

**2024 - 2025 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 re-order as needed.*

*\* Indicates not automatically waived with transferable associates 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). Associate in Science recommended for ease of transfer.*

**YEAR 1 - FRESHMAN (32 CREDITS)**

<b>FALL SEMESTER (16 credits)</b>		<b>SPRING SEMESTER (16 credits)</b>	
<u>General Education Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education Coursework:</u>	<u>VCCS Equivalency:</u>
Human Behavior: ECON 202S recommended	<a href="#">Transfer Equivalency Guide</a>	Oral Communication	<a href="#">Transfer Equivalency Guide</a>
MATH 211 (4 credits)	MTH 173, 263 or 273*	MATH 212 (4 credits)	MTH 174, 264, or 274*
Information Literacy and Research: CS 121G preferred. IT 150G is acceptable substitute for the Actuarial Mathematics Major or the Big Data Analytics Major	<a href="#">Transfer Equivalency Guide</a>	Philosophy and Ethics: PHIL 120P recommended	<a href="#">Transfer Equivalency Guide</a>
ENGL 110C	ENG 111*	ENGL 211C or 231C	ENG 112, 210, 115 or 131*
Language and Culture I (May be waived. See catalog for details)	<a href="#">Transfer Equivalency Guide</a>	Language and Culture II (May be waived. See catalog for details)	<a href="#">Transfer Equivalency Guide</a>

**YEAR 2 - SOPHOMORE (28 CREDITS)**

<b>FALL SEMESTER (14 credits)</b>		<b>SPRING SEMESTER (14 credits)</b>	
<u>General Education Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education Coursework:</u>	<u>VCCS Equivalency:</u>
Nature of Science**	<a href="#">Transfer Equivalency Guide</a>	Nature of Science**	<a href="#">Transfer Equivalency Guide</a>
Human Creativity	<a href="#">Transfer Equivalency Guide</a>	Interpreting the Past	<a href="#">Transfer Equivalency Guide</a>
CS 151 or 153 (4 credits)	CSC 221 (If CSC 221 is taught in C++ , transfers as CS 150, if taught in Java, as CS 151, if taught in Python, as CS 153)*	Impact of Technology: IT 360T suggested for the Actuarial Mathematics Major	<a href="#">Transfer Equivalency Guide</a>
MATH 307		MATH 312 (4 credits)	

**YEAR 3 - JUNIOR (30 CREDITS)**

<b>FALL SEMESTER (15 credits)</b>		<b>SPRING SEMESTER (15 credits)</b>	
<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>
STAT 310 or 331 (Statistics/Biostatistics and Actuarial Mathematics majors must take STAT 331)		STAT 330 or 431 (Statistics/Biostatistics and Actuarial Mathematics majors must take STAT 431)	
MATH 311W	<a href="#">Transfer Equivalency Guide</a>	MATH 316	
Literature		MATH 317	
Major course***		Major course***	
<u>Upper Division Gen. Ed. Coursework:</u>		<u>Upper Division Gen. Ed. Coursework:</u>	
300-/400-level course		300-/400-level course	

**YEAR 4 - SENIOR (30 CREDITS)**

<b>FALL SEMESTER (15 credits)</b>		<b>SPRING SEMESTER (15 credits)</b>	
<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>
Major course***		Major course***	
Major course***		Major course***	
Elective or major course if Big Data Analytics major***		Elective or major course if Big Data Analytics major***	
Elective or STAT 310***		Elective****	
<u>Upper Division Gen. Ed. Coursework:</u>		<u>Upper Division Gen. Ed. Coursework:</u>	
300-/400-level course		300-/400-level course	

*\*\*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.*

*\*\*\*\*Elective credit will be needed to meet the minimum requirement of 120 credit hours, consult Degree Works and with your advisor for options.*

*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 110C, ENGL 211C or 231C, 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.*