EEME Advanced – Project Sessions (Syllabus)

Spring 2018

Instructor Information

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| Instructor: | Email: | Class Location & Hours: |
| **Chris Gearhart** | cgearhart@homeoftheshamrocks.org | Lincoln Township Library  Bi-Weekly Tuesdays 6-8pm |

# General Information

## Description:

Students will learn how to assemble and test hands-on electronics. The primary purpose is to engage students in real component based circuitry that when assembled together will perform real tasks that prove the circuits design. The principles learned will also help the students understand the basic functions that are commonly used in today’s electronics.

EEME (pronounced “Ee-Mee” stands for Electrical Engineering Mechanical Engineering

and the class is part of preparing students for STEM opportunities.

## Course Highlights:

• Continuation from EEME Intermediate class **(NOTE: EEME Intermediate is a pre-requisite).**

• Class meets bi-weekly (twice a month) Tuesday’s from 6-8PM **(Class dates and projects schedule to be announced)**

• Receive 8 advanced electronics kits (one per class) in class to build during the semester. (Previous EEME website kits are not taught during the advanced class. In-class projects are the only requirement.)

• With instructions taught by Mr. Gearhart, electronic kits are assembled in class utilizing guided step by step instructions and then the students keep the projects.

• The EEME Advanced kits are built on 830 point breadboards and utilize multiple integrated circuits to create new challenging fun circuits that expand the student’s knowledge of digital and analog electronics.

• The class projects are a mix of individual and team circuits.

• Repeat the class for a total of 8 sessions and different projects during the semester.

• Parents are encouraged to attend class and engage in class participation!

• This advanced class is only offered in the spring semester.

• Class meets at Lincoln Township Library located at: 2099 W. John Beers Rd., Stevensville, MI

## Expectations and Goals: (Pass/Fail )

Complete all class provided kits and participate during the class project summary session. Due to the limited class meetings, all classes must be attended to meet partnership attendance requirements. Excused absence exceptions are to be discussed in advance.

## Required Materials:

* All kit components are provided on arrival of class.
* Optional Materials (provided by student/family): Compartment storage organizer with dividers used to keep electronic components organized.

## Class Schedule:

## Bi-weekly Tuesdays with (8) class meetings (Dates to be determined with library room availability)