# WELCOME TO AP COMPUTER SCIENCE PRINCIPLES

*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**

AP CSP

IED

# 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 & Development (EDD)***

**\*Engineering Internship Opportunity**

# AP Computer Science Principles (APCSP)

# Course Description

Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. This course helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation. PLTW is recognized by the College Board as an endorsed provider of curriculum and professional development for AP® Computer Science Principles (APCSP). This endorsement affirms that all components of PLTW CSP's offerings are aligned to the AP Curriculum Framework standards and the APCSP assessment.
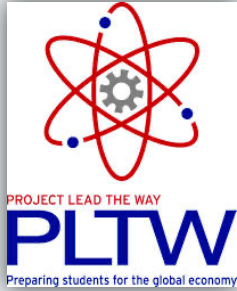
**Units covered in APCSP**

**UNIT 1: Creative Computing for All**

**UNIT 2: Every Bit of the Internet**

**UNIT 3: Little Data to Big Data**

**UNIT 4: Solving Complex Problems**

# Class Syllabus

&

"Back to School" Handout

&

"Canvas Observer" Instructions

MADISON CENTRAL HIGH SCHOOL
MARK OF EXCELLENCE

ABOUT US   ATHLETICS   LIBRARY   PTO   RESOURCES   STUDENT LIFE   STUDENT SERVICES   TEACHERS — CALENDAR

Cam Bilbro Ogletree

Home | Teachers | Ogletree, Cam

ABOUT MRS. OGLETREE

AP COMPUTER SCIENCE PRINCIPLES

INTRO TO ENGINEERING DESIGN

Edit Page

## 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: cogletree@madison-schools.com

Degrees and Certifications:

Bachelors Degree in Business Info Systems & Quantitative Analysis
Masters Degree in Business Education

Educational Certifications/Endorsements include:

National Board Certified Teacher (NBCT)
iCAT-T Certification
C.O.O.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)
955 Career Pathway:  Business Management (7-12)
983 STEM (7-12)

## Supplies needed for class:     $20 Supply Fee!
Folder, Paper, Pen/Pencils

Optional: External Mouse (TrippLite USB/VGA/MicroSD Hub $35 or $10 for USB hub only)

# Class Syllabus

# &

## "Back to School"

# Handout

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## Madison Central's Engineering Academy

***Mission/Goal of the Engineering Academy:***
To advance students' ability to innovate, think critically, and collaborate to solve problems in order to prepare them for any STEM-related field of study at a 2 or 4 year college.

### AP Computer Science Principles
#### Class Syllabus
#### Mrs. Ogletree
*Email: cogletree@madison-schools.com*

**Materials:**
1) $20 Supply Fee  (MySchoolBucks.com )
2) Canvas (Learning Management System) Account:  Use your MSIS number and password for access.
3) Paper, pencil, pen  (binder, folder, notebook, etc. – Your choice on how to organize paper)
4) Optional:  Personal Earbuds (Headphones are available in the classroom)

**Course Description:**
Students work in teams to develop computational thinking and solve problems. Structured activities progress to open-ended projects and problems that require planning, documentation, communication, and other professional skills. Problems aim for ground-level entry with no ceiling: all students can successfully engage the problems while students showing greater achievement are challenged to work further. There are five primary course objectives.

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## Welcome to
## AP Computer Science Principles
### Mrs. Ogletree

**Active Parent Codes:**

**NG**
NO GRADE

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

⚛ Syllabus in Canvas ($20 Fee)

⚛ Contact Information (Preferred: Email)
- **Email:** cogletree@madison-schools.com
- **Online Form:** found at http://www.madison-schools.com/ogletree

⚛ Mrs. Ogletree's CANVAS Weekly Assignments include
- Link to Weekly Assignments from Home Page/Announcements
- Each Week's instructions & Assignments are under Modules

# Grading Structure

- **Class is weighted (10%)**

- **Minor Grades = 34% (min 1 per Week)**

- **Major Grades = 66% (min 2-3 per Term)**

- **Extra Credit (max 5 major points per Term)**

## 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**
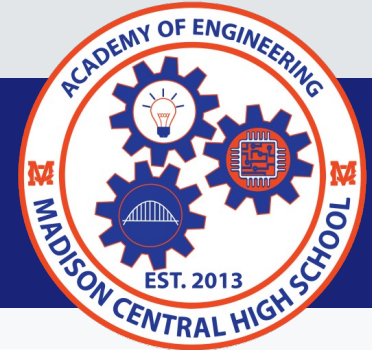
**Assignment has already been graded**

## NM Example

**Assignment is NOT past due**

**Student may or may not have submitted yet**

**Assignment has not been graded**

# Curriculum Delivered Via...

# Software Used…



**Word**

**Excel**

**PowerPoint**

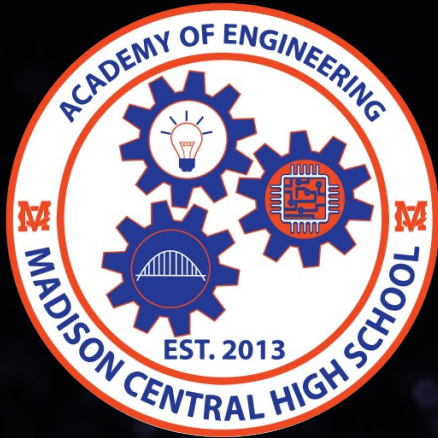**Teams**

**Programming Platforms:**

**MS Visual Studio Code (Python)**

**MIT App Inventor***

*Extra Enrichment Activities