designers. Engineers are all of these things and so much more.

Your life as an engineer doesn’t begin and end with engineering. While you’re pursuing your degree, we want you to pursue the things that make you you.

The University of Houston community is as diverse as it is vibrant. Whatever your hobbies or interests outside of engineering might be, the University of Houston has a home for you – and we’re here to help you find it. Please visit www.uh.edu/student-life to learn more!
Learn about the different departments and programs at the UH Cullen College of Engineering and choose how to customize the right degree for you.
WHAT IS BIOENGINEERING?

Biomedical engineers solve problems in biology and medicine, playing a central role in advancing healthcare, medicine and patient care. At the University of Houston Cullen College of Engineering, biomedical engineering students and faculty members are researching new methods for diagnosing diseases, improving therapies for treatment of diseases and developing cutting-edge medical technologies that are being implemented in hospitals and clinics across the country.

CAREERS IN BIOENGINEERING

Biomedical engineering students at the UH Cullen College of Engineering will be prepared for careers in the biomedical technology industry, graduate school or professional programs such as engineering, medicine, business and law. The Cullen College has a dedicated Engineering Career Center which connects hundreds of engineering students each year to internships and full-time positions throughout the region. A 2015 salary survey produced by the National Association of Colleges and Employers found that new biomedical engineering graduates earned an average starting salary of $60,100.

WHY EARN YOUR BIOENGINEERING DEGREE AT THE UNIVERSITY OF HOUSTON?

ACADEMICS

Biomedical engineering undergraduate students in the UH Cullen College of Engineering are taught by the world’s leading experts and researchers in the biomedical engineering field. The biomedical engineering undergraduate program prepares students for a huge range of career opportunities, and places an emphasis on exposing students to cutting-edge technologies through such courses as “Biomedical Microdevices” and “Regenerative Medicine and Stem Cell Engineering.” The courses lead up to a one-year Capstone senior design course that explores regulatory and business development issues in the fall and segues into the project design component with the start of the spring semester.

The biomedical engineering undergraduate program requires a working knowledge of the sciences and engineering tools and logic. The interdisciplinary curriculum incorporates math, physics, chemistry and biology with mechanical, electrical and chemical engineering.

Prior to the beginning of your junior year, you will have the option of customizing your biomedical engineering curriculum by choosing one of three emphasis areas: biomedical imaging, bionanoscience, and neural & rehabilitation engineering. Learn more at www.bme.uh.edu/undergraduate

RESEARCH

The biomedical engineering department at the UH Cullen College of Engineering is home to some of the world’s most advanced and cutting-edge biomedical research, touching on areas from neural and rehabilitation engineering to biomedical imaging and bionanoscience. Even during your freshman year at the Cullen College, you will be exposed to ongoing biomedical engineering research through classroom lessons and projects and will have opportunities to join faculty-led research groups across campus.

The University of Houston is conveniently located five miles from the Texas Medical Center (TMC), the largest medical center in the world. Research opportunities for biomedical engineering undergraduates are endless, and all students are strongly encouraged to get hands-on experience working in either a research lab on campus, at TMC, or at a local biotech company. Learn more at www.bme.uh.edu/research/undergrad

SCHOLARSHIPS

The department funds undergraduate research fellowships for qualified, top-performing upperclassmen. Merit-based scholarships are also awarded by the Cullen College of Engineering.

Scholarships are also offered by the UH Office of Scholarships and Financial Aid. Additionally, the university’s co-op program offers students the opportunity to receive career training while financing their education. Learn more at www.egr.uh.edu/academics/scholarships

STUDENT ORGANIZATIONS

Students are encouraged to join academic and professional organizations to build leadership, communication and networking skills. Members of student organizations receive career guidance from engineering professionals and participate in activities that promote engineering.

The UH Biomedical Engineering Society is a highly active organization. Members have opportunities to explore fascinating technology in medicine through talks by experts in the field, and the organization provides an environment for social interaction and exchange of ideas between all levels of undergraduate students, graduate students and faculty. Learn more at www.bme.uh.edu/links/bmesociety

FOR MORE INFORMATION

Biomedical Engineering Department: www.bme.uh.edu
Undergraduate Program: www.bme.uh.edu/undergraduate
Email: kmallory@central.uh.edu

UH Department of Biomedical Engineering | 2011 Science and Engineering
Research Center | 3517 Cullen Blvd. | Houston, Texas 77204-5060 | 832.842.8813

DEPARTMENTAL 2015

FAST FACTS

228 Total Undergrad Students in BME Department
3,754 Total Undergrad Students in Cullen College
23 Total Faculty in BME Department
121 Total Faculty in Cullen College
22:1 Student to Faculty Ratio Across the University

Total Undergrad Students in BME Department
3,754 Total Undergrad Students in Cullen College
Total Faculty in BME Department
121 Total Faculty in Cullen College
Student to Faculty Ratio Across the University
22:1
WHAT IS CHEMICAL ENGINEERING?

Chemical engineers are taught to link chemistry and engineering in order to produce substances or products that improve people’s lives. Chemical engineers develop techniques and processes to convert raw materials into products such as chemicals, plastics, food, pharmaceuticals, petroleum-products and other consumer goods while maximizing efficiency and minimizing risk and environmental impact.

CAREERS IN CHEMICAL ENGINEERING

Chemical engineering careers span chemicals manufacturing, refining, advanced materials, resource management, medicine, pharmaceuticals development and production, pollution control and environmental remediation.

Career opportunities in chemical engineering are excellent—especially in the city of Houston, the energy capital of the world. A 2015 salary survey produced by the National Association of Colleges and Employers found that new chemical engineering graduates earned an average starting salary of $62,864.

Career opportunities for chemical engineers in Houston tend to be better than the national average. Almost half of Houston’s economic base is driven by energy, with more than 3,600 energy-related companies based in Houston. All of the major oil and gas companies have operations in Houston, and the region boasts almost 40,000 jobs just in oil and gas extraction, representing a third of such positions worldwide.

WHY EARN YOUR CHEMICAL & BIOMOLECULAR ENGINEERING DEGREE AT THE UNIVERSITY OF HOUSTON?

