

Central Connecticut State University

1615 Stanley Street
New Britain, Connecticut 06050-4010

Bachelor of Science

Effective: Fall 2012

Name:

I.D.#

Major: **Robotics and Mechtronics Engineering Technology**

Entry:

 Fall

 Spring

 Transfer Cr.

General Education		Crs	Major Requirements (42 Credits)		Crs
STUDY AREAS:			ROBO110	Introduction to Robotics and Mechatronics	3
I. Arts & Humanities (9 credits)			ROBO220	Parametric Modeling and Simulation	3
English Literature		3	ROBO240	Electro-Mechanical Converters and Drivers	3
PHIL or Fine Arts		3	ROBO260	Programmable Controllers	3
English Literature or PHIL or Fine Arts		3	ROBO310	Data Acquisition & Processing	3
II. Social Sciences (6 Credits)			ROBO330	Fluid Power Systems	3
History		3	ROBO350	Applied Control Systems I	3
ECON or ET399.		3	ROBO370	Mechanisms for Automation	3
III. Behavioral Sciences (3 Credits)			ROBO380	Mechatronics	3
Anthropology or Psychology or Sociology		3	ROBO460	Applied Control Systems II	3
IV. Natural Sciences (8 Credits)			ROBO470	Robotics Systems Engineering and Analysis	3
PHYS 125 or PHYS 121		4	ROBO480	Industrial Robotics	3
CHEM 161 General Chemistry I		3	ROBO496	Industrial Internship	3
CHEM 162 General Chemistry I - LAB		1	ROBO497	Capstone: Senior Project	3
			Total		42
SKILL AREAS:			Additional Requirements (39 Credits)		Crs
I. Communication Skills (6 credits)			CET236	Circuits Analysis	3
ENG 110-Freshman Composition		3	CET 243	Analog I	3
COMM 140-Public Speaking		3	CET363	Digital Circuits	3
II. Mathematics			CET453	Microprocessors	3
MATH 119 Pre-Cal. with Trig.		4	ET251	Applied Mechanics I - Statics	3
MATH 152-Calc I		4	ET252	Applied Mechanics II - Dynamics	3
III.a Foreign Language (0-6 Credits)			ET357	Strength of Materials	3
		0-6	ETM358	Applied Thermodynamics	3
III.b International (6 Credits)			MATH221	Calc II	4
			MATH226/ MATH 228	Linear Algebra and Probability for Engineers/ Introduction to Linear Algebra	4
			MATH355	Introduction to Differential Equations	4
			MFG216	Manufacturing Processes	3
			Total		39
IV. University Requirements (2 Credits)			Free Electives (1-7 Credits)		Crs
PE 144-Fitness/Wellness		2	FREE ELECTIVES		
Total			Total		Upto 7
42-48			Total Credits = 130		

Curriculum Flowchart

Bachelor of Science in Robotics and Mechatronics Engineering Technology

FIRST YEAR					
Fall		Cr	Spring		Cr
ROBO110	Introduction to Mechatronics and Robotics	3	ROBO220	Parametric Modeling and Simulation	3
ENG 110	English Composition	3	MFG 216	Manufacturing Processes	3
MATH119	Pre-Cal. with Trig.	4	PHYS125	University Physics	4
COMM140	Public Speaking	3	MATH 152	Calculus I	4
	Social Science Electives	3		English Literature	3
		Total			Total
		16			17
SECOND YEAR					
Fall		Cr	Spring		Cr
CET 236	Circuits Analysis	3	ROBO240	Electro-Mech Converters and Drivers	3
MATH221	Calculus II	4	CET 243	Analog I	3
ET251	Applied Mechanics I - Statics	3	CET 363	Digital Circuits	3
CHEM161	General Chemistry I	3	ET252	Applied Mechanics II - Dynamics	3
CHEM162	General Chemistry I Lab	1	ROBO260	Programmable Controllers	3
	Fine Arts Elective	3			
		Total			Total
		17			15
THIRD YEAR					
Fall		Cr	Spring		Cr
ROBO310	Data Acquisition & Processing	3	ROBO350	Applied Control Systems I	3
ROBO330	Fluid Power Systems	3	ROBO370	Mechanisms for Automation	3
CET 453	Microprocessors	3	MATH355	Introduction to Differential Equations	4
MATH226	Linear Algebra and Probability for Engineers	4	ETM358	Applied Thermodynamics	3
ET357	Strength of Materials	3	ET399	Engineering Economy	3
		Total			Total
		16			16
SUMMER					
ROBO496	Industrial Internship	3			
FOURTH YEAR					
Fall		Cr	Spring		Cr
ROBO380	Mechatronics	3	ROBO480	Industrial Robotics	3
ROBO460	Applied Control Systems II	3	ROBO497	Capstone: Senior Project	3
ROBO470	Robotics Systems Engineering and Analysis	3	Study Area II	History	3
Study Area I	English Literature or PHIL or Fine Arts	3	Study Area III	Anthropology or Psychology or Sociology	3
Skill Area III	Foreign Language	3	Skill Area III	Foreign Language	3
Elective (to complete 130 credits min degree requirements)		1			
		Total			Total
		16			15
Total Credits = 130					
NOTE: A Total of 130 Credit Hrs. are required for the degree			Program Effective: Fall 2012		
Please check with your advisor regularly for scheduling and program advising.					