

# FABENS HIGH SCHOOL

## T-STEM Academy

Where imagination comes to life



# Texas HB5 Endorsements

## Business & Industry

- BIM
- DIMM
- Animation
- Graphic Arts
  
- Prin Transportation
- Small Engine
- Auto Tech 1
- Auto Tech 2

**PTECH**

## Arts & Humanities

- Arts 1-4
  
- Theatre Arts 1-3
  
- Band 1-4
  
- LOTE
- Span 1-4
- French 1-4

## Public Service

- Humanities
- Prin Human Service
  - child dev
  - FD/Nutrition
  - Sewing 1
  - Sewing 2
- Health Science
- Prin Health
  - Med Term
  - Patho
  - Anatomy
- JROTC
- JROTC 1-4

## Multidisciplinary

- General course options

**Early College**

## STEM

### Science

- Complete five science credits
- Bio
- Chem
- Physics/IPC
- science elec
- science elec

### Math

- complete five math credits
- Alg I
- Geom
- Alg II
- Pre-Cal/fourth elective
- Cal/pre-cal

**STEM Academy**

# Why FHS T-STEM

## OPTIONS

### Advanced Placement

- English III
  - English IV
  - US History
  - Government Systems
  - Economics
  - Human Geography
  - European History
  - W. History
  - French III
  - French IV
  - Spanish III
  - Spanish IV
  - Spanish V
- Physics
  - Biology
  - Chemistry
  - Environmental
  - Art III
  - Art IV
  - Calculus
  - Music Theory

## OPTIONS

### Dual Credit

- Sociology
- Psychology
- US History
- Government
- Economics
- Pre-Cal
- Calculus
- English

## OPTIONS

### STEM Academy Pathways

- **Engineering**
- **Medical**
- **Computer Science**



# STEM : Healthcare Therapeutics

Core Courses : Sciences, math, history, english, P.E., arts, foreign language, electives

## 9th Grade

Principles of Health Science

-Types of Health issues

-Nutrition

## 10th Grade

Medical Terminology

-Content vocabulary

-study of root words, prefixes and suffixes

## 11th Grade

Anatomy and Physiology

-Body Systems

- cell

- tissue

-Physiology: normal function of each system

## 12th Grade

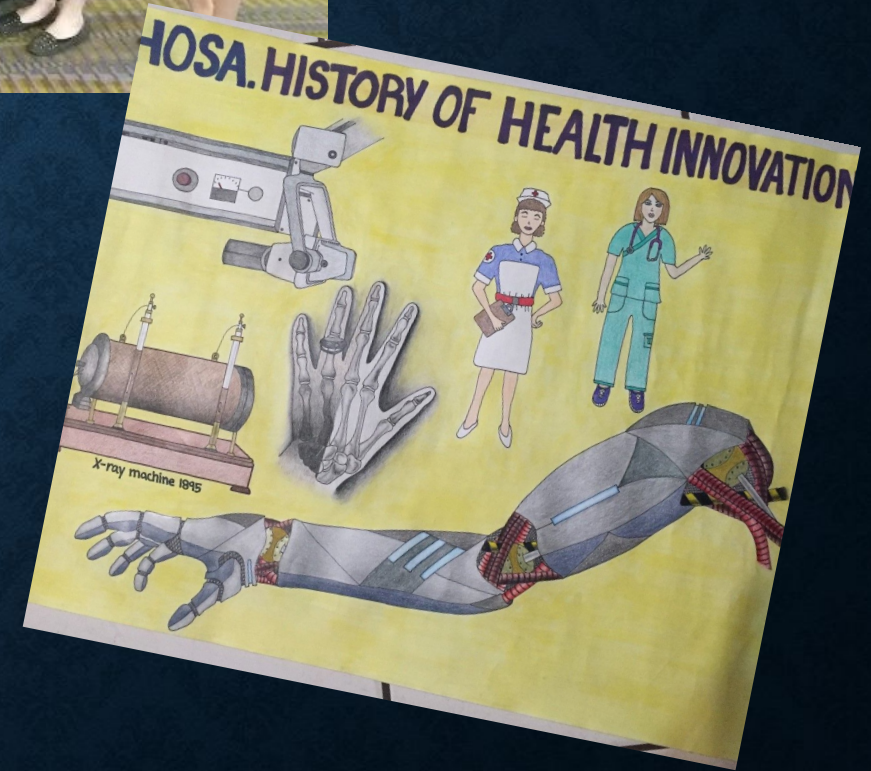
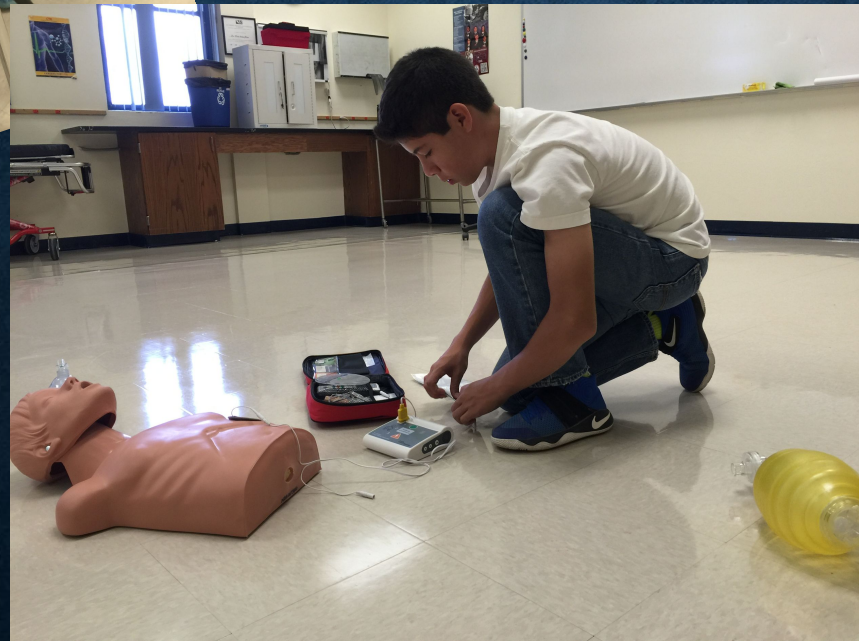
Pathophysiology

