

## 2016 - 2017 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.*

*Courses in green are waived by the completion of an Associate degree (Not eligible for Applied Associate degrees).*

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

FALL SEMESTER (16 credits)		SPRING SEMESTER (17 credits)	
<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education and Major 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	PHY 231 or 241*
COMM 101R	CST 100, 105 or 110*	MSIM 111	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	EGR 218*	MSIM 205	EGR 230*
STAT 330		MSIM 281 (1 credit)	EGR 230*
PHYS 232N	PHY 232 or 242*	MATH 307	MTH 279 or 291*
CS 250	CSC 210*	ENGL 231C (C or better required)	ENG 115 or 131*
CS 252	ITN 171 or 271*	<span style="color: green;">Human Creativity</span>	<a href="#">Transfer Guide</a>
		<span style="color: green;">Literature</span>	<a href="#">Transfer Guide</a>

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

FALL SEMESTER (16 credits)		SPRING SEMESTER (16 credits)	
<u>General Education and 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		<span style="color: green;">Interpreting the Past</span>	<a href="#">Transfer Guide</a>
MSIM 382		MSIM 410	
<span style="color: green;">Human Behavior</span>	<a href="#">Transfer Guide</a>	MSIM 451	
Approved Program Elective		Upper-Division General Education course/Option D Course I	

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

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