ACADEMICS

The chemical and biomolecular engineering department at the University of Houston Cullen College of Engineering is one of the top-ranked chemical engineering programs in the nation. Chemical engineering undergraduates are prepared to meet or exceed the expectations of employers, particularly in the energy and chemical industries. Many graduates of the chemical engineering program are currently employed in leading positions in industry, academia and government across the Houston region and around the world.

Conveniently located in the energy capital of the world, students have direct access to internships and full-time positions throughout the region and are strongly encouraged to pursue professional opportunities while they are still in school.

Learn more at www.chee.uh.edu/undergraduate/degree

RESEARCH

At the University of Houston Cullen College of Engineering, there’s no shortage of research for chemical engineers. The University of Houston is home to some of the world’s most advanced energy research, touching on areas such as sustainability, alternative, grid power, solar energy, wind energy and superconductivity. Moreover, the university has a 24-acre campus, called Energy Research Park, dedicated solely to bringing industry and academia together to conduct energy research in clean engines and fuels, wind energy, superconductivity and petroleum engineering. All undergraduate students in the chemical engineering department are strongly encouraged to get hands-on research experience in one of the many faculty research groups, labs or centers on campus while they are pursuing their degree.

Learn more at www.chee.uh.edu/research/overview

SCHOLARSHIPS

Departmental scholarships are offered from the Lubrizol Foundation and the Fleischer Scholarship Fund. Merit-based scholarships are also awarded by the Cullen College of Engineering.

Scholarships are also offered by the University of Houston Office of Scholarships and Financial Aid. Additionally, the university’s co-op program allows students to receive career training while financing their education.

Learn more at www.chee.uh.edu/undergraduate/scholarships/chbe-department

STUDENT ORGANIZATIONS

Students are encouraged to join academic and professional organizations to build leadership, communication and networking skills. Members of student organizations receive career guidance from engineering professionals and participate in activities that promote engineering.

Chemical engineering organizations include the American Institute of Chemical Engineers (AIChE) and the Society of Petroleum Engineers (SPE).

Learn more at www.chee.uh.edu/people/student_organizations

FOR MORE INFORMATION

UH Department of Chemical and Biomolecular Engineering: www.chee.uh.edu
Undergraduate Program: www.chee.uh.edu/undergraduate/overview
Email: vellison@central.uh.edu

UH Department of Chemical and Biomolecular Engineering | 5222 Engineering Building | 4756 Calhoun Rd | Houston, Texas 77204-4004 | 713.743.4300

Student to Faculty Ratio Across the University

28 Total Undergrad Students in ChBE Department
35 Total Undergrad Students in Cullen College
19 Total Faculty in ChBE Department
121 Total Faculty in Cullen College
22:1 Student to Faculty Ratio Across the University
WHAT IS CIVIL ENGINEERING?

Civil engineering is the professional discipline that focuses on the development and maintenance of both man-made and natural infrastructure. Civil engineers produce the facilities on which modern life depends, including roads, bridges, buildings, offshore structures, airports and levees, as well as the infrastructure required for the supply of clean water.

Civil engineering includes a multitude of sub-disciplines including structural engineering, environmental engineering, geotechnical engineering, water resources engineering, geosensing systems engineering, and others. Civil engineering offers a very wide variety of opportunities!

CAREERS IN CIVIL ENGINEERING

Civil engineers find employment opportunities in both the private and public sectors. Career opportunities in civil engineering are excellent – especially in Houston, the energy capital of the world. Employment for civil engineers is expected to increase significantly, spurred by ongoing emphasis to improve our nation’s infrastructure.

A 2015 salary survey produced by the National Association of Colleges and Employers found that new civil engineering graduates earned an average starting salary of $60,018.

WHY EARN YOUR CIVIL ENGINEERING DEGREE AT THE UNIVERSITY OF HOUSTON?

ACADEMICS

The civil engineering undergraduate program at the University of Houston Cullen College of Engineering is rigorous and hands-on. The program is designed to offer undergraduate students a broad-based education in the freshman and sophomore years and a more focused education in the junior and senior years. The jobs available in the field of civil and environmental engineering are diverse, so a broad base is provided to prepare graduates for a variety of positions. Luckily, the civil and environmental engineering department has one of the most loyal and active alumni bases in the entire country.

A 2015 salary survey produced by the National Association of Colleges and Employers found that new civil engineering graduates earned an average starting salary of $60,018.

RESEARCH

The civil engineering undergraduate program at the University of Houston Cullen College of Engineering is well-known for its research, and faculty in the department have expertise in environmental engineering, geotechnical and materials engineering, structural engineering, oceans and water resources engineering and geosensing systems engineering. The civil and environmental engineering department is also home to the world-famous National Center for Airborne Laser Mapping (NCALM), which was recently featured in international media for finding a fabled ancient city in Honduras. Undergraduate students have the opportunity to become involved in the fascinating research being done by faculty members and graduate students in the department.

Learn more at www.cive.uh.edu/research/overview

SCHOLARSHIPS

Departmental scholarships include the Cobb/Fendley Endowed Scholarship, R. P. Doss Houston Contractors Association Scholarship, Jesse G. Schindewolf Academic Scholarship, The Klotz Associates, Inc. Scholarship, Herbert and Fay Lum Scholarship, The Structural Consulting Company/Monarch Scholarship, Jimmie A. Schindewolf Academic Scholarship, American Concrete Institute Scholarship and others. Scholarships are also awarded by the Cullen College of Engineering and by the University of Houston Office of Scholarships and Financial Aid. Additionally, the university’s internship program allows students to receive career training while financing their education.

Learn more at www.cive.uh.edu/programs/undergraduate/scholarships

STUDENT ORGANIZATIONS

Students are encouraged to join academic and professional organizations to build leadership, communication and networking skills. Members of student organizations receive career guidance from engineering professionals and participate in activities that promote engineering.

The civil and environmental engineering department has student chapters of the American Society of Civil Engineers (ASCE), the American Concrete Institute (ACI) and the Chi Epsilon Civil Engineering Honor Society. The UH ASCE chapter is very active, and its members are engaged in the Concrete Canoe and Steel Bridge Competitions each year.

