



2-Year Program Map for Mechanical and Instrumentation Automation AAT Degree

Area of Study: Advanced Manufacturing and Mechanical

Program maps are suggested academic plans and should not be used in the place of regular academic advising. Your student entry method, placement, course availability, and program requirements are subject to change and transfer credit(s) may change your map/plan.

Mechatronics Technology is a growing technical field that deals with the integration of mechanical and electronic components managed by a control system. Our program emphasizes current concepts and technology by providing practical, hands-on experience with the latest industry standard equipment. Course work includes process control systems, instrumentation/automation systems, conveyor Systems, palletizer systems, and robotics systems. Contact the [department](#) for eligibility requirements.

> Free [Tutoring Services](#) are available to support you throughout your degree completion.

Year One

Summer Term

- MTX 100 Industrial Safety 1
- MTX 103 Basic Measurement Tools 2
- PTCS 110 Professional Technical Computation Skills OR MATH& 146 Introduction to Statistics 5
- COLL 101 College Essentials: Intro to Clark 2
- MGMT 101 Principles of Management or BUS 148 Business Professional Self Development 3

Fall Term

- MTX 101 DC Fundamentals 3
- MTX 106 Fluid Power Systems 4
- MTX 180 Mechanical Systems 5

Winter Term

- MTX 102 AC Fundamentals 4
- MTX 130 Programmable Logic Controllers 1 4
- MTX 132 Siemens PLC LVL I 4

Spring Term

- MTX 110 Electric Motor Control 1 4
- MTX 140 Robotic Systems 4
- PTWR 135 Introduction to Applied Technical Writing OR ENGL& 101 English Composition 5

Approximate Costs Each Term

Tuition \$1,490* for 15 credits per term plus books, supplies, and miscellaneous fees. *Tuition based on Washington resident rates. View [residency classifications](#) on our website.

How to Enroll

Visit Clark College's Welcome Center in Gaiser Hall room 127 or the [Get Started webpage](#) for information on becoming a new student. Email start@clark.edu or call 360-992-2078.

Year Two

Summer Term

- MTX 121 Semiconductors I 3
- MTX 145 Electrical Power & Distribution Systems 4
- MTX 175 Mechatronics Systems Fundamentals 3
- MTX 230 Laser Alignment 2

Fall Term

- MTX 221 Semiconductors 2 3
- MTX 224 Motor Drive Systems 5
- MTX 250 Advanced programmable Logic Controllers 4

Winter Term

- MTX 216 Mechatronics 2 5
- MTX 232 Digital Electronics Fundamentals 3
- MTX 275 Advanced Fluid Power Systems 5

Spring Term

- MTX 240 Process Control Systems 6
- MTX 292 Manufacturing System Principles 4
- MTX 296 Capstone/Final Project 4

101 units required. View the [Clark College Catalog](#) for additional program information

Key ^ Alternative classes are available to fit your schedule or interest. & Common Course in the State of Washington

Customize with Advising

Make an appointment online with Advising Services to learn more about customizing your academic plan at clark.edu/advising.

Apply for Admission

Support Services

At Clark College, we know that everyone who walks through our doors is a unique person with diverse, interesting and sometimes challenging circumstances. We are committed to ensuring each and every student can succeed at Clark, and are committed to serving systemically non-dominant communities, including (but not limited to) people of color, those who identify as LGBTQIA2S+ and people with disabilities. We have resource centers, clubs, programs and activities for all students.

Visit our [Student Support](#) page for more information.

Funding Options at Clark

There are many resources available to help students cover the costs to attend college—tuition, books, fees, tools, transportation, childcare, etc.—so you can focus on completing your degree or certificate.

Grants Based on need. You do not need to pay back grants.

Scholarships Similar to grants, and there are different criteria; Clark College awards hundreds of thousands of dollars to students each year. We encourage everyone to apply!

Student Employment & Work Study Money you earn through working part-time; this helps to reduce your reliance on loans, and build your skills and resume.

Loans If you do need to borrow additional funds to pay for college-related expenses, you can consider loans. It is money you borrow and will pay back with interest.

Specific Assistance For Veterans, worker retraining, DREAMers, students receiving DSHS benefits, and more.

For more information, visit our [paying for college website](#) or visit the Office of Financial Aid in Gaiser Hall room 101.

Career Opportunities

Career exploration and planning is an essential step to establishing your academic journey at Clark College and beyond. Career Services connects you with resources and strategies for career planning in six areas: knowing self; career awareness; relationship building and networking; work-based learning; job-search skills; and career readiness competencies. You are encouraged to participate in *MyPlan*, a comprehensive and interactive guide with activities to support your career, academic, and financial wellness planning. Visit [Career Services](#) in the Penguin Union Building room 002.

Students who complete the **Mechanical and Instrumentation Automation Associate in Applied Technology** degree could be employed as:

Some careers may require a bachelor's degree or higher

Mechatronic Technicians

Cutting Punching

Press Machine Setters, Operators, and Tenders

Machinists and Computer-Controlled Machine Tool Operators

Career exploration information created by Clark Faculty and Staff.



Clark College does not discriminate on the basis of race, color, national origin, age, perceived or actual physical or mental disability, pregnancy, genetic information, sex, sexual orientation, gender identity, marital status, creed, religion, honorably discharged veteran or military status, or use of a trained guide dog or service animal in its programs and activities, in accordance with state and federal laws. The responsibility for and the protection of this commitment extends to students, faculty, administration, staff, contractors and those who develop or participate in college programs. It encompasses every aspect of employment and every student and community activity. The following person has been designated to handle inquiries regarding non-discrimination policies: Vice President of Diversity, Equity, and Inclusion, Gaiser Hall (GHL) 220, 360-992-2757, or 360-991-0901 (video phone).

Alternate format of this document is available upon request. Please contact Disability Support Services at 360-992-2314, or 360-991-0901 (video phone).

Created in March 2020, last updated in June 2020