**2023 - 2024 Old Dominion University Catalog**

**Bachelor of Science in Mathematics with a Major in Big Data Analytics (BS) (w/ VCCS Equivalencies)**

Sample four year curriculum with a suggested ordering of courses. Students may reorder as needed.

* Indicates not automatically waived with transferrable associate's degree. C or better required for transfer. Courses in green are waived by the completion of an Associate degree (Not eligible for Applied Associate degrees). Assassins in Science recommended for ease of transfer.

### Year 1 - Freshman (32 Credits)

<table>
<thead>
<tr>
<th>FALL SEMESTER (16 credits)</th>
<th>SPRING SEMESTER (16 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Education Coursework</strong></td>
<td><strong>General Education Coursework</strong></td>
</tr>
<tr>
<td>Human Behavior: ECON 202S recommended</td>
<td>Oral Communication</td>
</tr>
<tr>
<td>MATH 211 (4 credits)</td>
<td>MTH 212 (4 credits)</td>
</tr>
<tr>
<td>Information Literacy and Research: CS 121G preferred. IT 150G is acceptable substitute for the Actuarial Mathematics Major or the Big Data Analytics Major</td>
<td>Philosophy and Ethics: PHIL 120P recommended</td>
</tr>
<tr>
<td>ENGL 110C</td>
<td>ENG 111*</td>
</tr>
<tr>
<td>Language and Culture I (May be waived. See catalog for details)</td>
<td>Language and Culture II (May be waived. See catalog for details)</td>
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### Year 2 - Sophomore (28 Credits)

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<thead>
<tr>
<th>FALL SEMESTER (14 credits)</th>
<th>SPRING SEMESTER (14 credits)</th>
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<tr>
<td><strong>General Education Coursework</strong></td>
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</tr>
<tr>
<td>Nature of Science**</td>
<td>Nature of Science**</td>
</tr>
<tr>
<td>Human Creativity</td>
<td>Interpreting the Past</td>
</tr>
<tr>
<td>CSC 221 (If CSC 221 is taught in C++, transfers as CS 150, if taught in Java, as CS 151, or taught in Python, as CS 155)**</td>
<td>Impact of Technology: IT 360T suggested for the Actuarial Mathematics Major</td>
</tr>
<tr>
<td>MATH 307</td>
<td>MATH 312 (4 credits)</td>
</tr>
</tbody>
</table>

### Year 3 - Junior (30 Credits)

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<thead>
<tr>
<th>FALL SEMESTER (15 credits)</th>
<th>SPRING SEMESTER (15 credits)</th>
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<tr>
<td><strong>Major Coursework</strong></td>
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</tr>
<tr>
<td>STAT 310 or 331 (Statistics/Biostatistics and Actuarial Mathematics majors must take STAT 331)</td>
<td>STAT 330 or 431 (Statistics/Biostatistics and Actuarial Mathematics majors must take STAT 431)</td>
</tr>
<tr>
<td>MATH 311W</td>
<td>MATH 316</td>
</tr>
<tr>
<td>Literature</td>
<td>Transfer Equivalency Guide</td>
</tr>
<tr>
<td>Major course***</td>
<td>Major course***</td>
</tr>
</tbody>
</table>

### Year 4 - Senior (30 Credits)

<table>
<thead>
<tr>
<th>FALL SEMESTER (15 credits)</th>
<th>SPRING SEMESTER (15 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Major Coursework</strong></td>
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<tr>
<td>Major course***</td>
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<tr>
<td>Elective or major course if Big Data Analytics major***</td>
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**The Nature of Science requirement need not be in the same science. However, PHYS 231N-232N are recommended for the Applied Mathematics major, and BIOL 110N/111N, or BIOL 112N/113N, BIOL 117N/BIOL 118N, or BIOL 121N/122N-BIOL 123N/124N are recommended for the Statistics/Biostatistics major.**

***Major course***

Elective***

Elective or STAT 310***

Elective or major course if Big Data Analytics major***

Elective or major course if Big Data Analytics major***

Elective****

Elective****

Elective****

Elective****

Elective****

Elective****

**The Nature of Science requirement need not be in the same science. However, PHYS 231N-232N are recommended for the Applied Mathematics major, and BIOL 110N/111N, or BIOL 112N/113N, BIOL 117N/BIOL 118N, or BIOL 121N/122N-BIOL 123N/124N are recommended for the Statistics/Biostatistics major.**

### Requirements for graduation include a minimum cumulative grade point average of 2.00 overall and in the major, a grade of C or better in all courses required for the major, including prerequisite courses, 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University, completion of ENGL 115C, ENGL 211C or 213C, and a writing intensive (W) course in the major with a grade of C or better, and completion of Senior Assessment.

This four-year plan is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.