Learn more at www.cive.uh.edu/programs/undergraduate/student-activities

FOR MORE INFORMATION

UH Department of Civil and Environmental Engineering: www.cive.uh.edu/undergraduate Program: www.cive.uh.edu/programs/undergraduate Email: civil@egr.uh.edu

UH Department of Civil and Environmental Engineering

Ned Engineering Building 1 | 426 Calhoun Rd. Houston, Texas 77204-4003 | 713.743.4250

DEPARTMENTAL 2015 FAST FACTS

260 Total Undergrad Students in CEE Department
3,754 Total Undergrad Students in Cullen College
22 Total Faculty in CEE Department
121 Total Faculty in Cullen College
22:1 Student to Faculty Ratio Across the University
WHAT IS ELECTRICAL & COMPUTER ENGINEERING?

Electrical engineering is a very broad field—it encompasses virtually anything you can think of that requires electric power to operate! As an electrical engineering student at UH, you will get a broad sampling of courses from several areas involving electrical and electronic systems, but in your last two years you will choose from among six specialty areas: electronics; nanotechnology; power and alternative energy; computers and embedded systems; electromagnetics; and signals, systems and communication.

Computer engineering combines electrical engineering and computer science. It is about the interface between machines (hardware) and computers (software). Electrical engineers and computer engineers do both things, but computer engineers are more involved with software than electrical engineers. Computer engineers design and maintain hardware and software in computer-based systems, from PCs to supercomputers, as well as computer systems that are embedded in vehicles, appliances and communication networks.

Specialized areas in computer engineering include system architecture, computer chip design, layout design, package/board design and system integration.

CAREERS IN ELECTRICAL & COMPUTER ENGINEERING

Career opportunities for both electrical and computer engineers are fantastic across all specialties. A 2019 salary survey produced by the National Association of Colleges and Employers found that new electrical engineering graduates earned an average starting salary of $64,081 and new computer engineering graduates earned an average starting salary of $62,953. However, starting salaries for UH electrical and computer engineers are above the annual national average. Alumni of the electrical and computer engineering department work locally and overseas for Halliburton, Schlumberger, Hewlett Packard, CenterPoint Energy, Burns & McDonnell, as well as other telecommunications, construction and petrochemical companies.

WHY EARN YOUR ELECTRICAL & COMPUTER ENGINEERING DEGREE AT THE UNIVERSITY OF HOUSTON?

ACADEMICS

The electrical and computer engineering department at the UH Cullen College of Engineering takes pride in its commitment to undergraduate education. Students are treated as individuals and have access to faculty advisors throughout their undergraduate career. Small classes are the rule, especially at the junior and senior level. From the introductory level to the more advanced courses, teaching is done primarily by full-time faculty members, many of whom have received prestigious teaching awards. Students will receive real-world, hands-on training in the field to introduce you to electrical and computer engineering in an exciting and relevant way. In the Senior Design courses, you will work on real-world problems with faculty and industry engineers guiding you. For those desiring additional learning opportunities, special workshops are available in some of the required freshman and sophomore courses.

SCHOLARSHIPS

Many scholarships are available to incoming and current undergraduate students in the electrical and computer engineering department. Some are administered by the Office of Scholarships and Financial Aid and are open to all University of Houston students. The Cullen College of Engineering also offers merit-based scholarships. Additionally, the university’s co-op program allows students to receive career training while financing their education.

FOR MORE INFORMATION

UH Department of Electrical and Computer Engineering: www.ece.uh.edu
Undergraduate Program: www.ece.uh.edu/undergraduate/
general information
Email: casmit20@central.uh.edu
UH Department of Electrical and Computer Engineering
Njoo Engineering Building | 4326 Calhoun Rd.
Houston, Texas 77204-4005 | 713.743.4400

DEPARTMENTAL 2015 FAST FACTS

536 Total Undergrad Students in ECE Department
3,764 Total Undergrad Students in Cullen College
37 Total Faculty in ECE Department
121 Total Faculty in Cullen College
22:1 Student to Faculty Ratio Across the University
WHAT IS INDUSTRIAL ENGINEERING?

Industrial engineers focus on the effective use of people, machines, materials, information and energy to improve processes for products and services. This unique engineering field includes the development of analytical methods and techniques to concentrate on higher productivity and better quality. Firms looking to develop more efficient processes hire industrial engineers to reduce costs and waste.

CAREERS IN INDUSTRIAL ENGINEERING

Industrial engineers are trained to work virtually anywhere in the industry to improve the system performance. Specific industries include manufacturing, logistics and transportation, supply chain, energy, oil and gas, healthcare, retail, hotel chains, consulting, automobile manufacturers, electronics manufacturers, airlines, construction companies, banks, social services and government.

Examples of Industrial engineering projects include:

• Making wait times shorter for rides at Walt Disney World to increase guest satisfaction
• Optimizing the nursing staff levels at a hospital to improve patient care
• Streamlining the manufacturing processes of automobiles to make cars more affordable
• Simplifying a supply chain for UPS so deliveries can be made more expeditiously
• Leading a team of engineers to design new equipment for NASA
• Improving the quality of your favorite candy bar at Hershey to increase customer satisfaction
• Performing energy audits to enable more companies to go green
• Consulting and training people to use the latest technology to improve operations
• Designing safer and more ergonomic ways to work on the factory floor at a manufacturing plant

A 2015 salary survey produced by the National Association of Colleges and Employers found that new industrial/manufacturing engineering graduates earned an average starting salary of $62,184.

WHY EARN YOUR INDUSTRIAL ENGINEERING DEGREE AT THE UNIVERSITY OF HOUSTON?

ACADEMICS

The industrial engineering department at the University of Houston Cullen College of Engineering is highly-ranked, consisting of top-performing students and world class faculty and researchers. Undergraduate students in the industrial engineering department are taught by professors who are actively conducting research in the areas of healthcare and medical decision-making, homeland and port security, energy, reliability and maintenance, logistics and transportation, supply chains and manufacturing. Additionally, undergraduate students are exposed to professional and research opportunities throughout their education. With the second most Fortune 500 headquarters just minutes down the road from the Cullen College, there’s no excuse not to land your dream job or internship while you’re still pursuing your industrial engineering degree!

