Transfer Degree Map: HCC Associate of Science Computer Science 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

HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
Fall Semester				**Spring Semester**			
EDUC 1300	UHD 13XX	Core (090)	3	HIST 1302	HIST 1306	United States History after 1877	3
ENGL 1301	ENGL 1301	Composition I	3	MATH 2413	MATH 2401	Calculus I	4
MATH 2412	Math 1404	Pre-Calculus Math	4	ENGL 1302	ENG 1302	Composition II	3
HIST 1301	HIST 1305	United States History to 1877	3	COSC 1437	CS 2410	Programming Fundamentals II	4
COSC 1436	CS 1410	Programming Fundamentals I	4				
Total			**17**	**Total**			**14**

Second Year – Sophomore

HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
Fall Semester				**Spring Semester**			
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	COSC 2425	CS 2301	Computer Organization	4
COSC 2436	CS 3304	Programming Fundamentals III	4	Elective	Elective	Social & Behavioral Science	3
Total			**15**	**Total**			**14**

Third Year – Junior

HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
Fall Semester				**Spring Semester**			
	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	4
	MATH 2305	Discrete Mathematical Structures	3		MATH 3423	Advanced Linear Algebra and Optimization	4
	MATH 2422	Linear Algebra: Multivariable Calculus w/ Applications	3		STAT 3333	Statistical Inference	3
	MATH 3302	Probability and Statistics	3		PHIL 2305	Introduction to Ethics	3
Total			**15**	**Total**			**17**

Fourth Year – Senior

HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs.
Fall Semester				**Spring Semester**			
	DATA 3402	Data Coll.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	3		STAT 4310	Applied Regression	3
	CS UL Elective	Domain Focus Course	3		Free Elective	Free Elective	3
					Creative Arts	Select from UHD Creative Arts core curriculum	3
Total			**12**	**Total**			**15**

Notes/Comments (AS in Computer Science 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.

*Based on UHD & HCC Catalog year of 2018-2019 Note: There may be some minor changes in courses due to recently approved course updates.

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 Computer Science 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.