UNIVERSITY of HOUSTON

Texas Common Course Numbering System (TCCNS)
Transfer Course Equivalencies: 2025-2026 UH Catalog

Engineering
Cullen College of Engineering

I. CORE REQUIREMENTS (41-44 hours)*

Course Name	Hours	TCCNS	UH
Communication (6 hours)			
English Composition I	3	ENGL 1301	ENGL 1301
English Composition II	3	ENGL 1302	ENGL 1302
Mathematics (8 hours)			
Calculus I	4	MATH 2413	MATH 2413
Calculus II	4	MATH 2414	MATH 2414
Life & Physical Sciences (6 hours)			
University Physics I	3	PHYS 2325 **or** 2425	PHYS 2325 **or** 2325/2125[1]
University Physics II	3	PHYS 2326 **or** 2426	PHYS 2326 **or** 2326/2126[1]
Creative Arts (3 hours)			
Choose **one** course from your current college's core approved list.			
Language, Philosophy, & Culture (3 hours)			
Choose **one** course from your current college's core approved list.			
Social & Behavioral Sciences (3 hours)[2]			
Choose **one** course from your current college's core approved list.			
American History (6 Hours)			
Choose **two** courses from your current college's core approved list.			
Government/Political Sciences (6 hours)			
Federal Government	3	GOVT 2305	GOVT 2305
Texas Government	3	GOVT 2306	GOVT 2306
Writing in the Disciplines (3 hours)[3]			
Houston Community College, Lone Star College, and San Jacinto College ONLY:			
Technical & Business Writing	3	ENGL 2311	ENGI 2304

II. MAJOR REQUIREMENTS (19-35 hours)*

Course Name	Hours	TCCNS	UH
All Majors (13 hours)			
General Chemistry I	4	CHEM 1311/1111 **or** 1411	CHEM 1311/1111
Introduction to Engineering	2	ENGR 1201	ENGI 1100
Programming for Engineers	3	ENGR 2304	ENGI 1331
Calculus III	4	MATH 2415	MATH 2415
Biomedical Engineering Majors (22 hours)			
Biology for Science Majors I	4	BIOL 1306/1106 **or** 1406	BIOL 1306/1106
Biology for Science Majors II	4	BIOL 1307/1107 **or** 1407	BIOL 1307/1107
General Chemistry II	4	CHEM 1312/1112 **or** 1412	CHEM 1312/1112
Organic Chemistry I	4	CHEM 2323/2123 **or** 2423	CHEM 2323/2123
Linear Algebra **AND** Differential Equations	6	MATH 2318 AND MATH 2320	MATH 3321[4]
Chemical Engineering Majors (12 hours)			
General Chemistry II	4	CHEM 1312/1112 **or** 1412	CHEM 1312/1112
Organic Chemistry I	4	CHEM 2323/2123 **or** 2423	CHEM 2323/2123
Organic Chemistry II	3 or 4	CHEM 2325 **or** 2425	CHEM 2325
Civil Engineering Majors (23 hours)			
Biology for Science Majors I **OR** Physical Geology **OR** Meteorology	3 or 4	BIOL 1306 **or** 1406 **OR** GEOL 1303 **or** 1403 **OR** GEOL 1347 **or** 1447	BIOL 1306 **OR** GEOL 1303 **OR** GEOL 1347
General Chemistry II	4	CHEM 1312/1112 **or** 1412	CHEM 1312/1112
Engineering Graphics I	3	ENGR 1304	ENGR 1304
Engineering Mechanics I: Statics	3	ENGR 2301	ENGR 2301
Engineering Mechanics II: Dynamics	3	ENGR 2302	MECE 3336
Linear Algebra **AND** Differential Equations	6	MATH 2318 AND MATH 2320	MATH 3321[4]

Computer Engineering Majors (21-23 hours)			
Programming Fundamentals II	3-4	COSC 1337 **or** 1437	COSC 1437
Programming Fundamentals III	3-4	COSC 2336 **or** 2446	COSC 2436
Electrical Circuits I	4	ENGR 2305/2105 or 2405	ECE 2201
Discrete Mathematics	3	MATH 2305	MATH 2305
Linear Algebra **AND** Differential Equations	6	MATH 2318 AND MATH 2320	MATH 3321[4]
University Physics Lab I	1	PHYS 2125	PHYS 2125
University Physics Lab II	1	PHYS 2126	PHYS 2126
Electrical Engineering Majors (11-12 hours)			
Electrical Circuits I	3-4	ENGR 2305/2105 or 2405	ECE 2201
Linear Algebra **AND** Differential Equations	6	MATH 2318 AND MATH 2320	MATH 3321[4]
University Physics Lab I	1	PHYS 2125	PHYS 2125
University Physics Lab II	1	PHYS 2126	PHYS 2126
Industrial Engineering Majors (9 hours)			
Discrete Mathematics[5]	3	MATH 2305	MATH 2305
Linear Algebra **AND** Differential Equations	6	MATH 2318 AND MATH 2320	MATH 3321[4]
Mechanical Engineering Majors (16 hours)[6]			
General Chemistry II	4	CHEM 1312/1112 or 1412	CHEM 1312/1112
Engineering Mechanics I: Statics	3	ENGR 2301	ENGR 2301
Engineering Mechanics II: Dynamics	3	ENGR 2302	MECE 3336
Linear Algebra **AND** Differential Equations	6	MATH 2318 AND MATH 2320	MATH 3321[4]
Petroleum Engineering Majors (14 hours)			
General Chemistry II	4	CHEM 1312/1112 or 1412	CHEM 1312/1112
Physical Geology	4	GEOL 1303/1103 or 1403	GEOL 1303/1103
Linear Algebra **AND** Differential Equations	6	MATH 2318 AND MATH 2320	MATH 3321[4]