The department recently launched the first BSIE/MBA joint degree, providing IE students the opportunity to get their industrial engineering Bachelor’s as well as a master of business administration while saving 24 credit hours of course work! Learn more at www.ie.uh.edu/undergraduate-program/overview

DEPARTMENTAL 2015 FAST FACTS

120 Total Undergrad Students in IE Department
3,765 Total Undergrad Students in Cullen College
8 Total Faculty in IE Department
121 Total Faculty in Cullen College
22:1 Student to Faculty Ratio Across the University

RESEARCH

The industrial engineering department at the University of Houston Cullen College of Engineering places a huge emphasis on undergraduate research. Encouraging all undergraduate students to get involved with faculty-led research projects or Capstone design projects before they graduate. With an amazing array of industrial engineering research taking place inside of the engineering buildings, students have unique access to some of the world’s most cutting edge technological research and discoveries – so you have no excuse not to get involved!

Learn more at www.ie.uh.edu/research/overview

SCHOLARSHIPS

Industrial engineering students can apply for the Sam Scharff Scholarship, Melody Snider-Porter Scholarship, Durga and Sushila Agrawal Endowment, Brij and Sunita Agrawal Scholarship, Hari and Anjali Agrawal Scholarship, Charles E. Donaghey Scholarship, Victor Zalozim Scholarship, Scott T. Piaje Matching Scholarship, Piping Technology Scholarship, and others. Merit based scholarships are also awarded by the Cullen College of Engineering. Scholarships are also offered by the University of Houston Office of Scholarships and Financial Aid. Additionally, the university’s co-op program allows students to receive career training while financing their education.

Learn more at www.ie.uh.edu/undergraduate-program/scholarships

STUDENT ORGANIZATIONS

Students are encouraged to join academic and professional organizations to build leadership, communication and networking skills. Members of student organizations receive career guidance from engineering professionals and participate in activities that promote engineering.

Student organizations include Alpha Phi Alpha, an industrial engineering national honor society and the Institute of Industrial Engineers (IEEE). Learn more at www.ie.uh.edu/people/student-organizations

FOR MORE INFORMATION

UH Department of Industrial Engineering: www.ie.uh.edu
Undergraduate Program: www.ie.uh.edu/undergraduate-program
Email: cedward4@central.uh.edu
UH Department of Industrial Engineering | E206 Engineering Building | 4722 Calhoun Rd | Houston, Texas 77204-4008 | 713.743.4180

The Cullen College of Engineering at the University of Houston is ranked 35th nationally by U.S. News & World Report. The College is home to the 14th ranked mechanical engineering program and the 35th ranked chemical engineering program. Student enrollment exceeds 3,500.

The industrial engineering program at the Cullen College of Engineering is highly-ranked, and the department is home to over 120 undergraduate and graduate students. The faculty comprises top-performing professors who are actively conducting research in the areas of industrial engineering, operations research, systems engineering, and manufacturing. Undergraduate students are exposed to professional and research opportunities throughout their education. With a unique location in the heart of the energy industry, there’s no excuse not to land your dream job or internship while you’re still pursuing your industrial engineering degree!
WHAT IS MECHANICAL ENGINEERING?

Mechanical engineers are the jack-of-all-trades within the engineering profession. Just about everything you can think of involves a mechanical process, and anything with a mechanical process is the business of a mechanical engineer. These engineers work in nearly every industry you can imagine, addressing problems in such areas as energy conversion, aerospace, design of mechanical components and systems, man and machine environments, product reliability and safety, materials, instrumentation and control of processes, and polymers.

CAREERS IN MECHANICAL ENGINEERING

Career opportunities in mechanical engineering are excellent – especially in the city of Houston, the energy capital of the world. A 2015 salary survey produced by the National Assocation of Colleges and Employers found that new mechanical engineering graduates earned an average starting salary of $65,300. In recent years, this figure has been quite a bit higher in the Houston region for UH graduates, due to strong growth in the energy industry.

WHY EARN YOUR MECHANICAL ENGINEERING DEGREE AT THE UNIVERSITY OF HOUSTON?

ACADEMICS

The mechanical engineering department at the University of Houston Cullen College of Engineering is top-ranked, attracting the highest quality and hardest working students, faculty members and researchers. Undergraduate students in the mechanical engineering department are taught to connect the dots between classroom lessons and their real-world applications through project-based learning, hands-on laboratory research, Capstone design projects and seminars led by industry professionals. The department’s curriculum provides students with the opportunity to learn how to think creatively and logically, and how to use new-found knowledge to address complex problems. Throughout the curriculum, but particularly in the three course design sequence, students are challenged with creative design problems. To solve these problems, students use skills learned from classes in mechanics of materials, experimental methods, engineering analysis, controls, materials science, thermodynamics, fluid mechanics and heat transfer.

LEARN MORE AT www.me.uh.edu/undergraduate-program/overview

RESEARCH

The mechanical engineering department at the University of Houston Cullen College of Engineering places a huge emphasis on undergraduate research, encouraging all undergraduate students to get involved with faculty-led research projects or Capstone design projects before they graduate. Mechanical engineering faculty members are incredibly active and productive researchers, focusing on research projects which are motivated by the challenges of the 21st century and grounded in the fundamentals of the mechanical sciences. With so many exciting research opportunities in the mechanical engineering department – touching on areas including applied mechanics, controls and dynamical systems, biomedical engineering, design of mechanical systems, materials engineering, and thermal and fluid sciences – students are guaranteed to get hands-on research experience before they graduate!

LEARN MORE AT www.me.uh.edu/research/overview

SCHOLARSHIPS

Scholarships are offered through the mechanical engineering department for qualified, top-performing students. Merit-based scholarships are also awarded by the Cullen College of Engineering.

SCHOLARSHIPS

Scholarships are also offered by the University of Houston Office of Scholarships and Financial Aid. Additionally, the university’s co-op program allows students to receive career training while financing their education.

LEARN MORE AT www.me.uh.edu/undergraduate-program/scholarships

STUDENT ORGANIZATIONS

Students are encouraged to join academic and professional organizations to build leadership, communication and networking skills. Members of student organizations receive career guidance from engineering professionals and participate in activities that promote engineering.

