# **Additional Standards**

Content Area: Science

Course(s): CAD Architect, Robotics A
Time Period: Generic Time Period

Length: Full Year Status: Published

#### **Interdisciplinary Standards Across the Content and Grade**

CS.9-12.8.1.12.AP.1 Design algorithms to solve computational problems using a combination of original and

existing algorithms.

CS.9-12.8.1.12.CS.4 Develop guidelines that convey systematic troubleshooting strategies that others can use

to identify and fix errors.

VA.9-12.1.5.12prof.Cn10a Document the process of developing ideas from early stages to fully elaborated ideas.

9-12.HS-PS2-6.6.1 students investigate systems by examining the properties of different materials, the

structures of different components, and their interconnections to reveal the system's function and/or solve a problem. They infer the functions and properties of natural and designed objects and systems from their overall structure, the way their components are

shaped and used, and the molecular substructures of their various materials.

A computing system involves interaction among the user, hardware, application software,

and system software.

#### **Technology**

TECH.8.1.12.B.CS1 Apply existing knowledge to generate new ideas, products, or processes.

TECH.8.1.12.B.CS2 Create original works as a means of personal or group expression.

TECH.8.1.12.F.CS2 Plan and manage activities to develop a solution or complete a project.

TECH.8.2.12.C.5 Create scaled engineering drawings of products both manually and digitally with materials

and measurements labeled.

### 21st Century Skills and Career Ready Practices

CRP.K-12.CRP6.1 Career-ready individuals regularly think of ideas that solve problems in new and different

ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand

how to bring innovation to an organization.

CAEP.9.2.12.C.2 Modify Personalized Student Learning Plans to support declared career goals.

CAEP.9.2.12.C.3 Identify transferable career skills and design alternate career plans.

## **Reading and Writing**

LA.W.9-10.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and

analysis of content.

LA.W.9-10.2.A Introduce a topic; organize complex ideas, concepts, and information to make important

connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures,

tables), and multimedia when useful to aiding comprehension.

LA.W.9-10.2.D Use precise language and domain-specific vocabulary to manage the complexity of the

topic.