

HOUSTON HCC Associate of Science Biology to UH-Downtown Bachelor of Science (Data Science)



	4 – Y	ear Suggested Academic Pla	n for	Transfer, Effec	tive 2025-2026	Catalog Year		
			st Yea					
Fall Semester				Spring Semester				
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs	
EDUC 1300 (1)	UHD 13XX	(Core 090)	3	ENGL 1302	ENG 1302	Composition II (Core 010)	3	
BIOL 1306/1106	BIOL 1301/1101	Biology I for Science Majors	4	CHEM 1412	CHEM 1308/1108	General Chemistry II Lecture/Lab (Core 030)	4	
CHEM 1311/1111	CHEM 1307/1107	General Chemistry I Lecture/Lab (Core 030)	4	MATH 2413	MATH 2401	Calculus I	4	
ENGL 1301	ENG 1301	Composition & Rhetoric I (Core 010)	3	BIOL 1407	BIOL 1302/1102	Biology for Science Majors II	4	
MATH 2412 (2)	MATH 1404	Pre-calculus (Core 020)	4					
Total			18	Total			15	
		Seco	nd Yea	r Sophomore				
Fall Semester				Spring Semester				
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs	
CHEM 2423 (3)	CHEM 2301/2101	Organic Chemistry I	4	BIOL 2421 (3)	MBIO 2305/2105	General Microbiology	4	
PHYS 1401	PHYS 1307/1107	College Physics I	4	CHEM 2425 (3)	CHEM 2302/2102	Organic Chemistry II	4	
GOVT 2305	POLS 2305	Federal Government (Core 070)	3	BIOL 2416	BIOL 2303/2103	General Genetics Lecture/Lab	4	
HIST 1301	HIST 1305	United States History to 1877 (Core 060)	3	HIST 1302	HIST 1306	United States History after 1877 (Core 060)	3	
Social & Behavioral Sciences (4)	Core (080)	Social & Behavioral Sciences (Core 080)	3	Creative Arts (4)	Core (050)	Creative Arts (050)	3	
Total			17	Total			18	
		TI	hird Ye	ear Junior				
Fall Semester				Spring Semester				
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs	
	CS 1411	Introduction to Computer with Python	4		CS 2311	Python Data Structures	3	
	DATA 2401	Data Science I	4		DATA 3401	Data Science II	4	
	MATH 2305	Discrete Mathematics Structures	3		BIOL Domain Focus	BIOL Domain Focus	3	
	Core (040)	Language, Philosophy & Culture Lab (Core 040)	3		Oral Communications Core (090)	Oral Communications (Core 090)	3	
	POLS 2306	Texas Government (Core 070)	3		MATH 2422	Linear Algebra: Multivariable Calculus w/ Applications	4	
	MATH 2421	Differential and Integral Calculus with Applications	4		MATH 3302	Probability & Statistics	3	
Total			21	Total			20	
		Fo	urth Y	ear Senior				
Fall Semester				Spring Semester				
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs	
	DATA 3402	Data Collection, Transformation & Curation	4		DATA 4320	Advanced Machine Learning	3	
	STAT 3333	Statistical Inference	3		UL course	Additional UL Course: see catalog	3	
	Data 4419	Statistical & Machine Learning	4		STAT 4310	Applied Regression	3	
	STAT 4303 or STAT 4311	Decision Mathematics or Operations Research	3		Data 4300	Ethics for Data Science	3	
	MATH 3323	Numerical Linear Algebra and	3		BIOL Domain	BIOL Domain Focus	3	
	WATTI 3323	Optimization			Focus	BIOL Domain 1 ocus	<u> </u>	

Notes/Comments (AS in Biology to BS in Data Science at UHD):

- (1) EDUC 1300 is required for First Time in College (FTIC) students only. If not FTIC, take PHED 1164.
- Students may be placed in MATH 2412 through placement testing OR by completing all MATH prerequisites (MATH 1314, 1316, and 2412). Student should consult with advisor regarding placement testing.
- (3) Courses required for AS in Biology but not BS in Data Science. However, some courses serve as prerequisites for the upper-level biology domain focus courses towards the Data Science degree.
- (4) Courses not required for AS in Biology but required for BS in Data Science.

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Transfer Information

Program 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 degree candidates must have a 2.0 GPA average and a grade of "C" or better in all upper level courses.

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, and from a four-year to a four-year institution.

Texas Direct - Texas Higher Education Coordinating Board



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