The UH chapter of the American Society of Mechanical Engineers (ASME) is a highly active organization, promoting teamwork and collaboration throughout the duration of a student’s academic career. Several events are held annually for students to gain knowledge, professional contacts and colleagues.

LEARN MORE AT www.me.uh.edu/undergraduate-program/student-org

FOR MORE INFORMATION

UH Department of Mechanical Engineering: www.me.uh.edu
Undergraduate Program: www.me.uh.edu/undergraduate-program/overview
Email: ME-Undergrad-Advisor@me.uh.edu

UH Department of Mechanical Engineering | N207 Engineering Building 1
4726 Calhoun Rd. | Houston, Texas 77204-4006 | 713.743.4500

DEPARTMENTAL 2015 FAST FACTS

932 Total Undergrad Students in ME Department
3693 Total Undergrad Students in Cullen College
25 Total Faculty in ME Department
121 Total Faculty in Cullen College
22:1 Student to Faculty Ratio Across the University
WHAT IS PETROLEUM ENGINEERING?

Petroleum engineers solve the most critical and pressing global energy challenges facing humanity, including how to meet increasing global demand for energy while ensuring the safety and cleanliness of our environment. Petroleum engineers are entrusted by the public to implement solutions to these problems in a safe, ethical and environmentally responsible manner, setting a very high standard for competence and ethics for the profession.

Projections from the United States Energy Information Administration predict a substantial increase in demand for energy of all types over the next 30 years. They predict that oil and natural gas will constitute about 35 percent of the total energy supply throughout that period. They also predict that, unless significant improvements in technology are discovered, the increased demand for energy will result in increased atmospheric carbon dioxide concentrations. However, new technologies and practices in directional and horizontal drilling, as well as hydraulic fracturing, have opened vast, new domestic natural gas production capabilities which offer the prospect of an ample supply of low-carbon energy for the next century or more in the U.S.

CAREERS IN PETROLEUM ENGINEERING

Career opportunities for petroleum engineers are amazing – especially in the city of Houston, the energy capital of the world. A 2015 salary survey produced by the National Association of Colleges and Employers found that new petroleum engineering graduates earned an average starting salary of $80,600.

Employment opportunities are widely available with the major integrated international energy companies and service providers, or the many intermediate and independent oil and gas producers, drilling companies, special equipment companies and industry support companies. Employment can be domestic or international, onshore or offshore, and can involve the most sophisticated intelligent systems and technologies. Early on, it can involve specific technical and operational assignments, and later, engineering and business leadership positions. Petroleum engineers with appropriate experience and knowledge may start their own oil and gas companies.

WHY EARN YOUR PETROLEUM ENGINEERING DEGREE AT THE UNIVERSITY OF HOUSTON?

ACADEMICS

The vision of the University of Houston Petroleum Engineering Department is to be a center of world-class petroleum engineering education, research and service in Houston, the center of the world’s petroleum industry – and at that it has certainly succeeded. Petroleum engineering undergraduate classes are taught by leading researchers and industry professionals. By the time you graduate from the petroleum engineering undergraduate program, you will have been taught how to address the challenges of the world’s energy needs responsibly, how to exceed the evolving expectations of employers in the petroleum and energy industries, how to sustain industry leading skills, and how to be a leader in industry, academia and government.

Learn more at www.petro.uh.edu/undergraduate/overview

INTERNSHIPS

Almost half of Houston’s economic base is driven by energy, with more than 3,600 energy-related companies based in Houston. All of the major oil and gas companies have operations in Houston, and the region boasts almost 40,000 jobs just in oil and gas extraction, representing a third of such positions worldwide! The Petroleum Engineering Department at UH is located just a few short miles down the road from the world’s leading energy companies, so you are expected to hold internship positions while working to obtain your bachelor's degree in petroleum engineering.

Internships can be summer-based or can involve 10-20 hours per week throughout the year while taking classes, which is difficult at universities that aren’t located in the city of Houston. Interns receive compensation and valuable experience in real petroleum engineering assignments, enhancing the opportunity for direct hire upon graduation. Learn more at www.petro.uh.edu/undergraduate/internships

RESEARCH

At the University of Houston Cullen College of Engineering, there’s no shortage of research for petroleum engineers to get involved in. The University of Houston is home to some of the world’s most advanced energy research, touching on areas such as sustainability, alternatives and grid power, solar energy, wind energy and superconductivity. Moreover, the university has a 26-acre campus, called Energy Research Park, dedicated solely to bringing industry and academia together to conduct energy research in clean engines and fuels, wind energy, superconductivity and petroleum engineering. All undergraduate students in engineering are strongly encouraged to get hands-on research experience in one of the many faculty research groups, labs or centers on campus while they are pursuing their degree.

Learn more at www.petro.uh.edu/undergraduate/research_resources

SCHOLARSHIPS

Departmental scholarships are offered for qualified, top-performing students. Merit-based scholarships are also awarded by the Cullen College of Engineering. Scholarships are also offered by the University of Houston Office of Scholarships and Financial Aid. Additionally, the university’s co-op program allows students to receive career training while financing their education. Learn more at www.petro.uh.edu/scholarship

STUDENT ORGANIZATIONS

Students are encouraged to join academic and professional organizations to build leadership, communication and networking skills. Members of student organizations receive career guidance from engineering professionals and participate in activities that promote engineering.

Petroleum engineering organizations include: Society of Petroleum Engineers (SPE) and the American Association of Drilling Engineers (AADE). Learn more at www.petro.uh.edu/people/student-organizations

FOR MORE INFORMATION

UH Department of Petroleum Engineering: www.petro.uh.edu

Undergraduate Program: www.petro.uh.edu/undergraduate/overview

Email: mastrum@uh.edu

UH Petroleum Engineering | UH Energy Research Park
5010 Gulf Fwy, Bldg. 9 Rm. 219 | Houston, Texas 77204-0945
60% MORE DEMAND FOR ENGINEERS
Job posting trends suggest demand for engineers is 60 percent higher than for all other occupations.

$85,000 AVERAGE ANNUAL SALARY
The median income for engineers is twice that of general occupations ($42,000).

