



Course Outline



Course Information

Course Title: Engineering Design Drafting

Course Code: DEC30S

Year: 2025/2026

Location: Crocus Plains Regional Secondary School, Room 211

Instructor Information

Instructor Name: Mr. Jason Klimack

Email: Klimack.Jason@bsd.ca

Office Phone: 1.204.729.0309

Communication: Best method of communication is through email.

Course Description

Overview: Engineering design drafting is intended for students continuing in the specialization branch of engineering. Students will learn about various mechanical systems including gears, joints, springs, connectors, animation, and 3D printing.

Prerequisites: DEA20S – Introduction to Mechanical Engineering (Essentials 1).

Course Objectives

- Prepare computer models of design solutions.
- Prepare working and presentation drawings and documents.
- Plan and organize presentations of design solutions.
- Describe building/manufacturing processes in design solutions.
- Describe and apply common tools and equipment used in design drafting.
- Describe and apply the transferable cross-curricular knowledge and skills that relate to design drafting; understanding mathematical and scientific concepts related to design drafting, as well as being able to read, interpret and communicate information.
- Demonstrate employability skills required in design drafting including personal management, organization, teamwork, and independence.
- Demonstrate a knowledge of and ability to recognize and apply appropriate health and safety requirements and practices to maintain a safe workplace.

Assessment

Formative Assessments: Self-assessments, survey questions, weekly assignment feedback.

Summative Assessments:

- Practical and Theory tests – 35%
- Projects – 60%
- Employability – 5%

There is NO final exam for this course.

Course Schedule

Unit	Number of Weeks
Review Project	2
Animation	1
3D Printing	2
Gears	2
Midterm Project	3
Title Block Design	1
Springs and Joints	2
Research and Presentation	2
Final Project	3

Course Policies

Attendance: Students that are absent for one or more days are responsible for ensuring that they catch up with any content that was covered during their absence prior to the end of the unit, or with the teacher's permission of an extension PRIOR to the absence.

Academic integrity: There is a zero-tolerance policy for academic dishonesty (cheating), including but not limited to: replicating projects from the internet, completing or submitting other students work, plagiarism, or using AI to write content for any written assessments. Failure to comply with this policy will result in a grade of zero for that assessment and may result in the reporting of the incident to the student's parents or the school administration.

Class participation: All students are expected to participate in class activities and discussions.

Personal electronic devices: All personal electronic devices are prohibited during class time including cellphones, smart watches, ear buds and headphones. If a student is caught using their device they will be asked ONCE to put the device away. If the problem continues then the students parents and/or the office administration will be contacted.

Late work: Students are to save all their course work in their shared engineering folder on OneDrive. Students will not need to submit their work as the instructor will always have access. However, any work

that is incomplete at the time of grading will be assigned a grade based on the level of completeness (e.g. if the project is only 75% complete, the student will receive a maximum score of 75%).