

## **SIMULATION TECHNOLOGY**

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Simulation specialists replicate situations or environments, through the use of programming and robotics that allow healthcare professionals to experience simulated reality for the purpose of training. This program is designed to provide the programming, robotics, and healthcare basics needed to gain employment in a simulation center or lab. This course of study is intended for individuals who have an interest in working with robotics in the healthcare setting as well as individuals already working in simulation settings.

### **Program prerequisites:**

- Complete BBCC admissions process.
- Complete English and math placement tests.
- Meet with the Medical Simulation program advisor to develop a professional development plan.
- Have a satisfactory criminal background check prior to SIM 295.

### **Physical and Psychosocial Requirements for the Medical Simulation program:**

- Demonstrate good body mechanics, lift/carry a minimum of 25 lbs independently and 50 lbs with assistance.
- Demonstrate ability to tolerate intermittent sitting, standing, stooping and walking. Full range of motion is required.
- Demonstrate ability to work in high-paced facilities in various stressful circumstances while promoting positive professionalism with staff, community partners, and visitors.

The certificate of accomplishment is designed to provide recognition for the students that have completed the core dynamics of the Simulation Technology program. This certificate will provide foundational skills in basic programming, maintenance, and instructional strategies that the student can use to implement high fidelity medical simulation activities.

### **Medical Simulation Operations Certificate of Accomplishment (14+)**

Program Learning Outcomes

#### **IO3 *Human Relations/Workplace Skills***

Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

Prerequisites:

HED 119 Medical Terminology.....	5
OR prior medical terminology course or experience	
SIM 211 ADV. Life Support and Pediatric Scenarios .....	8
OR HED 121, 122, and 123 The Human Body and Disease I, II, and III.....	15
OR prior anatomy/physiology coursework, medical training, or experience	

### **Required Certificate Courses:**

SIM 110 Intro to SIM Programming .....	4
SIM 130 Fundamentals of SIM Theory .....	4
SIM 140 Basic SIM Diagnostics .....	3
SIM 245 Basic Simulation Operations (Lab) .....	2
SIM 295 Practicum in the Community .....	1

**Medical Simulation Educator Certificate of Accomplishment (18 credits)**

Program Learning Outcomes

IO3 ***Human Relations/Workplace Skills***

Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

SIM 110 Intro to SIM Programming .....	4
SIM 130 Fundamentals of SIM Theory .....	4
SIM 140 Basic SIM Diagnostics .....	3
SIM 235 Principles of Debriefing .....	4
SIM 245 Basic Simulation Operations (Lab) .....	2
SIM 295 Practicum in the Community .....	1

<b>SIMULATION TECHNOLOGY</b>	<b>Credits</b>	<b>Summer 2020</b>	<b>Fall 2020</b>	<b>Winter 2021</b>	<b>Spring 2021</b>	<b>Summer 2021</b>	<b>Fall 2021</b>	<b>Winter 2022</b>	<b>Spring 2022</b>	<b>Summer 2022</b>
<b>SIM 110 Intro to SIM Programming</b>	4		Online	Online			Online			
<b>SIM 120 Medical Equipment Research</b> (Winter 2022 only)	2							Online		
<b>SIM 130 Fundamentals of Simulation Theory</b>	4		Online	Online				Online		
<b>SIM 140 Basic Simulation Diagnostics</b>	3				Online				Online	
<b>SIM 161 SIM Pharmacology Lab</b> (Spring 2021 only)	1				Hybrid					
<b>SIM 211 Adv Life Support &amp; Peds Scenarios</b> (Fall 2021 only)	8						Hybrid			
<b>SIM 235 Principles of Debriefing</b>	4	Online				Online				Online
<b>SIM 221 Pediatric Scenarios</b> (Fall 2021 only)	5						Hybrid			
<b>SIM 222 Clinical Focused Simulation</b> (Winter 2022 only)	5							Hybrid		
<b>SIM 230 Learning Management Systems</b> (Winter 2022 only)	5							Hybrid		
<b>SIM 232 SIM by Design</b> (Spring 2022 only)	3								Hybrid	
<b>SIM 245 Basic Simulation Operations</b>	2				Hybrid				Hybrid	
<b>SIM 295 Practicum in Community Simulation</b>	1				Hybrid				Hybrid	
<b>SIM 297 SIM Seminar</b> (Spring 2022 only)	1								Hybrid	