



## Science, Technology, Engineering, and Mathematics Career and Academic Pathways (CAPs) Program Map: Skills Certificate for Programming Certification

Total number of units: 5 units

Top Code/Academic Plan: 0708.10

Updated on 9/30/2021

Semester 1	Course Code	Course	Units	Notes	Notes for Part-time students
Program Course	MIT 220	<b>Introduction to Robotics</b>	<b>3</b>		Mostly offered as a dual enrollment course with partner high schools.

**Total Units 3**

Semester 2	Course Code	Course	Units	Notes	Notes for Part-time students
Program Course	EET 123	<b>Introduction to Arduino</b>	<b>2</b>		Course Offering: Off-site. Check with department for course offering.

**Total Units 2**

### Degree Path and Requirements:

This map is a suggested term-by-term sequence of courses to complete the program in a recommended time frame. This is an efficient and recommended plan, but actual plans may vary by individual student need. This map cannot replace a meeting with [counselors](#).

### Department Advising Notes:

We recommend that students meet with an academic counselor as well as with a career counselor before deciding on which elective courses to take for this degree. Please take note of the prerequisite courses that are required for the courses in this degree.

### Program Description

[What is Arduino?](#) Arduino is an open-source electronics platform based on easy-to-use hardware and software. Arduino boards are able to read inputs - light on a sensor, a finger on a button, or a Twitter message - and turn it into an output - activating a motor, turning on an LED, publishing something online. You can tell your board what to do by sending a set of instructions to the microcontroller on the board. To do so you use the Arduino programming language (based on Wiring), and the Arduino Software (IDE), based on Processing.

### Career and Transfer Opportunities

Visit the [Transfer Center](#) for transfer information, which varies based on transfer college. Make an appointment with a [counselor](#). Students can visit [Career and Job Services](#) for career counseling and further exploration.

### Youtube Videos

[3 Creative ideas with Arduino](#)

### Program Map

A suggested sequence of classes to complete a degree, certificate, or program of study. Students should consult an academic counselor for variations to this plan based on part-time or full-time status, transfer plans, pre-requisites needed, etc.

### Prerequisite Course

A specific course that must be completed before advancing to the next course.

Check the online catalog at [elac.edu](http://elac.edu) for the latest and most accurate information.

### Contact

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