TOP THREE SALARIES
The highest annual earnings for engineers go to these occupations:

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<th>Engineering Role</th>
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ENGINEERING JOB PROJECTIONS THROUGH 2023:
11% GROWTH
249,908 new jobs will be available for engineers.

TOP 10 OCCUPATIONS
Growth forecast for engineering occupations:

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TOP 10 LOCATIONS
These U.S. metropolitan areas will have the greatest demand for engineers:

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DID YOU KNOW?
- UH graduates beat the national average for starting and mid-career salaries (Source: PayScale.com)
- UH is #7 in U.S. for graduating students with the least amount of debt (Source: U.S. News & World Report)
- UH is a “Best Value College” (Source: Princeton Review)
- UH is awarded $113 million in grants and scholarships each year (Source: AffordableCollegesOnline.org)
- UH is among the “Top 100 Most Affordable Large Public Colleges” (Source: AffordableCollegesOnline.org)

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The University of Houston offers several different kinds of financial assistance, ranging from scholarships that are awarded on the basis of academic merit to loans awarded on the basis of financial need. A typical financial aid package includes more than one type of aid.

**What types of financial aid are available at UH?**

- **Scholarships**
  - Merit-based awards that you do not have to repay.
- **Grants**
  - Need-based awards that you do not have to repay.
- **Loans**
  - Need-based, federally funded loans that you repay at below-market interest rates, plus private bank loans if you don’t qualify for federal loans.
- **Work-Study**
  - Need-based job placements on campus.
- **Financial Incentives**
  - Financial incentives are special programs available at the University of Houston that help students balance course loads and the cost of tuition over time while still encouraging them to make the most of their educational experience.
- **Summer Aid**
  - Available if you are enrolled at least half-time and have remaining aid that was NOT used during the fall and spring semesters.
- **Spring Aid**
  - Available if you are enrolled at least half-time and have remaining aid that was NOT used during the fall semester.

For more information on the types of financial aid available at UH, please visit: [www.uh.edu/financial/undergraduate/types-aid/](http://www.uh.edu/financial/undergraduate/types-aid/).

Please note that all students receiving financial aid will need to apply and be approved on an annual basis to receive financial assistance. In order to be eligible for federal funding, you must be a fully admitted degree-seeking student.

**Before you apply for financial aid**

To be eligible for federal financial aid you need to:

- have a high school diploma or a General Education Development (GED) Certificate
- be a U.S. citizen, or an eligible non-citizen
- be enrolled at least half-time in a degree program
- have a valid Social Security Number
- be registered with the Selective Service, if required
- maintain satisfactory academic progress
- not be in default of any federal funds

Once you have determined that you are eligible, you are ready to begin the six steps to financial aid.

**Getting Started with your Financial Aid Application**

1. Create a username and password at fafsa.ed.gov.
3. Through myUH (https://myuh.uh.edu) check financial aid application status, confirm contact information, and monitor status to assure process is expedited.
4. Check out all of the scholarship opportunities UH offers: www.uh.edu/scholarships.

For more information on applying for financial aid, please visit: [www.uh.edu/financial/undergraduate/how-apply](http://www.uh.edu/financial/undergraduate/how-apply/).

**Steps for applying for federal student aid**

1. **Parents and Students, File Tax Returns as Soon as Possible**
   - To complete the FAFSA, students or their parents will need to have filed an income tax return. Students should file tax returns as soon as possible as it takes several weeks for the FAFSA IRS Data Retrieval Process to become available once the tax return has been filed.
   - Electronic tax returns—allow 2 weeks for FAFSA IRS Data Retrieval to become available
   - Paper tax returns—allow 8 weeks for FAFSA IRS Data Retrieval to become available

2. **Apply for your FAFSA Username and Password**
   - Creating a username and password allows you to sign your Free Application for Federal Student Aid (FAFSA) electronically. Parents of dependent students must obtain a username and password as well, so that they, too, can sign the FAFSA online. If you are a continuing student, you may use your username to access your FAFSA Renewal on the Web. Visit fafsa.ed.gov to obtain your username and password.

3. **Complete your FAFSA**
   - To apply for financial aid, you MUST complete a FAFSA at www.fafsa.ed.gov. You should complete the application as early as possible after February 1, and prior to April 1. You must complete the FAFSA (utilizing the Data Retrieval Process is highly recommended) and submit it by the priority deadline of April 1 to receive the maximum consideration for limited financial aid resources. The University of Houston’s Federal School Code is 003652.

4. **Review your Student Aid Report (SAR)**
   - You will be notified by the Department of Education via e-mail within 3-5 days that your Student Aid Report (SAR) is ready for review and has been forwarded to the school of your choice. If your SAR has errors, correct them online (https://fafsa.ed.gov/) using your username and password.

5. **Complete your file if additional documentation is required**
   - While processing your FAFSA, additional application requirements may be requested to complete your file. For an application called verification (http://www.uh.edu/financial/undergraduate/how-apply/verification/). You will be notified via email if your file is incomplete, but it is also recommended that you monitor your status online at myUH. The priority deadline to submit all documents is April 1.

6. **Check your status**
   - In order to be eligible for federal funding, you MUST be a fully admitted degree-seeking student. Check your status online at myUH.uh.edu.

7. **Accept your awards**
   - We will notify you via e-mail when you have been awarded financial aid. Accept or decline your financial aid award(s) at myUH.uh.edu. University of Houston strives to make the Financial Aid process as straightforward as possible, but some students have unique situations that they need help with. If you still have questions, contact the Financial Aid Office (http://www.uh.edu/financial/contact/).

**TIP for avoiding delays with your financial aid application!**

**Provide consistent information** - A computer process scans your FAFSA and tax return to ensure all information matches. Please take great consideration in providing consistent information to avoid being flagged for verification. For example, listing “123 Main St.” on your tax return and “123 Main Street” on the FAFSA could cause delays. It is recommended that you have your tax return in front of you as you fill out the FAFSA to ensure consistency.
As a new student, tuition numbers can be scary. But with a wide array of scholarship and financial aid opportunities available at UH, college can truly become affordable.

ELIGIBILITY FOR UH SCHOLARSHIPS

In order to be eligible for any university-funded freshman scholarship, you must meet the following criteria:

• Graduated from a high school that is accredited by the Texas Education Agency and/or the appropriate Regional Association of Schools and Colleges.

