



## 2-Year Program Map for AST MRP (OTRE) - Mechanical Engineering

### Area of Study: Science, Technology, and Engineering

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.

Mechanical, Civil & Aeronautical Engineering encompasses the foundational skills of the engineering profession. Clark's program teaches students to develop creative solutions to everyday issues. We offer three concentration areas in engineering that have wide-ranging employment possibilities including include robotics, and aerospace industries. This program is designed for students planning to transfer to a four-year institution to pursue a bachelor's degree. Please see an Engineering Faculty Advisor for help in selecting courses.

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

### Year One

#### Fall Term

<input type="checkbox"/> MATH& 151 Calculus I.....	5
<input type="checkbox"/> CHEM& 141 General Chemistry I.....	4
<input type="checkbox"/> CHEM& 151 General Chemistry Laboratory I.....	1
<input type="checkbox"/> ENGR 109 Intro to Engineering <sup>^*</sup> .....	5

#### Winter Term

<input type="checkbox"/> MATH& 152 Calculus II.....	5
<input type="checkbox"/> CHEM& 142 General Chemistry II.....	4
<input type="checkbox"/> CHEM& 152 General Chemistry Laboratory II.....	1
<input type="checkbox"/> ENGL& 101 English Composition I <sup>^</sup> .....	5

#### Spring Term

<input type="checkbox"/> MATH& 153 Calculus III.....	5
<input type="checkbox"/> HIST& 128 World Civilizations III <sup>^</sup> .....	5
<input type="checkbox"/> ENGR 113 Engineering Sketching & Visualization <sup>^*</sup> .....	2
<input type="checkbox"/> ENGR 150 Basic SolidWorks <sup>^*</sup> .....	4

#### Summer Term

<input type="checkbox"/> MATH 215 Linear Algebra.....	5
<input type="checkbox"/> WS 101 Introduction to Women's Studies <sup>^</sup> .....	5
<input type="checkbox"/> ECON& 201 or ECON& 202 <sup>^</sup> .....	5

### Year Two

#### Fall Term

<input type="checkbox"/> PHYS& 231 Engineering Physics Lab I.....	1
<input type="checkbox"/> PHYS& 241 Engineering Physics I.....	4
<input type="checkbox"/> PHYS 094 Physics Calculations.....	1
<input type="checkbox"/> ENGR& 214 Statics.....	5
<input type="checkbox"/> ENGR 240 Numerical I Methods <sup>^*</sup> .....	4

#### Winter Term

<input type="checkbox"/> PHYS& 232 Engineering Physics Lab II.....	1
<input type="checkbox"/> PHYS& 242 Engineering Physics II.....	4
<input type="checkbox"/> PHYS 095 Physics Calculations.....	1
<input type="checkbox"/> ENGR& 215 Dynamics.....	4
<input type="checkbox"/> Math& 254 Calculus IV.....	5

#### Spring Term

<input type="checkbox"/> PHYS& 233 Engineering Physics Laboratory III.....	1
<input type="checkbox"/> PHYS& 243 Engineering Physics III.....	4
<input type="checkbox"/> PHYS 096 Physics Calculations.....	1
<input type="checkbox"/> ENGR& 225 Mechanics of Materials.....	5
<input type="checkbox"/> ENGR& 224 Thermodynamics <sup>^*</sup> .....	5

#### Summer Term

<input type="checkbox"/> MATH 221 Differential Equations.....	5
<input type="checkbox"/> ENGL 235 Technical Writing <sup>^*</sup> .....	5

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

*\*Elective credits in excess of 15 may not be funded by financial aid. Work with your advisor for specific academic planning based on your intended transfer institution.*

**Key:** <sup>^</sup> Alternative classes are available to fit your schedule or interest. Please see your engineering faculty advisor. & Common Course in the State of Washington.

### Approximate Costs Each Term

Tuition \$1490\* for 15 credits per term plus books, supplies, and miscellaneous fees. \*Tuition based on Washington resident rates. View [residency classifications](#) on our website.

### Customize with Advising

Make an appointment online with Advising Services to learn more about customizing your academic plan at [clark.edu/advising](http://clark.edu/advising).

## 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](mailto:start@clark.edu) or call 360-992-2078.

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 an **Associate in Science Transfer degree in Mechanical, Civil or Aeronautical Engineering (emphasis areas)** and transfer to earn a bachelor's degree or higher could be employed as:

City Engineer  
Structural Engineer  
Process Engineer

Mechanical Design Engineer  
Flight test Engineer

Career exploration information established 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).*

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