

# HCC Associate of Science Computer Science to UH-Downtown Bachelor of Science (Data Science)



	4 – Y	ear Suggested Academic Pla			ive 2025-20	26 Catalog Year	
		Fire	st Yea	r Freshman			
Fall Semester				Spring Semester			
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
EDUC 1300 (1)	UHD 13XX	Core (090)	3	HIST 1302	HIST 1306	United States History after 1877 (Core 060)	3
ENGL 1301	ENGL 1301	Composition I (Core 010)	3	MATH 2413 (2) (3)	MATH 2401	Calculus I	4
MATH 2412 (2) (3)	Math 1404	Pre-Calculus Math (Core 020)	4	ENGL 1302	ENG 1302	Composition II (Core 010)	3
HIST 1301	HIST 1305	United States History to 1877 (Core 060)	3	COSC 1437	CS 2411	Programming Fundamentals II	4
COSC 1436	CS 1411	Programming Fundamentals I	4				
Total			17	Total			14
		Seco	nd Yea	ar Sophomore			
Fall Semester				Spring Semester			
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
GOVT 2305	POLS 2305	Federal Government (Core 070)	3	GOVT 2306	POLS 2306	Texas Government (Core 070)	3
PHYS 2325/2125	PHYS 2401/2101	University Physics I Lecture/Lab (Core 030)	4	PHYS 2326/2126	PHYS 2402/2102	University Physics II Lecture/Lab (Core 030)	4
MATH 2414	MATH 2402	Calculus II	4	COSC 2425	CS 2301	Computer Organization	4
COSC 2436	CS 3304	Programming Fundamentals III	4	Social & Behavioral Sciences Elective	Core (080)	Social & Behavioral Sciences (Core 080)	3
Total			15	Total			14
		Т	hird Y	ear Junior			
Fall Semester				Spring Semester			
нсс	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
	DATA 2401	Data Science I	4		CS 2311	Python Data Structures	3
	MATH 3302	Probability & Statistics	3		DATA 3401	Data Science II	4
	MATH 2422	Linear Algebra: Multivariable Calculus w/ Applications	4		CS Domain Focus	CS Domain Focus	3
	MATH 2305	MATH 2305 Discrete Mathematics	3		Core (050)	Creative Arts (Core 050)	3
					Core (090)	(Core 090)	3
Total			14	Total			16
		Fo	urth Y	ear Senior			
		Fall Semester			S	pring Semester	
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs.
	DATA 3402	Data Collection, Transformation & Curation	4		Core (040)	Language, Philosophy & Culture Lab (Core 040)	3
	STAT 3333	Statistical Inference	3		DATA 4320	Advanced Machine Learning	3
	Data 4419	Statistical & Machine Learning	4		UL course	Additional UL Course: see catalog	3
	STAT 4303 or STAT 4311	Decision Mathematics or Operations Research	3		STAT 4310	Applied Regression	3
	MATH 3323	Numerical Linear Algebra and Optimization	3		Data 4300	Ethics for Data Science	3
Total		- Parineutori	17	Total			15

Notes/Comments (AS in Computer Science to BS in Data Science 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) UHD does not require MATH 2412 for the Bachelor of Science in Computer Science degree plan, but the hours can be used to satisfy Free Electives in the degree.
- (4) Students who graduate with a BS in DS will earn two minors (Statistics and Mathematics).
- (5) Students who transfer an AS in Computer Science to BS in DS may have more than 120 hours. Students should consult with an advisor.



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### Progrom Specific Information: Bachelor of Science – Data Science

#### **Program Specific Requirements:**

- The BS in Data Science at UHD is a 120-credit-hour degree program.
- All The Bachelor of Science Degree in Data Science requires a grade of "C" or higher in all upper-level courses to be applied to the degree.

#### **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:
  - o 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 institution, from a four-year to a two-year institution, and from a four-year institution.

Texas Direct - Texas Higher Education Coordinating Board



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