• Applied for admission at UH for the Fall semester immediately following high school graduation.

• Be a U.S. citizen, permanent resident, or hold a Temporary Resident Card (form I-766) as provided by the Immigration and Reform Control Act of 1986.

• Admissions file must be completed by December 1 to be considered for priority funding. Please note that this is the priority deadline and scholarships will continue to be awarded as long as funds are available.

• Students are responsible for submitting new high school transcripts and/or SAT/ACT test scores if class rank or test scores change. Students must then notify the Office of Scholarships & Financial Aid when this information has been submitted if they would like their files to be reviewed again. Students may do so by contacting the Office of Scholarships & Financial Aid at (713) 743-1010 (option 5), instant messaging with a representative on Live Online Chat (https://uhelpdesk.custhelp.com/app/chat/chat_launch), or visiting the UH Welcome Center.

• If no high school class rank information is provided on the original transcript submitted with the admissions application, the student is responsible for notifying the Office of Scholarships & Financial Aid of any changes to this information. In lieu of an official ranking provided on the transcript, a statement of rank provided by a school administrator may be sufficient. This statement of rank should include a student’s statement of rank provided by a school administrator may be sufficient. This statement of rank should include a student’s name, UH ID and a confirmation as to whether or not the student would fall in the top 10 percent, top 20 percent or top 30 percent of their respective graduating class.

• New SAT/ACT test scores and/or class ranks will be accepted through January 31.

• Your completed admissions application allows you to be automatically considered for some scholarships. Other scholarships require a separate application.

ELIGIBILITY TO MAINTAIN YOUR UH-FUNDED SCHOLARSHIP

Eligibility to maintain your university-funded scholarship will renew each year provided you meet the following criteria:

• Maintain a minimum 3.0 GPA each semester;

• Enroll and complete a minimum of 12 credit hours in the Fall and 12 credit hours in the Spring; and

• Complete a minimum of 30 credit hours of enrollment at UH every academic year.

• Summer courses may count toward the completion of the 30 credit hours, but tuition and fees for those courses will not be funded by your scholarship, unless a scholarship petition is filed.

• Transfer hours and AP/Dual credit hours will not count toward the annual 30-hour requirement.

• Courses repeated will not be covered by university-funded scholarships. Credit hours for courses repeated will not be included in the semester and annual credit hour requirements.

UNIVERSITY ENDOWED SCHOLARSHIPS

University endowed scholarships are available on an annual basis based on collaborations between UH and outside donors, which can vary from private donors to companies like NASA, CenterPoint and Reliant Energy, and the Houston Office Leasing Brokers Association. Scholarship opportunities can change every year, and many are designed for students interested in particular areas like energy or aerospace – perfect for engineering majors!

Each year, a number of foundations, corporations, and individuals provide funding for UH scholarships. Some of these privately funded scholarships are designed to support students in a particular discipline or from a specific heritage or geographic region; others are open to students of any major or background. Offerings change often according to availability of funds and the time of the school year.

Note:

State law requires that each student identify any relation to a current University of Houston Board of Regent member. A student who is related to a current member of the governing board of that institution is prohibited from receiving scholarships unless the scholarship is awarded exclusively based on academic merit or is an athletic scholarship.
FRESHMAN ENGINEERING REQUIREMENTS

<table>
<thead>
<tr>
<th>RANK IN CLASS</th>
<th>MINIMUM SAT SCORE TOTAL</th>
<th>MINIMUM SAT CRITICAL READING (CR)</th>
<th>MINIMUM ACT COMPOSITE</th>
<th>MINIMUM ACT ENGLISH</th>
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</thead>
<tbody>
<tr>
<td>Top 25%</td>
<td>1200</td>
<td>570</td>
<td>26</td>
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<tr>
<td>Top 26%-50%</td>
<td>1250</td>
<td>570</td>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td>Top 51%-75%</td>
<td>1340</td>
<td>570</td>
<td>30</td>
<td>24</td>
</tr>
<tr>
<td>All others or not ranked</td>
<td>1370</td>
<td>570</td>
<td>31</td>
<td>24</td>
</tr>
</tbody>
</table>

REQUIREDSCHOOL COURSES:

- English: 4
- Social Studies: 3
- Chemistry: 1
- Physics: 1
- Mathematics (including 2 credits in algebra, 1 in geometry, and ½ in either elementary analysis or analytical geometry): 4

*Mechanical Engineering Students Only: Course in mechanical drawing/drafting in the tenth, eleventh, or twelfth grade. A deficiency in this area may be made up during the first year at the University of Houston.

CREDIT BY EXAM

The University of Houston and Cullen College of Engineering accept credit through various examination programs, including the Advanced Placement (AP) Examinations and Scholastic Aptitude Test (SAT) Subject Tests. UH Departmental Exams are also available to test out of certain courses. For more information see the University Testing Services Credit by Examination webpage (http://www.las.uh.edu/uts/uh-credit-by-examination.aspx).

ADMISSIONS REQUIREMENTS FOR THE HONORS COLLEGE

To complete your Honors College application:

- Check the Honors box on the ApplyTexas (www.applytexas.org) application or complete the online application at TheHonorsCollege.com
- Email your academic essay sample to honors@uh.edu
- Email your list of interests and activities to honors@uh.edu

Honors uses the transcripts and test scores submitted with your UH application for admission decisions.

TRANSFER REQUIREMENTS

<table>
<thead>
<tr>
<th>REQUIRED GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>All college-level work attempted</td>
</tr>
<tr>
<td>All calculus courses and math courses with calculus prerequisites attempted</td>
</tr>
<tr>
<td>All college-level chemistry, biology, geology and calculus-based physics courses that apply to UH Engineering degree plan attempted</td>
</tr>
<tr>
<td>All college-level English courses attempted</td>
</tr>
<tr>
<td>All college-level engineering courses attempted</td>
</tr>
</tbody>
</table>

THE APPLICATION.

You must apply online using the ApplyTexas Application (www.applytexas.org).

THE $50 APPLICATION FEE.

Submit your application with a credit card payment or mail a check or money order to the Office of Admissions. Check or money order must be payable to: University of Houston.

