



## Early College STEM Academy

### Curriculum Overview

The Early College STEM Academy is a partnership between the Madison Metropolitan School District and Madison College. The Academy is designed to provide access to college courses in STEM fields (science, technology, engineering, and math) which are anticipated to be areas with high-demand and high-wage jobs of the future. This opportunity to earn college credit while in high school comes at no cost to students or their families. Students enrolled in the program will have access to a range of courses at Madison College that include options for transfer to a four-year college or university. Students can choose to focus on one area interest or to explore multiple options, based on their personal goals.

### Program Options

#### The Associate of Science Degree

The Associate of Science Degree prepares students to transfer to a major in a STEM field at a four year college. It is like the first two years of a Bachelor of Science. The sixty credits required for the degree are transferable, so a student completing the degree can enter a four year college with junior standing. Most of the classes students will enroll in during the first year at the Early College STEM Academy will satisfy requirements of the Associate of Science Degree.

#### Applied Associate Degrees in STEM Areas

Applied Associate Degrees are two year programs which can lead directly to employment opportunities or be a starting point for completing a bachelor degree program. Coursework in the Applied Associate Degree programs helps students prepare for college and career opportunities across a variety of in-demand STEM fields, including:

- **Engineering** (including: civil, electrical, mechanical)
- **Information Technology** (including: networks, web and mobile applications, cloud support)
- **Additional Technology Fields** (including: electronics, robotics, automation, architecture)



## 11th grade student suggested courses<sup>+</sup>

### Fall 2020

Madison College Course	MMSD Course & Credit Equivalency
STEM Elective Options span across program offerings. See counselor for complete list.	Elective Credit number varies
Intermediate Algebra	Algebra 2 Math Credit = 1.33 cr ✓
Introduction to College Writing	English 3 English Credit = 1.0 cr ✓
American History since 1945	Modern US History Social Studies Credit = 1.0 cr ✓
Physical Education course	Physical Education Credit PE Credit = 0.5 cr ✓

### Spring 2021

Madison College Course	MMSD Course & Credit Equivalency
STEM Elective Options span across program offerings. See counselor for complete list.	Elective Credit number varies
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Choice of Science Examples: College Chemistry 1, University Physics 1, and others	Science Credit Credit number varies ✓
Choice of Math Examples: College Algebra, Math Analysis, Statistics, and others	Math Elective Credit (varies based on selected course)
English 1	English 4 English Credit = 1.0 cr ✓

<sup>+</sup> Specific course selection will be determined individually based on student personal goals

✓ Indicates credits required for high school graduation