

Name:

Date:

PeopleSoft ID:

Check List for BS in Mathematics - Data Science Option

Tr	UH	MATHEMATICS (46 Hours; MUST have 30 advanced hours):
		MATH 2413 (1431) Calculus I Fall, Spring, Sum
		MATH 2414 (1432) Calculus II Fall, Spring, Sum
		MATH 2415 (2433) Calculus III Fall, Spring, Sum
		MATH 2131 Linear Algebra Lab Fall, Spring, Sum
		MATH 2318 (2331) Linear Algebra Fall, Spring, Sum
		MATH 3325 Transition to Advanced Mathematics Fall, Spring, Sum
		MATH 3331 Differential Equations Fall, Spring, Sum
		MATH 3333 Intermediate Analysis Fall, Spring, Sum
		MATH 3338 Probability Fall, Spring, Sum
		MATH 3339 Statistics for the Sciences Fall, Spring, Sum
		or 3349 Inferential Statistics
		MATH 4389 Survey of Undergraduate Mathematics Fall, Spring, Sum
		MATH ___ 3 hours APPROVED advanced MATH elective *
		MATH 43 ___ 3 hours 4000-level MATH elective **

*Elective Must Come From List Below:	
(Check Catalog for Pre-Requisites)	
MATH 3330	Abstract Algebra
MATH 3334	Advanced Multivariable Calculus
MATH 4315	Graph Theory with Applications
MATH 4320	Introduction to Stochastic Processes
MATH 4331	Introduction to Real Analysis I
MATH 4335	Partial Differential Equations
MATH 4339	Multivariate Statistics
MATH 4364	Numerical Analysis
MATH 4366	Numerical Linear Algebra
MATH 4377	Advanced Linear Algebra I

Can be satisfied by any 4000-level MATH elective

MATH SENIOR SEQUENCE (6 Hours):		
		MATH 4322 Introduction to Data Science and Machine Learning
		MATH 4323 Data Science and Statistical Learning

COMPUTER SCIENCE REQUIREMENTS (6 Hours):		
		COSC 1336 (1306) Computer Science & Programming
		COSC 2306 Data Programming
		OR 2436 (2430) Programming and Data Structures

NSM Natural Sciences (14 Hours):		
		1 hr Natural Sciences Lab***
		1 hr Natural Sciences Lab***
		3 hours NSM Approved Natural Science***
		3 hours NSM Approved Natural Science***
		3 hours NSM Approved Natural Science
		3 hours NSM Approved Natural Science

***Indicates ALL courses must be in the same subject and approved for NSM majors

CORE (Check UH Catalog or UH Core Website for Pre-Requisites)

Tr	UH	COMMUNICATION (6 Hours):
		ENGL 1301 (1303) First Year Writing I
		ENGL 1302 (1304) First Year Writing II

STATE REQUIREMENTS (12 Hours):		
		American History (3 Hours)
		American History (3 Hours)
		GOVT 2305 (POLS 1337) U.S. Government: Congress, President, and Court
		GOVT 2306 (POLS 1336) U.S. and Texas Constitutions and Politics

FROM APPROVED CORE LIST (12 Hours): Choose from UH Core Website		
		Creative Arts (3 Hours)
		Language, Philosophy & Culture (3 Hours)
		Social & Behavioral Sciences (3 Hours)
		Writing in the Disciplines (3 Hours)*

Students are strongly encouraged to fulfill the NSM Capstone by completion of a minor in **Computer Science** or **Data Science-Computer Science**
See Undergraduate Catalog for requirements.

NSM CAPSTONE (Minimum 6 Advanced Hours):

- Must choose from one of the following:
- | | |
|---------------------------------------|--|
| <input type="checkbox"/> Minor | <input type="checkbox"/> Senior Research Project |
| <input type="checkbox"/> Double Major | <input type="checkbox"/> Senior Honors Thesis |
| <input type="checkbox"/> Dual Degree | <input type="checkbox"/> teachHouston |

Tr	UH	

FREE ELECTIVES

(Additional hours to complete a total of 120 hours. Must complete at least 36 advanced

Tr	UH	

RULES YOU NEED TO KNOW:

**Numbers in parentheses indicate UH course numbers prior to Fall 2021.*

1. MINIMUM of a 2.00 GPA in cumulative, major, and minor GPA to graduate
2. **PRE-REQ RULE:** Must earn C- or better in pre-requisite for MATH courses
3. **C- RULE:** MAXIMUM of 6 hours of grades below C- allowed in MATH courses
4. LAST 30 hours must be exclusively completed at UH
5. MAXIMUM of 6 W's allowed during entire undergraduate career
6. MINIMUM of 36 advanced hours and 120 total hours to graduate
7. MAXIMUM of 66 lower level transfer hours may be applied towards UH degree

Advisor _____