YOUR HIGH SCHOOL TRANSCRIPT.

We need your official transcript with your class rank, so ask your high school registrar to send it to the address below. Transcripts must be sent to UH electronically (the preferable method) or in a sealed envelope from the institution. Fax and photocopies are not accepted.

University of Houston Office of Admissions Welcome Center 4400 University Drive Houston, TX 77204-2023

YOUR TEST SCORES.

Official SAT or ACT scores should be sent directly to UH from the testing agency. SAT and ACT policy allows students to send test scores to several colleges. Scores can also be sent through The College Board (https://www.collegeboard.org) (code 6870) or ACT (www.act.org; code 4236).

Please note that your official test scores must have been taken within the last five years.

REQUIREMENTS FOR TRANSFER, INTERNATIONAL AND FORMER STUDENTS

Some students, like transfer students, international students, and former UH students applying for readmission will be required to submit additional information in addition to the application and application fee. To learn more about all admissions processes at UH, visit http://www.uh.edu/admissions/apply/.

Transfer students who have completed over 15 hours of college credit must meet minimum GPA and course requirements for the college, and should submit all updated official college transcripts from any colleges and institutions previously attended. If you have completed 14 or fewer college credit hours, you should submit college and high school transcripts. To learn more about transfer student admissions, visit http://www.uh.edu/admissions/apply/apply-transfer/.

International students will require a $75 application fee, all secondary school transcripts, mark sheets and diplomas, and either TOEFL or IELTS test scores in addition to SAT I or ACT scores. In addition, international applicants will be required to submit an I-20 form to the United States Citizenship and Immigration Services to receive their F-1 student visa. For the I-20 form, you will need to submit a letter of financial backing form, a copy of your passport biographic page, and a student address/photo identification form. Learn more about applying to UH as an international student at http://www.uh.edu/admissions/apply/international/.

Former UH students who are reapplying after an interruption of at least four consecutive semester (or 13 consecutive months) must apply for readmission to UH. The University of Houston considers all courses in the readmission grade point average. This includes UH and non-UH courses. Learn more at http://www.uh.edu/admissions/apply/re-apply-former-student/.

All college-level English courses attempted | 2.5 |
| All college-level engineering courses attempted | 3.0 |
The engineering curriculum at UH can be rigorous at times. Did you know a great way to blow off steam, reduce stress, and increase focus is cardiovascular activity? Cardio increases blood flow, releases endorphins and promotes heart health. As a student at UH, you’ll be granted full use of the Campus Recreation and Wellness Center, so go sweat your stress away!

If you’re living on campus, you’ll be surrounded by excitement 24/7, but you’ll need to remember to catch some zzz’s! According to the National Institutes of Health, the average adult needs 7 to 8 hours of sleep a night. Any less and you may not be functioning at your best, and trust us, you’ll need all your brainpower to ace your engineering courses!

Technology is present in every aspect of our lives. Having a reliable laptop will not only come in handy in classes and with homework, but social media can keep you connected with your friends and family, whether they’re across campus or across the world. (However, if you don’t have the money to invest in a high-powered laptop, it’s not the end of the world! Laptop computers are available at the UH library for check out whenever you need one!)

Engineers are changing the world every day. What drives you to join this elite group of builders, makers and scientists? Is it a famous engineer? A family member? A mechanical feat of science? Find what inspires you and remember it. It will help you power through your classes and find a way to make your mark on the world.

Part of being a great engineer is being open to new concepts, techniques and processes. To keep improving our world, a good engineer will constantly be imagining, “what if?”

COMFY SNEAKERS
The engineering curriculum at UH can be rigorous at times. Did you know a great way to blow off steam, reduce stress, and increase focus is cardiovascular activity? Cardio increases blood flow, releases endorphins and promotes heart health. As a student at UH, you’ll be granted full use of the Campus Recreation and Wellness Center, so go sweat your stress away!

A GREAT PILLOW
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A LAPTOP
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AN INSPIRATION
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AN IMAGINATION
Part of being a great engineer is being open to new concepts, techniques and processes. To keep improving our world, a good engineer will constantly be imagining, “what if?”

A SMILE
At the Cullen College, we work hard, but we play hard, too! Throughout the year we host several parties, like the Beginning of Semester party, the IEEE Chili Cook-off and several department banquets, galas and mixers. Bring your smile (and your appetite) and have a blast!
UNIVERSITY OF HOUSTON

- UH is a designated Tier One Research Institution by the Carnegie Foundation for the Advancement of Teaching.
- 581 student organizations to join.
- Over 5,000 student organizations on campus.
- Over 2,500 on-campus jobs and internships available annually.
- One of the most environmentally responsible universities in the nation (Princeton Review).
- 2nd most ethnically diverse university in the U.S. with students from 127 countries.
- 40 research centers on campus.
- About 6,000 students live on campus in residence halls, apartments and townhouses.
- Frontier Fiesta is a campus-wide carnival held every spring with live music, booths and a BBQ cook-off.
- Wear red for Cougar Red Fridays!
- Over 120 undergraduate majors and minors.
- There is a Health Center located on campus where students, faculty and staff can go for medical attention on a walk-in basis.
- The campus recreation and wellness center has a lounge area, rock wall, indoor and outdoor pools, and various courts and fields in addition to standard gym and fitness equipment.
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Over 6 million people live in the greater Houston metro area.

Houston has an NFL football team, NBA basketball team, MLB baseball team and MLS soccer team.

Houston is known as the “Energy Capital of the World,” and is home to more than 5,000 energy-related firms.

If Houston were an independent nation, it would rank as the world’s 30th largest economy.

The Port of Houston ranks first in the United States in international waterborne tonnage handled and second in total cargo tonnage handled.

Houston is home to the 2nd most Fortune 500 companies of all other major U.S. cities.

The Texas Medical Center, located near downtown Houston, is the world’s largest medical center.

The annual Houston Livestock Show and Rodeo attracts more than 2 million visitors each spring.

More than 90 languages are spoken throughout the Houston area.

Houston’s Museum District offers a range of museums, galleries, and art and cultural institutions.

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If Houston were an independent nation, it would rank as the world’s 30th largest economy.