



2022-2023 / Course Outlines / Career and Technical / Robotics

Robotics

Active as of Fall Semester 2014

I. General Information

1. Course Title:
Introduction to Engineering Graphics

2. Course Prefix & Number:
RAST 1120

3. Course Credits and Contact Hours:
Credits: 2

Lecture Hours: 1

Lab Hours: 2

4. Course Description:
This course introduces students to parametric modeling using the Solid Works program. Solid Works is prominent in industry and the theory it uses to create models is typical of this type of software.

5. Placement Tests Required:
Accuplacer (specify test): No placement tests required

6. Prerequisite Courses:
There are no prerequisites for this course.

9. Co-requisite Courses:
There are no corequisites for this course.

II. Transfer and Articulation

III. Course Purpose

IV. Learning Outcomes

1. College-Wide Outcomes

College-Wide Outcomes/Competencies:	Students will be able to:

V. Topical Outline

Listed below are major areas of content typically covered in this course.

VI. Textbook and Supplemental Reading Materials

Engineering Graphics with SOLIDWORKS 2020

Author: PLANCHARD, DAVID

Edition: 20

Published Date: 2020

ISBN: 9781630573157

Publisher: SDC PUB

Book Summary:

Engineering Graphics with SOLIDWORKS 2020 is written to assist students, designers, engineers and professionals who are new to SOLIDWORKS.

The book combines the fundamentals of engineering graphics and dimensioning practices with a step-by-step project based approach to learning SOLIDWORKS. The book is divided into four sections with 11 Chapters.

Review individual features, commands, and tools using SOLIDWORKS Help. The chapter exercises analyze and examine usage competencies based on the chapter objectives. The book is designed to complement the SOLIDWORKS Tutorials located in the SOLIDWORKS Help menu.

Desired outcomes and usage competencies are listed for each project. Know your objectives up front. Follow the step-by step procedures to achieve your design goals. Work between multiple documents, features, commands, and properties that represent how engineers and designers utilize SOLIDWORKS in industry. The author developed the industry scenarios by combining his own industry experience with the knowledge of engineers, department managers, vendors and manufacturers.