Transfer Degree Map: HCC Associate of Science Geology to UH-Downtown Bachelor of Science (Data Science)

4 – Year Suggested Academic Plan for Transfer

*Based on UHD Catalog year of 2021-2022 Note: There may be some minor changes in courses due to recently approved course updates.

First Year – Freshman

Fall Semester				Spring Semester			
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
EDUC 1300	Elective	Learning Framework	3	CHEM 1412	CHEM 1308	General Chemistry II	4
ENGL 1301	ENGL 1301	Composition I	3	HIST 1302	HIST 1306	United States History after 1877	3
CHEM 1411	CHEM 1307	General Chemistry I	4	MATH 2413	MATH 2401	Fundamentals of Calculus with Applications	4
HIST 1301	HIST 1305	United States History to 1877	3	ENGL 1302 or ENGL 2311	ENG 1302	Composition II	3
Total			13	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	3	GOVT 2306	POLS 2306	Texas Government	3
PHYS 2325	PHYS 2401	University Physics I	3	PHYS 2326	PHYS 2402	University Physics II	3
PHYS 2125	PHYS 2101	University Physics Laboratory I	1	PHYS 2126	PHYS 2102	University Physics Laboratory II	1
MATH 2414	MATH 2402	Calculus II	4	Creative Arts	Creative Arts	Creative Arts UHD Course Options	3
GEOL 1403	GEOL 1305	Physical Geology	4	Elective	Elective	Language, Philosophy, Culture	3
				GEOL 1404	GEOL 1306	Historical Geology	4
Total			15	Total			17

Third Year – Junior

Fall Semester				Spring Semester			
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
	CS 1311	Introduction to Computing with Python	3		CS 2311	Python Data Structures	3
	DATA 2401	Data Science I	3		DATA 3401	Data Science II	3
	MATH 2305	Discrete Mathematics Structures	3		MATH 3423	Advanced Linear Algebra and Optimization	4
	MATH 2422	Linear Algebra: Multivariable Calculus w/ Applications	3		STAT 3333	Statistical Inference	4
	MATH 3302	Probability & Statistics	3		PHIL 2305	Introduction to Ethics	3
Total			15	Total			17

Fourth Year – Senior

Fall Semester				Spring Semester			
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
	DATA 3402	Data Collection, Transformation & Curation	3		DATA 4319	Statistical and Machine Learning	3
	PHIL 3301	Moral Philosophy I	3		DATA 4395	Senior Project in DS or Equivalent	3
	STAT 4303 or STAT 4311	Decision Mathematics or Operations Research	4		STAT 4310	Applied Regression	3
	GEOL UL	Domain Focus Elective	3		GEOL UL	Domain Focus Elective	3
	Domain Focus	Domain Focus Elective	3				
Total			16	Total			12

Notes/Comments (AS in Geology 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.

(2) Students may be placed in MATH 2413 through placement testing OR by completing all MATH prerequisites (MATH 1314, 1316, and 2412). Student should consult with advisor regarding placement testing.

(3) Electives may be selected to complete the minimum 120 semester credit hours for completion of the degree at UHD. Student should consult with an advisor.

Articulation Agreement Information – Standard and Program to Program (P2P)

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

Standard Agreement & P2P Agreement
(Associate of Science in Geology to Bachelor of Science in Data Science)

Program Admission 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
- For a course taken more than once, the highest grade will be transferred

Program Specific Requirements

- The Bachelor of Science Degree in Data Science requires a grade of "C" or higher in all upper-level science courses to be applied to the degree.