Location: UH at Katy in Katy, TX			
Computer Engineering and Analytics Majors (11-12 hours)			
Electrical Circuits I	3-4	ENGR 2305/2105 or 2405	ECE 2201
Linear Algebra **AND** Differential Equations	6	MATH 2318 AND MATH 2320	MATH 3321[4]
University Physics Lab I	1	PHYS 2125	PHYS 2125
University Physics Lab II	1	PHYS 2126	PHYS 2126
Construction Engineering Majors (16 hours)			
General Chemistry II	4	CHEM 1312/1112 **or** 1412	CHEM 1312/1112
Engineering Mechanics I: Statics	3	ENGR 2301	ENGR 2301
Engineering Mechanics II: Dynamics	3	ENGR 2302	MECE 3336
Linear Algebra **AND** Differential Equations	6	MATH 2318 AND MATH 2320	MATH 3321[4]
Systems Engineering Majors (6 hours)			
Linear Algebra **AND** Differential Equations	6	MATH 2318 AND MATH 2320	MATH 3321[4]

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International students must also meet English Language Proficiency Requirements by meeting one of the following test score requirements TOEFL(PBT)of 550, TOEFL(iBT) of 79, or IELTS Overall of 6.5. International transfer students may be exempt from submitting a TOEFL or IELTS score by completing 30 or more semester credit hours from a U.S. accredited institution of higher education, including coursework equivalent to UH English Composition ENGL 1301 and ENGL 1302 with a grade of "C" or better and/or the completion of an AA or AS degree from an accredited institution of higher education.

[1]PHYS 2125 & PHYS 2126 are required for the Electrical Engineering, Computer Engineering, and Computer Engineering and Analytics majors.

[2]Computer Engineering, Computer Engineering and Analytics, Electrical Engineering and Chemical Engineering majors must take ECON 2302; this course also counts for your SBS core requirement.

[3]UH is partnered with the Houston Community College System, San Jacinto College District, and Lone Star College System. Students at these institutions can complete this requirement with the English course ENGL 2311 (TCCNS). All other transferring students must take the engineering course ENGI 2304 at UH.

[4]Credit for BOTH Linear Algebra and Differential Equations courses will satisfy the MATH 3321 Engineering Math degree requirement.

[5]MATH 2305 is an approved technical course in the degree plan.

[6]Mechanical majors should take a semester long computer-based drafting course, ENGR 1304 is recommended. This requirement is waived for students who completed one year of mechanical drawing or general drafting in the 10th, 11th, or 12th grade.

All courses with a UH Engineering rubric on the transfer guide (ECE, ENGI, ENGR, and MECE) must be taken in transfer PRIOR TO the first semester of matriculation into the College of Engineering. (Current UH Engineering majors CANNOT continue to take these rubrics in transfer.)

***TRANSFER CREDIT LIMIT:**

A maximum of 66 hours (grades C- or better) of 1000/2000 level transfer hours may be applied toward a UH degree. These are the 66 hours that best meet the degree requirements for your UH degree combination (Major, Double Major, Double Degree, and Minor).

- Students who currently attend UH should refer to their departmental advisor **BEFORE** taking courses at another college.
- Courses listed above are **suggested** courses for this degree. Other courses in combination may apply to a degree.
- See department or course catalog for further information on your degree plan.

Texas Undergraduate In-State Tuition Enrollment Cap

Under current rules, Texas resident undergraduate students who enrolled for the first time in a Texas public institution of higher education in fall 1999 or later may be charged a premium tuition rate after they reach an established enrollment cap. For details, see https://www.uh.edu/provost/policies-resources/student/#enrollment-cap

How do you feel about the attached addition on the transfer guide? No matter what we put, half of all the students will misunderstand it, and the other half will assume that it applies to them, even if it doesn't. What I'm trying to communicate is that, for example: If you have been admitted into Engineering in the Fall, you can still take Engineering courses in transfer the summer prior to that matriculation semester.Fo