

**United States Armed Forces / Old Dominion University
Military Pathway
Catalog Year 2024-2025
Bachelor of Science in Computer Engineering – Modeling & Simulation Major**

Requirements Potentially Satisfied Outside Classroom		
Military Course, Certification, Experience, or Exam	ODU Equivalent Course	Credits
Lower-Division General Education Requirements		
CLEP ^{1 2 3} College Composition (<u>not</u> Modular)	ENGL 110C English Composition	3
DSST Technical Writing	ENGL 231C Writing, Rhetoric, and Research: Special Topics	3
Instructor, career counselor, select specialties	COMM 101R Public Speaking	3
CLEP Foreign Languages or military linguist or DLIFLC grad	Language and Culture requirement ⁴	0-6
CLEP Any one of eight Social Science exams except Ed Psych	Human Behavior requirement	3
CLEP Any one of six History exams	Interpreting the Past requirement	3
CLEP American or Analyzing & Interpreting Literature	Literature requirement	3
Department or Major Requirements		
Nuclear Power School graduate or certain specialties	ENGN 121 Introduction to Engineering and Technology	4
Nuclear Power School graduate or certain specialties or CLEP Chemistry (meets lecture credit only)	CHEM 121N & 122N Foundations of Chemistry I lecture & lab or CHEM 121N & 123N Foundations of Chemistry I & II lecture only	4 or 6
CLEP or DSST multiple choices	Upper-Division General Education Requirements	6
Potential requirements met outside classroom		32-40

Notes:

- 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>
- Computer Engineering Modeling & Simulation majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

¹ 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.

² A student may forego CLEP or DSST options and meet requirements by taking courses. If a course is to be taken elsewhere check first for transfer equivalency here <https://transfer2.odu.edu/equivalency/>.

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

⁴ ODU's Language and Culture requirement can be met 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.

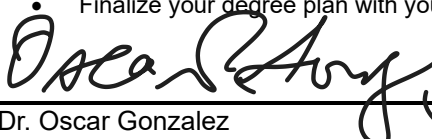
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Requirements Satisfied at ODU or Elsewhere
A minimum of 30 credits must be taken at ODU and 120 credits total to earn degree


Short Title	Course Title	Credits
Computer Engineering Major Requirements		
CS 261	Java for Programmers	1
CS 381	Introduction to Discrete Structures	3
ECE 201 & 202	Circuit Analysis I and II	6
ECE 241	Fundamentals of Computer Engineering	4
ECE 250	Object Oriented Programming in C++ for Engineers	3
ECE 287	Fundamental Electric Circuit Laboratory	2
ECE 302	Linear System Analysis	3
ECE 304	Probability, Statistics, and Reliability	3
ECE 306	Discrete System Modeling and Simulation	3
ECE 320	Continuous System Modeling and Simulation	3
ECE 341	Digital System Design	3
ECE 346	Microcontrollers	3
ECE 348	Simulation Software Design	3
ECE 381	Introduction to Discrete-time Signal Processing	3
ECE 406	Computer Graphics and Visualization	3
ECE 481W	Preparatory ECE Senior Design	3
ECE 482	ECE Senior Design	3
ECE Technical Electives	ECE Technical Elective requirements	6
ENGN 122	Computer Programming for Engineering	4
ENMA 410	Agile Project Management	3
ENMA 480	Ethics and Philosophy in Engineering Applications	3
Human Creativity	Human Creativity requirement	3
MATH 211 & 212	Calculus I and II	8
MATH 307	Ordinary Differential Equations	3
PHYS 231N & 232N	University Physics I and II	8
Requirements met at ODU or elsewhere		90
Total credits for degree		122+

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 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.


 Dr. Oscar Gonzalez
 Professor and Chair
 Electrical and Computer Engineering
 Old Dominion University

Date


 Dr. Brian Payne
 Vice Provost
 Academic Affairs
 Old Dominion University

Date

