

# Modeling & Simulation Engineering Major (BSCOME) Dual Degree with Computer Science (BSCS) Five-Year

## Modeling & Simulation Engineering Major (BSCOME) Dual Degree with Computer Science (BSCS) 2022-2023 Five-Year Plan\*

### Freshman

First Term	Hours	Second Term	Hours
ENGN 110		2 ECE 111 <sup>2</sup>	2
CHEM 121N		3 CHEM 123N	3
CHEM 122N or 120 <sup>1</sup>		1 MATH 212	4
MATH 211		4 PHYS 231N	4
ENGL 110C		3 ENGN 150 <sup>3</sup>	4
Human Creativity Way of Knowing		3	
		<b>16</b>	<b>17</b>

### Sophomore

First Term	Hours	Second Term	Hours
MATH 307 or 280		3 ECE 202	3
ECE 201		3 ECE 287	2
PHYS 232N		4 CS 250	4
ENGL 231C		3 CS 252	1
COMM 101R		3 CS 381	3
		Human Behavior Way of Knowing	3
		<b>16</b>	<b>16</b>

### Junior

First Term	Hours	Second Term	Hours
ECE 241		4 ECE 313	4
ECE 302		3 ECE 341	3
CS 330		3 ECE 304 <sup>4</sup>	3
CS 390		3 CS 361	3
CS 315		1 CS 450 or 418	3
Literature Way of Knowing		3	
		<b>17</b>	<b>16</b>

### Senior

First Term	Hours	Second Term	Hours
MATH 316		3 ECE 320	3
ECE 306		3 ECE 346 <sup>7</sup>	3

CS 350	3	ECE 348	3
ENMA 480 <sup>5</sup>	3	CS 417	3
ECE Technical Elective I <sup>6</sup>	3	CS 355	3
		CS Upper Level Elective I	3
		<b>15</b>	<b>18</b>

### Fifth Year

First Term	Hours	Second Term	Hours
ECE 406		3 ECE 487	2
ECE 443 <sup>8</sup>		3 CS 471	3
ECE 484W		3 CS 411W	3
ECE 486		2 CS Upper Level Elective III	3
CS 410		3 Interpreting the Past Way of Knowing	3
CS Upper Level Elective II		3	
		<b>17</b>	<b>14</b>

**Total credit hours: 162**

- \* Does not include the University's General Education language and culture requirement. Additional hours may be required.
- 1 CHEM 120 is for online program students only.
- 2 ECE 111 and other ECE required courses satisfy the Computer Science Information Literacy & Research requirement of CS 121G.
- 3 ENGN 150 satisfies the CS 150 requirement in Computer Science curriculum.
- 4 ECE 304 satisfies the STAT 330 requirement in Computer Science curriculum
- 5 ENMA 480 satisfies the Computer Science Philosophy & Ethics requirement.
- 6 Computer Engineering - Modeling & Simulation Engineering Major students pursuing the dual degree with Computer Science have one remaining ECE 400-level Technical Elective course.
- 7 ECE 346 satisfies the CS 170 requirement in Computer Science curriculum.
- 8 ECE 443 satisfies the CS 270 requirement in Computer Science curriculum.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major. The upper-division General Education requirement is met through a built-in minor in computer science and through the completion of a second major/degree.

Modeling & Simulation Engineering and Computer Science 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.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager.

*The five-year plan is a suggested curriculum to complete this degree program in five 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.*