

Phone: 713-688-1361

Website: www.houstonisd.org/waltrip

Manufacturing Engineering Technology I

Instructor: Mr. Bain

Email: fbain@houstonisd.org **Room:** 1104 / TEAMS

Office Hour: Monday 3:25 – 4:10 ***** Tuesday – Friday 1:50 – 2:35

Course Content

In Manufacturing Engineering Technology, I (MET), students will gain knowledge and skills in the application, design, production, and assessment of products, services and systems and how those knowledge and skills are applied to manufacturing. Students will prepare for success in the global economy. The study of manufacturing engineering will allow students to reinforce, apply and transpire academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in a manufacturing setting.

Text

The textbooks for the course is Core Curriculum: Introductory Craft Skills Trainee Guide 5th Edition

About the Teacher

Mr. Bain is a graduate of the Roy G. Perry College of Engineering with a Bachelor's in Civil Engineering and Construction Management from Prairie View A&M University. He worked in the Industry for 2 years as Construction Estimator before starting a career in Education. He has taught for 3 years at Waltrip High School in the CTE Department.

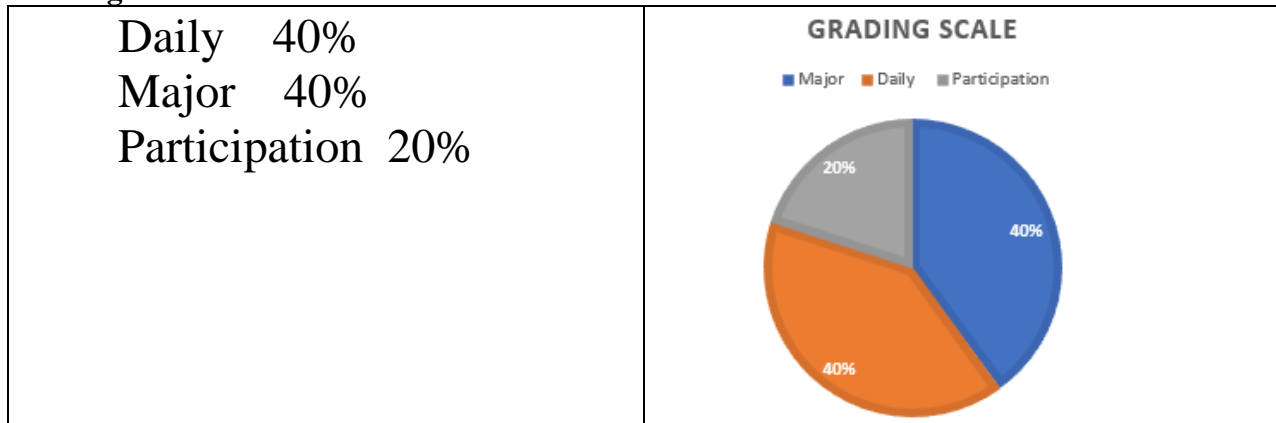
Ongoing Objectives

- Become a Certified SolidWorks Associate (CSWA) and Certified SolidWorks Associate (CSWP)
- Become certified in Autodesk
- Earn Core NCCER Certification
- Developed Hard and Soft Skills for Employment

Portfolio

Students are required to maintain an organized digital portfolio for the course. It will be submitted as a grade during each project cycle. Portfolios are digital and are created on Google Site a sample portfolio is available at <https://bit.ly/3gScEwq>

Grading Scale



Attendance and Participation

Attendance and participation are required; it is difficult to learn the content if you are not present in class. Your class participation and attendance can be a deciding factor if your class average straddles two grades. Be sure to see me about any missed work if you are absent. In the event of an unexpected absence (i.e. illness, emergency, etc.), the student is responsible for ensuring that the absence is excused before assignments (available on the HUB) can be turned in and graded. Student will have three (3) days to turn in completed work. Students will be given at least one opportunity to submit late work following an absence. Grade penalties and the amount of time allowed to complete the assignment are as follows:

Late Work related to an absence:

3 days to turn in the assignment no points deducted full credit eligible

Late Work NOT related to an absence:

1 day late	-10 points	max 90
2 days late	-20 points	max 80
3 days late	-30 points	max 70
4 days late	-40 points	max 60
5 days or later	zero assigned to the grade book	

ASSESSMENT RETAKE POLICY

A student will be permitted to retake any major test. The retest must occur within five (5) school days of the date the grade was received. The higher of the two test grades will be recorded. This does not apply to final exams. CSWA retakes must wait at least 30 days per SolidWorks policy.

Online Norms

- Camera on (preferred)
- Dressed for class
- Microphone muted when not speaking
- Raise hand for questions
- Participate in chat – on task / on topic
- Attentive – Sitting upright
- Engage in discussion and activities

Daily Required Materials

1.laptop 2. Writing Utensils 3. Project materials 4. Homework (late work by 11:59 PM)

Course Overview

Unit 1: Employability Skills

Unit 2: Computer Aided Design Manufacturing (CAD/CAM)

Unit 3: Computer Numeric Control (CNC)

Unit 4: Programmable Logic Controls (PLC)

Unit 5: Electrical Controls and Wiring

Unit 6: Pneumatics and Hydraulics

Unit 7: Thermal Science

Unit 8: Analyzing Quality Control Systems