

# DSGN 250 : DESIGN FOR ROBOTIC PRODUCTION

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## Transcript title

Design for Robotic Production

## Credits

3

## Grading mode

Standard letter grades

## Total contact hours

60

## Other hours

60

## Prerequisites

DSGN 130 and DSGN 140.

## Course Description

Provides the tools and techniques to design for robotic production. Preparation for analyzing design and material data to determine machine tooling and machining speeds and feeds. Provides hands-on training for safely operating milling and 3D printing robotic systems. Repeatable for credit.

## Course learning outcomes

1. Apply design standards and principles for robotic production.
2. Create accurate and technically-sound program files for robotic production.
3. Analyze design and material data to determine machine tooling and machining speeds and feeds.
4. Safely operate milling and 3D printing robotic systems.
5. Use media-specific terminology to receive and provide feedback.

## Content outline

1. Design for robotic production
2. Program files for robotic systems
3. Material data
4. Machining speeds and feeds
5. Machine tooling
6. Robotic milling safety, operation, and maintenance
7. Robotic 3D printing safety, operation, and maintenance
8. Constructive critique: giving and receiving feedback between instructor and classmates

## Required materials

Students will need to provide specific materials used in this course; please see the syllabus for a detailed list.

## General education/Related instruction lists

- Arts and Letters