

## 2014 - 2015 Old Dominion University Catalog

### Bachelor of Science in Modeling and Simulation Engineering (with VCCS Equivalencies)

*Sample four year curriculum with a suggested ordering of courses. Students may re-order as needed and where appropriate.*

*\* indicates not automatically waived with transferrable associates degree, C or better required for transfer.*

#### YEAR 1 - FRESHMAN (33 CREDITS)

FALL SEMESTER (16 credits)		SPRING SEMESTER (17 credits)	
<u>General Education Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education Coursework:</u>	<u>VCCS Equivalency:</u>
MATH 211	MTH 173 or 273*	MATH 212	MTH 174 or 274*
ENGL 110C (C or better required)	ENG 111*	CHEM 123N**	CHM 112*
CHEM 121N/122N**	CHM 111*	CS 150	CSC 201, EGR 125 or EGR 126*
ENGN 110	EGR 120*	PHYS 231N	See Monarch Transformation to ensure your institution's course will transfer.
COMM 101R	CST 100, 105 or 110*	MSIM 111	PHY 231 or 241*
			Dept. approval upon admission

#### YEAR 2 - SOPHOMORE (31 CREDITS)

FALL SEMESTER (15 credits)		SPRING SEMESTER (16 credits)	
<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
MSIM 201		MSIM 205	3
STAT 330		MSIM 281	1
PHYS 232N	PHY 232 or 242*	MATH 307	MTH 279 or 291*
CS 250	CSC 202 or 210*	ENGL 231C (C or better required)	ENG 115 or 131*
CS 252	ITN 171 or 271*	Human Creativity	<a href="#">See Transfer Guide</a>
		Literature	<a href="#">See Transfer Guide</a>

#### YEAR 3 - JUNIOR (32 CREDITS)

FALL SEMESTER (16 credits)		SPRING SEMESTER (16 credits)	
<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education Major Coursework:</u>	<u>VCCS Equivalency:</u>
CS 330		MSIM 331	
CS 381		MSIM 383 (1 credit)	
MSIM 320		Interpreting the Past	<a href="#">See Transfer Guide</a>
MSIM 382		MSIM 410	
Human Behavior	<a href="#">See Transfer Guide</a>	MSIM 451	
Approved Program Elective		Upper-Division General Education	

#### YEAR 4 - SENIOR (31 CREDITS)

FALL SEMESTER (16 credits)		SPRING SEMESTER (15 credits)	
<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
MSIM 441		ENMA 480	
MSIM 487W (C or better required)		MSIM 488	
Upper-Division General Education		Approved Program Elective	
ENMA 401		Approved MSIM Technical Elective II	
Approved MSIM Technical Elective I		Impact of Technology (Department Requirement)	<a href="#">See Transfer Guide*</a>

#### TOTAL CREDIT HOURS: 127

\*Does not include the University's General Education Language and Culture Requirement. Additional hours may be required.

\*\*Students in the Modeling and Simulation Engineering Program may substitute BIOL 121N/122N and BIOL 123N/124N in place of the CHEM 121N, CHEM 122N, and CHEM 123N requirement

The General Education requirements in Information Literacy and Research and Philosophy and Ethics are met through the 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 110C, ENGL 211C or 221C or 231C, and a writing intensive (W) course in the major with a grade of C or better, and completion of Senior Assessment.