



4500 Steilacoom Blvd SW,  
Lakewood, WA 98499 253.589.5800

School of Advanced Manufacturing Programs

**Bachelor of Applied Science in Mechatronics Engineering Technology & Automation Program Map 2022-2023**

Student Name: (First, Last)	Student EMPL #:	Date:
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<b>Total Units:</b> 94	<b>Total Cost:</b> <a href="http://www.cptc.edu/feelists">www.cptc.edu/feelists</a>	<b>Target Start Date:</b>	<b>Target Grad. Date:</b>	<b>Staff Initials:</b>
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**Important Information**

**Program Enrollment Requirements:** Students must apply and be accepted into the BAS-META Program. See college website for complete application requirements: <https://www.cptc.edu/programs/basmeta>  
**Program Starts:** Fall Term and Spring Term or by instructor permission  
**Graduation Requirements:** Students must earn a minimum grade of 2.3 in all coursework to complete the degree

**Pre-requisites required prior to Admission to the BAS-META program**

An articulated Mechatronics Associates degree, including CPTC's Mechatronics AAS-T or an earned Applied Associated degree, AAS-T, Direct Transfer Associate degree or equivalent in an outside discipline from a regionally accredited instruction and completion of the Mechatronics Technical Bridge courses (MEC 120, MEC 201 and MEC 202)

A minimum grade of 2.0 is required in the following 5 credit transferable General Education Coursework:

**English Composition:** ENGL& 101 English Composition, or *higher equivalent*

**Pre-Calculus:** Math& 141 or equivalent

**BAS-META Required General Education Courses**

Discipline	Lower Division	Upper Division General Ed Courses
10 Units Communication	<i>ENGL&amp; 101 English Comp. (5 units)</i> <i>Any English or Comm Course (5 units)</i>	
20 Units Quantitative	<i>MATH&amp; 141 Pre-Calculus I (5 units)</i> <i>MATH&amp; 142 Pre-Calculus II (5 units)</i> <i>MATH&amp; 151 Calculus I (5 units)</i> <i>MATH&amp; 152 Calculus II (5 units)</i>	
10 Units Humanities	<i>College level Humanities (5 units)</i>	<b>PHIL 310 Professional Ethics (5 units)</b> <i>(Pre-requisite: ENGL&amp; 101)</i>
5 Units Social Science	<i>PSYC&amp; 100 Psychology (5 units)</i>	
12 Units Science	<i>PHYS&amp; 221 Eng. Physics I (6 units)</i> <i>PHYS&amp; 222 Eng. Physics II (6 units)</i>	
5 Units Social Science	<i>Social Science Course (5 units)</i>	

Program Courses		Units	Status	Total Term Units
<b>Term 1 Fall</b>				
	MEC 310 Environmentally Sustainable Manufacturing	5		15
	MEC 330 Programming for Industry 4.0	5		
	<b>MATH&amp; 142 Pre-Calculus II, Functional Trigonometry (Pre-requisite: MATH&amp; 141)</b>	5		
<b>Term 2 Winter</b>				
	MEC 300 The Industrial Internet of Things	5		15
	MEC 320 Fixtures and Workflow	5		
	<b>MATH&amp; 151 Calculus I (pre-requisite: MATH&amp; 142)</b>	5		
<b>Term 3 Spring</b>				
	Mechatronics Technical Elective (Chosen from the list below)	5		15
	<b>Any Transferable English or Communication Course</b>	5		
	<b>MATH&amp; 152 Calculus II (Pre-requisites: MATH&amp; 151)</b>	5		

Clover Park Technical College does not discriminate on the basis of race, color, national origin, sex, disability, sexual orientation, age or Veteran's status in its program and activities.

Revised 10/14/22

Term 4 Fall			
	Mechatronics Technical Elective (Chosen from the list below)	5	
	Mechatronics Technical Elective (Chosen from the list below)	5	
	<b>PHYS&amp; 221 Engineering Physics I</b>	6	<b>16</b>
Term 5 Winter			
	MEC 450 Mechatronics Project Management Preparation and Planning	2	
	Mechatronics Technical Elective (Chosen from the list below)	5	
	<b>PHYS&amp; 222 Engineering Physics II</b>	6	
	<b>PHIL 310<sup>DIV</sup> Professional Ethics</b>	5	<b>18</b>
Quarter 6 Spring			
	MEC 490 Project Management	5	
	Mechatronics Technical Elective (Chosen from the list below)	5	
	<b>Any College Level Humanities Courses</b>	5	<b>15</b>
ELECTIVES			
	MEC 361 Process Control	5	
	MEC 362 Advanced Sensors and Actuators	5	
	MEC 363 AI and Data Analytics	5	
	MEC 381 Automation Evaluation and Implementation	5	
	MEC 382 Machine Vision	5	
	MEC 383 Dynamics of Machinery and Kinematics	5	
	MEC 402 Robotic Integration	5	
	MEC 403 Simulation, Emulation and Digital Twins	5	
<b>Status Key: X=Completed course, TR= Transferred course, IP= In Progress Note: Unit=Credit</b>			

Individualized Program Map			
Class:	Class:	Class:	Class:
Class:	Class:	Class:	Class:
Class:	Class:	Class:	Class:
Class:	Class:	Class:	Class:
Class:	Class:	Class:	Class:
Class:	Class:	Class:	Class:
<b>Program Counselor:</b> Taylor McGovern email: <a href="mailto:taylor.mcgovern@cptc.edu">taylor.mcgovern@cptc.edu</a>			
<b>Transferring Course Work into CPTC:</b> <a href="http://www.cptc.edu/transfer-to">www.cptc.edu/transfer-to</a>			
<b>Graduation Application:</b> <a href="http://www.cptc.edu/enrollment-services">www.cptc.edu/enrollment-services</a> >Transcripts & Graduation >Degree/Certificate Application. Graduation Ceremony Information (Commencement) > Graduation Info			
<b>Career Outlook sites:</b> <a href="http://www.onetonline.org">www.onetonline.org</a> <a href="http://www.worksourcewa.com">www.worksourcewa.com</a>			
<b>Notes:</b>			

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