

# “Extending the CTE-STEM Pipeline into Middle Schools”

## Career Awareness Elective Course

Solutionary Phase	Introductory Lesson Sequence for Career Awareness elective course
Lesson # and title	<b>Lesson 3: Introduction to CA Industry Sectors, High School CTE Pathways, and Post-Secondary Education</b>
Duration	45 minutes

### Lesson Overview

Having explored the variety of careers available to them, and how their personal priorities and values align to their choices, during this lesson, students will explore the pathways people take toward college and career. As such, students will learn about California’s fifteen industry sectors, the CTE Pathways that are available to them when they attend high school, and how college or university might play a role in attaining their goals.

### Learning Objectives

- Understand that California has identified fifteen industry sectors
- Understand that high school students can enroll in CTE pathways, which are categorized within the fifteen CA industry sectors.
- Understand that the purpose of college and post-secondary training is to prepare them for careers, jobs, and trades.

### Content Standard(s)

CA NGSS, EP&Cs, CCSS-ELA, CCSS-Math, EP&Cs, History/Social Studies, Visual and Performing Arts, Computer Science, Health, CTE, PE

CTE Standards for Career Ready Practice 3: Develop an education and career plan aligned with personal goals.

### College and Career Connection(s)

ALL!

## Equipment, Instructional Resources, and Materials

1. [Career Technical Education Introduction video](#)
2. [CTE Career Pathway Poster](#)
3. [CTE High School Program list for San Mateo County](#)
4. Video: [CA A-G Requirements](#)

## Suggested Student Grouping

Individual and Whole Group

## Vocabulary

Industry Sector  
Career Technical Education (CTE)  
CTE Pathway

## The Lesson

## Preparation

1. Review the [CTE Career Pathway Poster](#)
  - a. The bold title within each bubble represents the name of the industry sector.
  - b. The bulleted list within each bubble represents the name of the CTE pathways within each industry sector.
  - c. High schools can adopt any of the CTE pathway programs, but most high schools only offer a few.
2. Review the [CTE High School Program list for San Mateo County](#). This list represents the CTE pathways offered within San Mateo County school districts.
3. Watch the [Career Technical Education Introduction](#) video.
4. Watch the [CA A-G Requirements](#) video.

## Procedure

### Link to Lesson Slide Deck:

<https://docs.google.com/presentation/d/1jGYYWbMwKHx1NhMvkiUvyy4HG0VxCNDSHGxDt76rzTY/edit?usp=sharing>

Activity	Description	Time (min)
Career Exploration	<ul style="list-style-type: none"> <li>Students select one career that came up for them in the results of their self-assessment (“Interest Profiler” or “Work Importance Profiler”)</li> <li>Students input the occupation into the <a href="https://smcoe.cacareerzone.org/">https://smcoe.cacareerzone.org/</a> search bar</li> <li>Students explore the various aspects of that occupation</li> </ul>	15
CA Industry Sectors	<ul style="list-style-type: none"> <li>Tell students that California has organized careers within fifteen (15) industry sectors.                             <ul style="list-style-type: none"> <li>Share examples on slide (and/or from students’ examples)</li> </ul> </li> <li>Ask students to find the industry sector that aligns with their career selection.</li> </ul>	5
CTE Pathways	<ul style="list-style-type: none"> <li>Introduce High School Career Technical Education (CTE) Pathways to students.                             <ul style="list-style-type: none"> <li>Say, “<i>Within each industry sector are CTE pathways. A CTE pathway is a sequence of two or more CTE courses within an area of career interest. Pathways are designed to connect high school classes to college, industry certifications, and/or a career.</i>”</li> </ul> </li> <li>Play the <a href="#">Career Technical Education Introduction video</a>.</li> <li>Share the <a href="#">CTE High School Program list for San Mateo County</a> with students, have them find their high school district, and look for the CTE programs available to them.</li> <li>Explain that this is not the only way they can achieve their career. Students can take courses in high school identified as A-G courses that are required for application and admission into the University of California and California State University systems.                             <ul style="list-style-type: none"> <li>Play Video: <a href="#">CA A-G Requirements</a></li> </ul> </li> </ul>	15
Post-Secondary Education	<ul style="list-style-type: none"> <li>There are multiple pathways a student can take toward a career, job or trade after leaving high school:                             <ul style="list-style-type: none"> <li>Community College</li> <li>Two-year or four-year College or University</li> </ul> </li> </ul>	10

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|  | ○ Industry Certification Programs |  |
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## Assessment

Students watch a “[Career One Stop](#)” video and select one career of interest. Students research the type of post-secondary training required to enter into that career, and write one paragraph that describes that journey.