



## Certificates available at Trade Tech High School 2018-2019

*The following certificates are to recognize students that complete pathway requirements here at Trade Tech High School. These certificates will be given at graduation. Students that do not graduate, are not eligible to earn certifications. While they are not necessarily industry standard certificates, these accomplishments will set them above other adults as they apply for jobs and training.*

*In order to qualify for a certificate, student must maintain an overall GPA of 2.0 and have nothing lower than a B in ALL of the required courses.*

### **Construction Technology** (Required for an Apprenticeship Recommendation)

Required Courses:

- Construction 1
- Construction 2
- Construction 3 and/or Building Maintenance

Additional Requirements:

- OSHA 10 Certification
- Participation in at least one SkillsUSA competition.
- Introduction to Engineering Design

Recommended:

- Civil Engineering and Architecture

Note: If you enroll as a junior or senior at Trade Tech, we may modify the course requirements for apprenticeship recommendation. Please see the administrator for more information.

### **Engineering Design**

Required Courses:

- Drafting
- Introduction to Engineering Design
- Advanced Engineering Technology or Civil Engineering and Architecture
- Physics

Additional Requirements:

- Participation in at least 1 year of MESA (and attendance at the competition) or 1 year of FIRST Robotics
- Inclusion of work at the San Diego County Fair

### **Manufacturing and Product Development**

Required Courses:

- Drafting
- Introduction to Engineering Design
- Graphic Design and Model Making
- Manufacturing 1

Additional Requirements:

- Participation in at least 1 year of MESA (and attendance at the competition) or Participation in at least 1 year of FIRST Robotics or participation in at least 1 SkillsUSA manufacturing competition.

## **College Preparation (a through g, UC/CSU Eligible)**

Students must complete a minimum of 15 a-g courses, 11 of them must be prior to their senior year with a minimum overall average GPA of **3.0**.

Required Courses:

**History/social science (“a”) – 3 years required**

World History (1 year)

US History (1 year)

Civics (1 Semester)

Economics (1 Semester)

**English (“b”) – All full year courses – 4 years required**

English 9

English 10

English 11

English 12

**Mathematics (“c”) – All full year courses – minimum of 3 courses required from list below**

Integrated Mathematics 1

Algebra

Integrated Mathematics 2

Geometry

Integrated Mathematics 3

Algebra 2

Pre-Calculus

Calculus

**Laboratory science (“d”) – minimum of 2 years required (3 years recommended by UC system)**

Biology

Physics

Chemistry

**Language other than English (“e”) – Two years of the same language other than English or equivalent to the second level of high school instruction. Other languages may be taken at the community college level and transferred into Trade Tech. All full year courses**

Spanish 1

Spanish 2

Spanish 3

Or 2 semesters of foreign language taken at a community college

**Visual and performing arts (“f”) – One year chosen from dance, music, theater or the visual arts.**

Graphic Design and Modeling

Introduction to Theater

or “f” qualified elective taken at a community college (3 semester units or more)

**College-preparatory elective (“g”) – One year chosen from the “a-f” courses beyond those used to satisfy the requirements above, or courses that have been approved solely in the elective area.**

One year in one of the following courses:

Automotive Technology

Manufacturing 1

Civil Engineering and Architecture

Manufacturing 2

Construction Tech

MC3 (Construction 3)

Earth Science

Introduction to Engineering Design

Additional Requirements:

Personal Finance

Earth or Environmental Science

Minimum of 1 year participation with Key Club

Recommended:

Student Leadership

## **Machining**

### Required Courses:

- Drafting
- Introduction to Engineering Design
- Manufacturing 1
- Manufacturing 2/Advanced Machining

### Additional Requirements:

- Passing a minimum of 2 NIMS Certifications
- OSHA 10
- Participation in at least 1 year of FIRST Robotics or at least 1 year of SkillsUSA competition

## **Biliteracy (Spanish)**

### Required Courses:

- Spanish 1 (May be waived by teacher for fluent Native Speakers)
- Spanish 2
- Spanish 3
- Spanish 4 – Spanish for Professionals