The Engineering CAD class is intended for students who have an interest in the technical drafting fields and potentially are looking to pursue future studies in the area. Instruction covers such areas as technical sketching, working drawings, detail drawings, and assembly drawings. Students will plan, design, draw, and construct solutions to a variety of engineering related problems presented to them throughout the school year. Engineering practices relating to product design, prototyping, analyzing and improving new and existing designs are included in the student activities.

1 or 2 Semester Course (Pre-req.- Grades 10-12)

Related Computer Software
AutoCAD, Inventor, Rhino 3D Modeling

Engineering Drafting & CAD Outline

1. Twenty-Century Drafting
2. Sketching and Lettering
3. Use and Safety of Lab Equipment
4. Geometry for Technical Drawing
5. Multiple View Drawing
6. Dimensioning
7. Auxiliary Views and Revolutions
8. Basic Descriptive Geometry
9. 3D Modeling Software
10. Design and Engineering (Problem Solving)
11. Sectional Views and Conventions
12. Fasteners
13. Working Drawings
14. Pictorial Drawings
15. Drafting Media and Reproduction
16. Systems for Graphic Communications
17. Cams and Gears
18. Architectural Drafting
19. Structural Drafting
20. Map Drafting
21. Graphic Charts and Diagrams
22. Electrical and Electronics Drafting
23. Aerospace Drafting
24. Technical Illustration

Classroom Expectations
1. Always try to do your best!
2. Cooperate with and respect others.
3. During independent lab work, stay on task with the assigned activity.
4. Seek help from the teacher when needed.
5. Be on time and in your assigned seat/area when the tardy bell rings, remain there until excused to do otherwise.
6. Be PREPARED! (Pencils, pens, books, calculator, usb storge devices, etc.)
7. You are responsible for makeup work, contact the teacher when returning from an absence.
8. The classroom Attendance Policy, Dress Code, and Rules of Conduct (Discipline), will all be consistent with the policies outlined in the CHS student handbook.
Grading & Attendance Policy
Your semester grade will be based on a percentage point system …
1. Daily participation credit is worth 10 points daily. (Excuse absences can be made-up)
2. Students have up to three days from the date of an absence to provide a valid excuse to the attendance office. After three days, the absence will be classified as unexcused if no valid excuse has been received. 9th/10th Grade Attendance: 833-5763 | 11th/12th Grade Attendance: 833-5761
3. A classroom tardy will result in loss of half the daily credit (5 pts.)
4. Applied lab assignments and tests (approx. 70% of your grade)
5. Lab Assignments are to be done “in class” unless otherwise arranged or directed by teacher.
6. Extra credit assignments may be available upon request.
7. Elective classroom leadership activities are available for extra credit.

Grade Reports are available upon request by both the student and parent or guardian.

If you have questions or concerns, I can be reached via email at: kelly.williams@camas.wednet.edu or by phone at 360-833-5750. Our classroom website with some assignments and a variety of other information can be located at the following address... http://chs.camas.wednet.edu/tech/

Grading Scale - School Wide
A 100% to 92.5% of total points  C  76.4% to 72.5% of total points
A- 92.4% to 89.5% of total points  C-  72.4% to 69.5% of total points
B+ 89.4% to 86.5% of total points  D+  69.4% to 64.5% of total points
B  86.4% to 82.5% of total points  D  64.4% to 59.5% of total points 59% & below is failing
B- 82.4% to 79.5% of total points  I   Incomplete (6 week window for work completion)
C+ 79.4% to 76.5% of total points  NC  No Credit

Course Lab Fee - There is a $5.00 lab fee “per semester” for this elective course.

_________________________________________  _______________
Student Signature       Date

_________________________________________  _______________
Parent or Guardian Signature      Date

Parents please include an "email address" if you have one available... I will make every effort to communicate with you as needed relating to your son or daughters progress in class. Thank you!

Home Email Contact ___________________________________________