### Rules You Need to Know:

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 prerequisite for MATH courses
3. **C- Rule:** Maximum of 6 hours of grades below C- allowed in UH 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

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### Mathematics (46 Hours; MUST have 30 advanced hours):

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<th>Course</th>
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<td>MATH 1431 Calculus I Fall, Spring, Sum</td>
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<td>MATH 1432 Calculus II Fall, Spring, Sum</td>
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<td>MATH 2131 Linear Algebra Lab Fall, Spring, Sum</td>
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<td>MATH 2331 Linear Algebra Fall, Spring, Sum</td>
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<td>MATH 2433 Calculus III Fall, Spring, Sum</td>
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<td>MATH 3111 Functions and Modeling Fall</td>
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<td>MATH 3325 Transition to Advanced Mathematics Fall, Spring, Sum</td>
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<td>MATH 3330 Abstract Algebra Fall, Spring, Sum</td>
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<td>MATH 3331 Differential Equations Fall, Spring, Sum</td>
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<td>MATH 3333 Intermediate Analysis Fall, Spring, Sum</td>
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<td>MATH 3379 Introduction to Higher Geometry</td>
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<td>MATH 4389 Survey of Undergraduate Mathematics Fall, Spring, Sum</td>
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<td>MATH 43_____</td>
<td>3 hours 4000-level MATH elective</td>
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### Mathematics Senior Sequence (6 Hours):

- MATH 43_____ | 3 hours 4000-level MATH elective |          |
- Possible Senior Sequences: 4331/4332, 4377/4378, 4335/4336, 4335/4362, 4350/4351, 4364/4365, 4364/4366, 4320/4380, 4309/4310

### 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***
- BIO/L/CH/PHYS 4340 (Research Methods for teachHOUSTON)

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

### Core Communication (6 Hours):

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<td>ENGL 1303 First Year Writing I</td>
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<tr>
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<td>ENGL 1304 First Year Writing II</td>
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### State Requirements (12 Hours):

- HIST 1376 or 1377 The United States to 1877
- HIST 1378 or 1379 The United States Since 1877
- POLS 1336 U.S. and Texas Constitutions and Politics
- POLS 1337 U.S. Government: Congress, President, and Court

### From Approved Core List (12 Hours):

- Language/Philosophy/Culture (3 Hours)
- Creative Arts (3 Hours)
- Social & Behavioral Science (3 Hours)
- Writing in the Disciplines (3 Hours)

### Examples of 4000-Level MATH Electives:

- S MATH 4309 Mathematical Biology
- F MATH 4310 Biostatistics
- S MATH 4315 Graph Theory with Applications
- F MATH 4320 Introduction to Stochastic Processes
- F MATH 4322 Introduction to Data Science and Machine Learning
- S MATH 4323 Data Science and Statistical Learning
- F/S MATH 4331/4332 Introduction to Real Analysis
- ** MATH 4335/4336 Partial Differential Equations
- ** MATH 4339 Multivariate Statistics
- ** MATH 4350/4351 Differential Geometry
- S MATH 4355 Mathematics of Signal Representation
- ** MATH 4362 Theory of Ordinary Differential Equations
- F/S MATH 4364/4365 Numerical Analysis
- F MATH 4366 Numerical Linear Algebra
- F/Su MATH 4377/4378 Advanced Linear Algebra I
- S MATH 4378 Advanced Linear Algebra II
- S MATH 4380 Mathematical Introduction to Options
- S MATH 4383 Number Theory
- F MATH 4388 History of Mathematics

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### TeachHOUSTON Program (NSM Capstone):

- CUIN 1101 Step 1 - Teaching Science and Mathematics
- CUIN 1102 Step 2 - Teaching Science and Mathematics
- CUIN 3350 Knowing and Learning Science and Mathematics
- CUIN 3351 Classroom Interactions in Science and Mathematics
- CUIN 3352 Perspectives Mathematics and Science
- CUIN 4350 Multiple Teaching Strategies for Math and Science
- EDUC 4314 Student Teaching: Secondary
- EDUC 4315 Student Teaching: Secondary

### Research Methods Requirement is listed within the NSM Natural Sciences Requirement

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### Free Electives:

(Additional hours to complete a total of 120 hours, including at least 36 advanced hours)