Check List for BS in Mathematics - teachHOUSTON

**EXAMPLES OF 4000-LEVEL MATH ELECTIVES**

- **S** MATH 4309 Mathematical Biology
- **E** 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
- **S** MATH 4335/4336 Partial Differential Equations
- **S** MATH 4339 Multivariate Statistics
- **S** MATH 4350/4351 Differential Geometry
- **S** MATH 4355 Mathematics of Signal Representation
- **S** MATH 4362 Theory of Ordinary Differential Equations
- **F/S** MATH 4364/4365 Numerical Analysis
- **F** MATH 4366 Numerical Linear Algebra
- **F/Su** MATH 4377 Advanced Linear Algebra I
- **S/Su** MATH 4378 Advanced Linear Algebra II
- **S** MATH 4380 Mathematical Introduction to Options
- **F** MATH 4383 Number Theory
- **F** MATH 4388 History of Mathematics

**Indicates the course is not offered at consistent intervals**

**FREE ELECTIVES:**

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

**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 UH MATH courses
4. **LAST 30 hours** must be exclusively completed at UH
5. **MAXIMUM** of 6 Ws 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: ____________________________

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**NSM Natural Sciences (14 Hours):**

<table>
<thead>
<tr>
<th>UH</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 hr Natural Sciences Lab***</td>
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<tr>
<td>1 hr Natural Sciences Lab***</td>
<td></td>
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<tr>
<td>3 hours NSM Approved Natural Science***</td>
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**BIO/ICHEM/PHYS 4340 (Research Methods for teachHouston)**

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

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**COMMUNICATION (6 Hours):**

<table>
<thead>
<tr>
<th>UH</th>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>ENGL 1301 (1303) First Year Writing I</td>
<td></td>
</tr>
<tr>
<td>ENGL 1302 (1304) First Year Writing II</td>
<td></td>
</tr>
</tbody>
</table>

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**STATE REQUIREMENTS (12 Hours):**

<table>
<thead>
<tr>
<th>UH</th>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>American History (3 Hours)</td>
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<tr>
<td>American History (3 Hours)</td>
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</tr>
<tr>
<td>GOVT 2305 (POLS 1337) U.S. Government: Congress, President, and Courts</td>
<td></td>
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<tr>
<td>GOVT 2306 (POLS 1336) U.S. and Texas Constitutions and Politics</td>
<td></td>
</tr>
</tbody>
</table>

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**FROM APPROVED CORE LIST (12 Hours):** Choose from UH Core Website

<table>
<thead>
<tr>
<th>UH</th>
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<tbody>
<tr>
<td>Creative Arts (3 Hours)</td>
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<tr>
<td>Language, Philosophy &amp; Culture (3 Hours)</td>
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</tr>
<tr>
<td>Social &amp; Behavioral Sciences (3 Hours)</td>
<td></td>
</tr>
<tr>
<td>Writing in the Disciplines (3 Hours)</td>
<td></td>
</tr>
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