

HCC Associate of Science in Electrical Engineering to UH-Downtown

Bachelor of Science Control & Instrumentation Engineering Technology

4 – Year Suggested Academic Plan for Transfer, Effective 2025-2026 Catalog Year							
First Year Freshman							
Fall Semester				Spring Semester			
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
ENGR 1201	ENGR 1302	Approved Course – See Catalog for Details	2	ENGR 2304	ENGR 1333	Programming for Engineers	3
ENGL 1301	ENG 1301	Composition & Rhetoric I (010)	3	ENGL 2311	ENG 3XXX	Communication Core Option (010)	3
HIST #3##	HIST 130X	American History I or II (060)	3	MATH 2414	MATH 2402	Calculus II	4
MATH 2413	MATH 2401	Calculus I (020)	4	PHYS 2325/2125	PHYS 2401/2101	University Physics I Lecture/Lab (030)	4
CHEM 1311/1111	CHEM 1307/1107	General Chemistry I Lecture/Lab (030)	4				
Total			16	Total			14
Second Year Sophomore							
Fall Semester				Spring Semester			
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
GOVT 2305	POLS 2305	Federal Government (070)	3	ENGR 2305/2105	EET 1411	Electric Circuits and Lab	4
ECON 2308	ENGR 3302	Engineering Economics	3	MATH 2320 (4)	MATH 3301	Differential Equations	3
MATH 2415 (3)	MATH 2403	Calculus III	4	Creative Arts Core option	(Core 050)	Creative Arts Core Option (050)	3
PHYS 2326/2126	PHYS 2402/2102	University Physics II Lecture/Lab	4	Lang. Phil and Culture	(Core 040)	Approved Language, Philosophy and Culture Course (040)	3
				ENGR 2306/2106	EET 2332/2132	Digital Systems Lecture/Lab	4
Total			14	Total			17
Summer Session							
	EET 2322/2122 (5)	Analog Electronics Lecture/Lab	4				
Total			4				
Third Year Junior							
Fall Semester				Spring Semester			
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
	EET 3335/3135	Automation & Control	4		ENGR 4128	CIET Senior Project Design	1
	EET 3334	Electrical Power Systems	3		ENGR 3410	Process Modeling & Simulation	4
	EET 3352/3152	Measurement & Instrumentation	4		(Core 080)	Social & Behavioral Science Core Option (080)	3
	HIST 1306	United States History after 1877 (060)	3		ENGR 3307	Applied Thermodynamics	3
					(Core 050)	Creative Arts Core option (050)	3
Total			14	Total			14
Fourth Year Senior							
Fall Semester				Spring Semester			
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs.
	ENGR 3332	Engineering Communications & Ethics	3		ENGR 4306/4106	Process Control Systems/Lab	4
	POLS 2306	Texas Government (070)	3		ENGR 4338	Safety Instrumented Systems	3
	ENGR 3308	Fluid Mechanics	3		EET 4336/4136	Data Communications/Lab	4
	ENGR 4302/4102	Process Design And Operation Lab	4		(Core 090)	Component Area Core Option (090)	3
	ENGR 4328	Sr Project in Control & Instrumentation	3				
Total			16	Total			14



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Notes/Comments (AS in EE and CIET at UHD):

- (1) (4) EDUC 1300 is required for First Time in College (FTIC) students only. Non-FTIC students should enroll in SPCH 1311
- (2) Student may be placed in MATH 2413 directly through placement testing OR by completing all MATH prerequisites (MATH 1314, 1316, and 2412). Student should consult with an advisor regarding placement testing.
- (3) Calculus III is required for HCC AS in EE but not required for BS in ET-CIET degree at UHD but can be used as a free elective if needed.
- (4) MATH 2320 is required for HCC AS in EE but not required for BS in ET-CIET degree at UHD but can be used as UL required CIET elective.
- (5) Students are highly encouraged to take EET 2322/2122 in the summer or graduation can be pushed back an academic year.

Transfer Information

Program Specific Information:

Bachelor of Science – Control & Instrumentation Engineering Technology

Program Specific Requirements:

- The BS in Control & Instrumentation Engineering Technology at UHD is a 120-credit-hour degree program.
- The BS in Control & Instrumentation Engineering Technology requires a grade of “C” or higher in all upper-level ENGR and EET courses and to be applied to the degree.
- The BS in Control & Instrumentation Engineering Technology does not allow more than two grades of “D” in Math, Physics, and Chemistry.

Program Admissions Requirements:

- Transfer Admission Criteria (15 or more earned college-level credit hours) 2.0 GPA
- Student must be in Good Academic Standing at last institution attended
- UHD will calculate the higher grade received on duplicate courses for GPA requirements

Transfer of Credit & Student Benefits:

- Credits from HCC that are transferrable to UHD degree programs may be specified in any program-to-program articulation agreement.
- Reverse transfer
- HCC students will be allowed access to academic advising services at UHD
- HCC Honors students admitted to UHD will receive:
 - Acceptance to UHD Honors Program with a minimum GPA (GPA varies by the College in which the program resides)
 - UHD will accept a minimum of 12 hours of transfer Honors credit; eligible for merit and need-based aid commensurate with qualifications

Field Of Study:

Designated Core Courses:

ECON 2301 MATH 1324

Discipline Foundation Courses:

ECON 2302 ACCT 2301 ACCT 2302 BUSI 1301

FOS courses are guaranteed to transfer and apply to degree programs at all Texas public institutions of higher education, including community colleges, state and technical colleges, universities, and health-related institutions. This means the courses will transfer and apply from a two-year to a four-year institution, from a two-year to a two-year institution, from a four-year to a two-year institution, and from a four-year to a four-year institution.

[Texas Direct - Texas Higher Education Coordinating Board](#)