## EDUCATION PLAN - YEAR 2021-2022

### SCHOOL OF Advanced Manufacturing

**BAS in Mechatronics Engineering Technology and Automation**

**BAS Degree**

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<th>Quarter 1</th>
<th>Winter</th>
<th>Quarter 2</th>
<th>Spring</th>
<th>Quarter 3</th>
<th>Summer</th>
<th>Quarter 4</th>
<th>Fall</th>
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<tbody>
<tr>
<td><strong>Course Number</strong></td>
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<tr>
<td>MEC 310</td>
<td>Environmentally Sustainable Manufacturing</td>
<td>5</td>
<td>MEC 300</td>
<td>The Industrial Internet of Things</td>
<td>5</td>
<td>MEC 360</td>
<td>Human Factors Design</td>
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<td>MEC 320</td>
<td>Programming for Industry 4.0</td>
<td>5</td>
<td>MEC 321</td>
<td>Fixtures and Workflow</td>
<td>5</td>
<td>MATH&amp; 152</td>
<td>Calculus II</td>
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<td>MATH&amp; 142</td>
<td>Pre-calculus II, Functional Trigonometry</td>
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<td>MATH&amp; 153</td>
<td>Calculus I</td>
<td>5</td>
<td>ENGL&amp; 235</td>
<td>Technical Writing</td>
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<td><strong>Total Credits</strong></td>
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### Mechatronics Elective Options (must choose 20 credits)

- MEC 490CAP | Mechatronics Project Management | 5
- 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

### Mechatronics Elective Options (must choose 20 credits)

- MEC 382 | Machine Vision | 5
- MEC 383 | Dynamics of Machinery and Kinematics | 5
- MEC 402 | Robotics Integration | 5
- MEC 403 | Simulation, Emulation and Digital Twins | 5

### Required Gen Ed courses

- CUN 102 | College Success for All | 5
- ENGL& 101 | English Composition | 5
- MATH& 141 | Pre-Calculus I | 5

### Core Requirements

- Social Science that meet diversity requirement | 5

### Next Steps (Transcripts & Graduation)

- Apply for Graduation
- Apply for Sealed Official Transcript

### Career Outlook Sites

- The O*NET Information Network (O*NET)
- worksourcewa.com

### Important Program Information

- BAS-ME Tech Program entry requires a Mechatronics AAS-T from CPTC or a Mechatronics AA degree from another institution with an articulation agreement with CPTC or an AA degree and successful completion of the following 15 credits of CPTC bridge program.

### Important Program Information

- MEC 120 Computer-Aided Design I | 5 credits
- MEC 201 Systems Approach | 5 credits
- MEC 202 Total Mechatronics | 5 credits

### Important Program Information

- 5 college-level credits in English Composition (ENGL& 101 or higher).
- 5 college-level credits of MATH 141 or equivalent pre-calculus course.

### Important Program Information

- A minimum grade of 2.0 is required in all general education coursework. A minimum GPA of 2.3 is required of all coursework in the transferring Associates degree.

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*Please check Periodically with Advising and Counseling regarding any potential Changes to program course requirements.*

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 programs and activities.

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