# **TECHNOLOGY (TECH)**

See Course Description Symbols and Terms (https://catalog.csuchico.edu/academic-standards-policies/course-description-symbols-terms/) for an explanation of course description terminology and symbols, the course numbering system, and course credit units.

### **TECH 101 MESA Orientation Class**

2 Units

Prerequisite: MESA eligibility.
Typically Offered: Fall only

A comprehensive introduction that provides incoming Math, Engineering, Science Achievement (MESA) students with an overview of the fields of engineering and computer science, along with information on degree requirements, technical skills needed, working in industry, professional organizations, and professional development. In addition, there is an introduction to campus resources and university life for first-year MESA students. 2 hours lecture. (003699)

Grade Basis: ABC/No Credit

Repeatability: You may take this course for a maximum of 2 units

Course Attributes: Lower Division
TECH 180 Invention and Innovation

3 Units GE

Typically Offered: Fall and spring

This course explores invention and innovation, looking at the social, cultural, economic, environmental, intellectual, and sustainable contexts of technologies and scientific advancements. Critical technologies and scientific advancements are explored; how these technologies and advancements came about including the individuals, connections, organizations, settings, and culture which enabled the development. The impact on the individual, culture, society, economy, environment, sustainability, and other technologies and advancements at their inception, in our current world and the future, are considered. Throughout these investigations attention is directed to the development and social context of these inventions and advancements, challenging students to understand the past as the foundation of the world today and setting the stage for the future. 3 hours lecture. (021220)

General Education: Social and Behavioral Sciences (4)

Grade Basis: Graded

Repeatability: You may take this course for a maximum of 3 units

Course Attributes: Lower Division

## **TECH 182 Science Fiction**

3 Units GE

Typically Offered: Fall and spring

This course explores technology and science through science fiction, both historical and contemporary. In our rapidly changing technological civilization, technology and science offer numerous benefits to individuals and to societies along with a host of new challenges and considerations often foreshadowed in science fiction. Science fiction has also been used as a vehicle to inform, misinform, motivate, or alarm its audience regarding social, cultural, environmental, sustainable, technological, scientific, and other issues. This course uses science fiction to explore the past, present, and possible future effects of science and technology on society, culture, environment, sustainability, as well as on invention and innovation. Throughout the course various nonfiction articles, science fiction stories, and sections of science fiction works are used in discussions around a variety of themes. 3 hours lecture. (021221)

General Education: Humanities (3B)

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Grade Basis: Graded

Repeatability: You may take this course for a maximum of 3 units

Course Attributes: Lower Division

## TECH 380W Inventing the Future (W)

3 Units GE, W

**Prerequisite:** GE English Composition (1A), GE Critical Thinking (1B), GE Oral Communication (1C), GE GE Mathematical Concepts/Quantitative Reasoning (2), Physical Sciences (5A), GE Biological Sciences (5B); or faculty permission.

Typically Offered: Fall and spring

Rise to the challenge and take responsibility for your future. In this course students explore the nature of invention and innovation in context of the individual, culture, society, economics, environment, technology science, and sustainability among others. Case studies of innovators and inventors are studied, placing the ideas and inventions in historic context as well as considering contemporary and future implications. In light of this exploration and study, the students are challenged to develop their own creative proposal for new innovations or inventions. Not simply a refinement, but a creative innovation and invention, and then to consider and analyze the implications and ramifications of their idea. 3 hours lecture. (021363)

**General Education:** Upper-Division Mathematical Concepts/QR (UD2); Innovation, Design, and the Arts Pathway; Science, Technology, and Society Pathway

Grade Basis: Graded

Repeatability: You may take this course for a maximum of 3 units

Course Attributes: Upper Division; Writing Course

#### **TECH 598 Advanced Special Topics**

1-4 Units

Typically Offered: Inquire at department

This course is for special topics offered for 1.0-4.0 units. Typically the topic is offered on a one-time-only basis and may vary from term to term and be different for different sections. See The Class Schedule for the specific topic being offered. 0 hours supervision. (021448)

Grade Basis: Graded

Repeatability: You may take this course for a maximum of 4 units

Course Attributes: Upper Division