



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



## 4 – Year Suggested Academic Plan for Transfer

### 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
MATH 2412	MATH 1404	Pre-Calculus Math	4	MATH 2413	MATH 2401	Fundamentals of Calculus with Applications	4
CHEM 1411	CHEM 1307	General Chemistry I	4	ENGL 1302	ENG 1302	Composition II	3
HIST 1301	HIST 1305	United States History to 1877	3				
<b>Total</b>			<b>17</b>	<b>Total</b>			<b>14</b>

### Second Year – Sophomore

Fall Semester				Spring Semester			
HCC	UHD	Course Name	Hrs	HCC	UHD	Course Name	Hrs
GOVT 2305	POLS 2305	Federal Government	3	MATH 2415	MATH 2403	Calculus III	4
PHYS 2325	PHYS 2401	University Physics I	3	GOVT 2306	POLS 2306	Texas Government	3
PHYS 2125	PHYS 2101	University Physics Laboratory I	1	PHYS 2326	PHYS 2402	University Physics II	3
MATH 2414	MATH 2402	Calculus II	4	PHYS 2126	PHYS 2102	University Physics Laboratory II	1
Creative Arts	Creative Arts	Creative Arts UHD Course Options	3	Elective	Elective	Social & Behavioral Science	3
<b>Total</b>			<b>14</b>	<b>Total</b>			<b>14</b>

### 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	4		PHIL 2305	Language, Philosophy and Culture	3
<b>Total</b>			<b>16</b>	<b>Total</b>			<b>17</b>

### 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
	Domain Focus Elective	Domain Focus Elective	3		Domain Focus Elective	Domain Focus Elective	3
	Domain Focus Elective	Domain Focus Elective	3		Domain Focus Elective	Domain Focus Elective	3
<b>Total</b>			<b>16</b>	<b>Total</b>			<b>15</b>

**Notes/Comments (AS in Mathematics 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

### Optional Partnership

- [Joint Admission](#) provides students the opportunity to maximize utilization of facilities and programs offered jointly by HCC and UHD:
  - Student ID at HCC and UHD
  - Student computer/internet account, access to computer labs and access to libraries at HCC and UHD
  - Student access to sporting events at UHD
  - Free electronic transfer transcript transmission/evaluation
  - Application fees will be waived for HCC students who apply to UHD within 6 months of earning an Associate's degree.
- Cooperative Advising allows students to access embedded advisors at both institutions for students who are:
  - Admitted (either through regular or joint admissions) at UHD
  - All HCC students with an expressed interest in transferring to UHD
  - Advising for all degree programs at UHD
- Employee discount provides HCC employees an opportunity to apply discounts or waive fees at UHD:
  - Application fee will be waived for UHD employees
  - Recognize the eligibility of HCC employees to apply for scholarship programs.

## **Standard Agreement & P2P Agreement**

(Associate of Science in Mathematics 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.