

**United States Armed Forces / Old Dominion University  
Military Pathway  
Catalog Year 2024–2025**

**BACHELOR OF SCIENCE – DATA SCIENCE**

<b>Requirements Potentially Met Outside Classroom</b>		
<b>Military Course, Certification, Experience, or Exam</b>	<b>ODU Equivalent Course</b>	<b>Credits</b>
<b>Lower-Division General Education Requirements</b>		
CLEP <sup>1 2 3</sup> College Composition (NOT Modular)	ENGL 110C English Composition	3
DSST Technical Writing	ENGL 231C Writing, Rhetoric, and Research: Special Topics	3
Instructor, career counselor, recruiter, or select specialties	Oral Communication requirement	3
CLEP Precalculus or select specialties	MATH 162M and MATH 163 Precalculus I & II	6
DSST Principles of Statistics	STAT 130M Elementary Statistics	3
CLEP Foreign Languages or military linguist or DLIFLC grad	Language and Culture requirement <sup>4</sup>	6
CLEP Any Social Science exam except Educational Psych	Human Behavior requirement	3
CLEP Any History exam	Interpreting the Past requirement	3
CLEP American or Analyzing & Interpreting Literature	Literature requirement	3
CLEP Biology <sup>5</sup>	Nature of Science requirement	8
<b>Department or Major Requirements</b>		
CLEP or DSST multiple choices	Elective or General Education requirements	various
Select specialties	GEOG 102T Digital Earth: Geospatial Technology and Society	3
Select specialties	GEOG 402 Geographic Information Systems	3
Select specialties	GEOG 404 Digital Techniques for Remote Sensing	3
Select specialties	GEOG 432 Advanced GIS	3
Select specialties	GEOG 462 Advanced Spatial Analysis	3
Select specialties	GEOG 473 Geographic Information Systems for Emergency Management	3
<b>Requirements Potentially Met Outside Classroom</b>		<b>59+</b>

Note: Prior learning credit not to exceed 60 credit hours is also available in specific situations at a cost of 20-50% of the current tuition rate: <https://ww1.odu.edu/academics/academic-records/evaluation-of-credit/prior-learning>

<sup>1</sup> A passing CLEP or DSST examination score will satisfy the ODU requirement. See <https://clep.collegeboard.org/> and <https://www.odu.edu/academics/academic-records/score-analysis/clep-dantes> for details.

<sup>2</sup> A student may forego the CLEP or DSST option and satisfy the requirements by taking the actual courses. If a course is taken elsewhere check first for transfer equivalency here <https://transfer2.odu.edu/equivalency/>.

<sup>3</sup> Modern States offers CLEP preparation here <https://modernstates.org/>.

<sup>4</sup> ODU's Language and Culture requirement can be satisfied by three years of a foreign language or two years of two foreign languages in high school. Students whose native language is not English are exempt from taking a foreign language for general education.

<sup>5</sup> Biology is the only CLEP exam that will satisfy all eight credit hours for ODU's Nature of Science requirement.

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**Requirements Met at ODU**

*A minimum of 30 credits must be taken at ODU and 120 credits total to earn degree*

Short Title	Course Title	Credits
<b>Data Science Foundation and Core Requirements</b>		
BDA 200T	Elements of Data Science (meets Impact of Technology requirement)	3
CS 153	Introduction to Programming with Python	4
CS 251	Programming with Java	4
DASC 300	Foundations of Data Science	3
DASC 434	Data Science Research Methods	3
DASC 436W	Data Science Capstone Project (writing intensive; C or better required)	3
DASC or PHIL 357E	Ethics and Data (meets Philosophy and Ethics requirement)	3
DASC or SOC 205S	Data, Technology, and Society (cannot meet Human Behavior requirement)	3
Human Creativity	Human Creativity requirement	3
IT 360T	Principles of Information Technology	3
IT 450	Database Concepts	3
STAT 310	Introductory Data Analysis	3
<b>Artificial Intelligence and Machine Learning Area of Specialization Requirements</b>		
CS 252	Introduction to Unix for Programmers	1
CS 361	Data Structures and Algorithms	3
CS 422 or BDA 411	Introduction to Machine Learning	3
CS 480 or MSIM 480	Introduction to Artificial Intelligence	3
MATH 211	Calculus I	4
MATH 212	Calculus II	4
Electives	Select three of five approved area electives	9
<b>Data Visualization Area of Specialization Requirements</b>		
BNAL 206	Business Analytics I	3
BNAL 306	Business Analytics II	3
BNAL 403	Data Visualization and Exploration	3
CS 252	Introduction to Unix for Programmers	1
CS 361	Data Structures and Algorithms	3
ECE 406	Computer Graphics and Visualization	3
GAME 201T	Introduction to Game Studies	3
MATH 211	Calculus I	4
Electives	Select two of seven approved area electives	6
<b>Geospatial Information Systems Area of Specialization Requirements (remainder on page 1)</b>		
GEOG 419	Spatial Analysis of Coastal Environments	3
GEOG 425	Internet Geographic Information Systems	3
GEOG 463	GIS Programming	3
<b>Requirements met at ODU</b>		<b>47+</b>
<b>Total credits for degree</b>		<b>120</b>

Next steps:

- Submit application at <https://www.odu.edu/apply/applications>. Online students - use application fee waiver code provided by your ODUGlobal enrollment coordinator.
- Order your high school, college, CCAF, and/or joint service transcripts sent to [admissions@odu.edu](mailto:admissions@odu.edu) or Old Dominion University, Undergraduate Admissions, 1004 Alfred B. Rollins Jr. Hall, Norfolk, Virginia 23529-0050.
- Electronically sign your application.
- Monitor your application portal for status updates until an admission decision is made.
- Accept your admission offer and set up your ODU account/email as directed by Admissions.
- Complete orientation and meet with your academic advisor prior to course registration.
- Finalize your degree plan with your academic advisor based on this pathway.

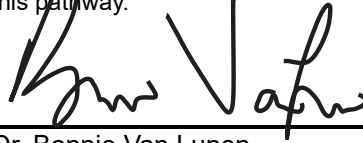


Oct 21, 2024

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Dr. Frank Liu  
Professor and School Director  
Data Science  
Old Dominion University

Date



10-28-24

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Dr. Bonnie Van Lunen  
Interim Vice Provost  
Academic Affairs  
Old Dominion University

Date