



WELCOME TO INTRODUCTION TO ENGINEERING DESIGN

Mrs. Ogletree

2023-2024



About Mrs. Ogletree

cogletree@madison-schools.com

- ⚙ See Bio & Agendas on Teacher Webpage at www.madison-schools.com/ogletree
- ⚙ 2023-24 Classes
 - ⚙ Intro to Engineering Design and AP Computer Science Principles at MCHS on A-days
 - ⚙ Intro to Engineering Design at Rosa Scott on B-days
- ⚙ Robotics Club Co-Sponsor





Engineering Academy Courses

Introduction to Engineering Design (IED)

Principles of Engineering (POE)

AP Computer Science Principles (APCSP)

Aerospace Engineering (AE)

Digital Electronics (DE)

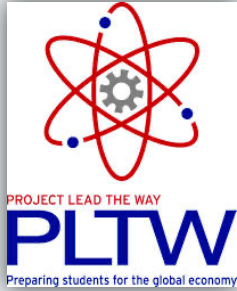
Engineering Design and Development (EDD)*

*Engineering Internship Opportunity

Introduction to Engineering Design (IED) Course Description

Students dig deep into the Engineering Design Process by applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software and an Engineering Notebook to properly document their work.





Units Covered in IED

UNIT 1: Design & Problem Solving

UNIT 2: Assembly Design

UNIT 3: Thoughtful Product Design

UNIT 4: Making Things Move

Grading Structure

- ☒ **Class is weighted (5%)**
- ☒ **Minor Grades = 34% (min 1 per Week)**
- ☒ **Major Grades = 66% (min 2-3 per Term)**
- ☒ **Extra Credit (max 5 major points per Term)**

END OF COURSE EXAMS

 **PLTW End of Course Exam**

 **Autodesk Fusion 360 User Certification**

 **Final Exam** (Optional if EXEMPT)

Active Parent Codes:

NG

NO GRADE

Counts as a Zero until missing work is made up and does count in average

NM

NO MEASUREMENT

Not Graded Yet, does NOT count in average

X

EXEMPT

Excused from or optional assignment
Does NOT count
in average

NG Example

Assignment is past due

Student has not submitted but will still be accepted

Assignment has already been graded


NM Example

Assignment is NOT past due

Student may or may not have submitted yet

Assignment HAS NOT BEEN GRADED

Class Syllabus & "Back to School" Handout & "Canvas Observer" Instructions



MADISON
CENTRAL
HIGH SCHOOL
MARK OF
EXCELLENCE


ABOUT USATHLETICSLIBRARYPTORESOURCESTUDENT LIFE
STUDENT SERVICES
TEACHERS
CALENDAR

District HomeOur SchoolsTranslate

Cam Bilbro Ogletree

Home | Teachers | Ogletree, Cam

ABOUT MRS. OGLETREE
AP COMPUTER SCIENCE
PRINCIPLES
INTRO TO ENGINEERING
DESIGN



Mrs. Cam Ogletree

Hello!

I have had the pleasure of being a faculty member of Madison Central since 2009 and have been teaching classes at Rosa Scott since 2012. My husband Jeff and I have lived in Madison since 1987 and have three sons and a daughter-in-law, all graduates of Madison Central. I currently teach two courses, Introduction to Engineering Design and AP Computer Science Principles, for the Academy of Engineering and am one of the sponsors of the Robotics Club which is made up of students from Rosa Scott and Madison Central. I also serve as Madison Central's website manager.

I earned a bachelor's degree in Business Information Systems and Quantitative Analysis from Mississippi State University in 1985. After working 20 plus years in corporate Information Technology departments, serving in several different capacities, I decided to follow my passion to teach and left the corporate workforce. In 2009, I completed the alternate route program and earned my master's degree in Business Education at Mississippi College.

My desire is to motivate my students to embrace the real world application of the courses I teach by bringing my work and academic experiences into the classroom. I am very excited to be a member of the Academy of Engineering at Rosa Scott and Madison Central and look forward to working with all of my new students and having another fun and successful year in the Jag Zone.

Classes for 2023 - 2024:

- AP Computer Science Principles (MCHS only)
- Intro to Engineering Design (Rosa Scott & MCHS)

Co-Sponsor of the Jaguars Robotics Club

MCHS Website Manager

Click HERE for the instructions to become an observer of a student in Canvas

Phone: (601) 856-7121
Email: ogletreecam@mchschools.com
Degrees and Certifications:
Bachelor's Degree in Business Info Systems &
Quantitative Analysis
Master's Degree in Business Education
Educational Certifications/Endorsements include:
National Board Certified Teacher (NBCT)
ICAT I Certification
C.O.D.L. Certification
PLTW Intro to Engineering Design Certification
PLTW AP Computer Science Principles Certification
Master Teacher Economics
105 Business Education (7-12)
111 Computer Applications (K-12)
188 General Sciences (7-12)
192 Social Studies (7-12)
193 Economics (7-12)
405 Business Management
411 Business Technology
928 PLTW High School STEM (7-12)
952 Career Pathway: Finance and Accounting (7-12)
953 Career Pathway: Business Management (7-12)
983 STEM (7-12)

Supplies needed for class: **\$20 Supply Fee!**
Folder, Paper, Pencils, calculator
Optional: eraser*, ruler*, tape*, scissors*, protractor*, colored pencils*,
External Mouse (TrippLite USB/VGA/MicroSD Hub \$35 or \$10 for USB hub only)

Engineering Notebook and Optional* supplies are provided.



Class Syllabus

&

"Back to School"
Handout



Madison Central Academy of Engineering Madison Central & Rosa Scott

Mission/Goal of the Engineering Academy:

Prepare students interested in pursuing any engineering or other STEM-related career for the rigorous curriculum at a 2-year or 4-year college and provide authentic workforce training.

Introduction to Engineering Design (IED) Syllabus

Mrs. Ogletree

Email: cogletree@madison-schools.com

Website: www.madison-schools.com/ogletree

Materials:

- 1) \$20 Supply Fee (May pay via cash, check, or [MySchoolBucks](#))
- 2) Canvas (Learning Management System) Account: Use your MSIS number and password for access.
- 3) Engineering Notebook – will be provided.



Welcome to
Introduction to
Engineering Design

Mrs. Ogletree

**Active Parent
Codes:**

NG
NO GRADE



About the Teacher (<http://www.madison-schools.com/ogletree>)

Review Syllabus (\$20 Fee – Engineering Notebook will be provided)

Contact Information (Preferred: Email)

o **Email:** cogletree@madison-schools.com

o **Online Form:** found at <http://www.madison-schools.com/ogletree>

Curriculum Delivered Via...



Software Used...



Microsoft



Word



Excel



PowerPoint

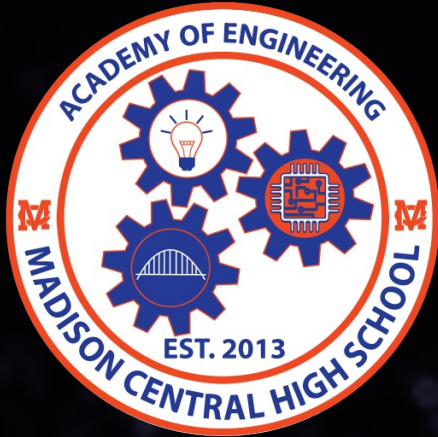


Teams



**AUTODESK®
FUSION 360™**

Computer Aided Design



**PLAN TO JOIN US FOR THE
ACADEMY OF ENGINEERING
SHOWCASE AT MCHS ON
THURSDAY**

APRIL 11, 2024

THANK YOU!