## DESK DAVIS ESSENTIAL SKILLS AND KNOWLEDGE

## CAD ARCH DESIGN 1

## **Course Description**

The first in a sequence of courses that prepare individuals for careers in the Architecture, Engineering, and Construction (AEC) industry. This course includes instruction and 2D or 3D Computer-Aided Design (CAD) software to draw a small residential home with an emphasis on blueprint reading.

## Strands

- 1. Students will investigate Architecture, Engineering, and Construction (AEC) related career opportunities.
- 2. Students will be able to understand, demonstrate, and apply mathematics and measuring skills.
- 3. Students will be able to interpret and create construction documents used in the AEC industry.
- 4. Students will be able to demonstrate sketching and CAD drawing techniques
- 5. Students will be able to layout a floor plan for a residence that meets Habitat for Humanity specifications for a 2-bedroom, slab-on-grade, 20-foot by 40-foot starter home .
- 6. Students will be able to use construction documents to identify components and construct a scaled physical cross-section model of a rambler with a basement using readily available materials.