

# Central Connecticut State University

1615 Stanley St, New Britain, CT 06050 USA

## Bachelor of Science in Robotics and Mechatronics Engineering Technology Program

Effective: Fall 2015

General Education		Crs	Major Requirements (45 Credits)		Crs
<b>STUDY AREAS:</b>			ROBO110	Introduction to Robotics and Mechatronics	3
<b>I. Arts &amp; Humanities (9 credits)</b>			ROBO220	Parametric Modeling and Simulation	3
English Literature	3		ROBO240	Electric Machines	3
PHIL or Fine Arts	3		ROBO260	Programmable Controllers	3
English Literature or PHIL or Fine Arts	3		ROBO 280	Embedded Systems Design	3
<b>II. Social Sciences (6 Credits)</b>			ROBO310	Data Acquisition & Processing	3
History	3		ROBO330	Fluid Power Systems	3
ECON or ET399.	3		ROBO350	Applied Control Systems I	3
<b>III. Behavioral Sciences (3 Credits)</b>			ROBO370	Mechanisms for Automation	3
Anthropology or Psychology or Sociology	3		ROBO380	Mechatronics	3
<b>IV. Natural Sciences (8 Credits)</b>			ROBO460	Applied Control Systems II	3
PHYS 125 or PHYS 121	4		ROBO470	Robotics Systems Engineering and Analysis	3
CHEM 161 General Chemistry I	3		ROBO480	Industrial Robotics	3
CHEM 162 General Chemistry I - LAB	1		ROBO496	Industrial Internship	3
			ROBO497	Capstone: Senior Project	3
			<b>Total</b>		<b>45</b>
<b>SKILL AREAS:</b>			<b>Additional Requirements (36 Credits)</b>		<b>Crs</b>
<b>I. Communication Skills (6 credits)</b>			CET236	Circuits Analysis	3
ENG 110- University Composition	3		CET 270	Electronic Circuits and Devices for Robotics	3
COMM 140-Public Speaking	3		CET363	Digital Circuits	3
<b>II. Mathematics</b>			ET251	Applied Mechanics I - Statics	3
MATH 119 Pre-Cal. with Trig.	4		ET252	Applied Mechanics II - Dynamics	3
MATH 152-Calc I	4		ET357	Strength of Materials	3
<b>III.a Foreign Language (0-6 Credits)</b>			ETM358	Applied Thermodynamics	3
	0-6		MATH221	Calc II	4
			MATH226/ MATH 228	Linear Algebra and Probability for Engineers/ Introduction to Linear Algebra	4
<b>III.b International (6 Credits)</b>			MATH355	Introduction to Differential Equations	4
			MM216	Manufacturing Processes	3
			<b>Total</b>		<b>36</b>
<b>IV. University Requirements (2 Credits)</b>			<b>Free Electives (1-7 Credits)</b>		<b>Crs</b>
PE 144-Fitness/Wellness	2			FREE ELECTIVES	
			<b>Total</b>		Upto 7
<b>Total</b>		<b>42-48</b>	<b>Total Credits = 130</b>		