-Pathology

-Physiology

Health Occupations Students of America (HOSA): competition in many different medical subjects

Cardiopulmonary Resuscitation (CPR): 2 yr. certification



# STEM : Engineering

Core Courses : Sciences, math, history, english, P.E., arts, foreign language, electives

## 9th Grade

Principles of Applied Engineering

-Types of Engineering

-Multiviews

-3D Printing

- Employability Skills

## 10th Grade

Engineering Design and Presentation

-Architectural blueprints

-Manufacturer blueprints

- AutoCAD software

-3D Printing

-Laser Cutter

## 11th Grade

Research and Design

Tsiolkovsky Rocket

- Goal: 1lb. payload; 1 mile in altitude

-Physics/ electrical engineering

-AutoCAD

-3D Print

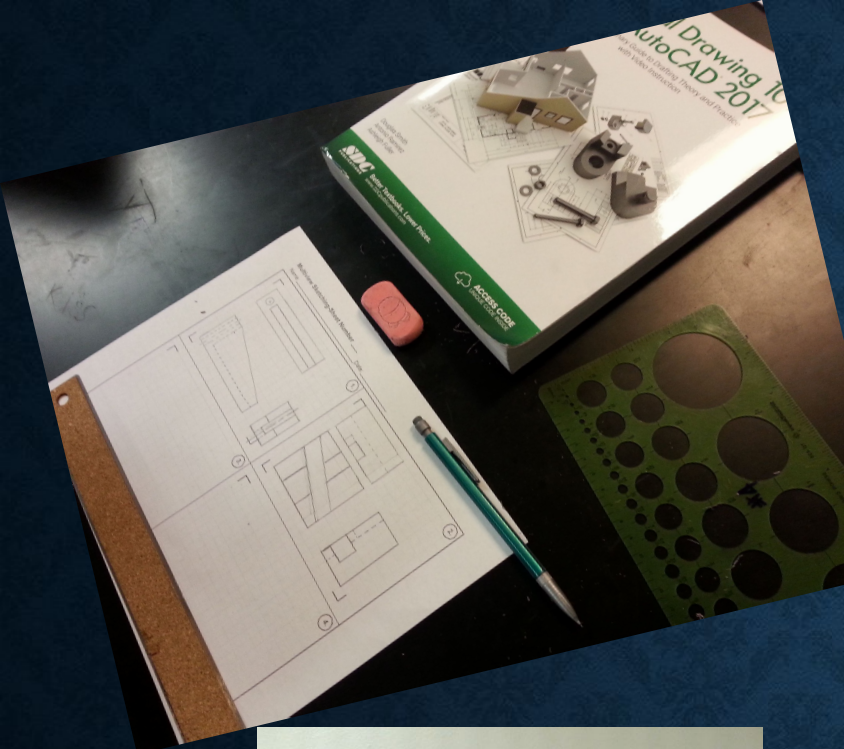
## 12th Grade

Research and Problem Solving

Oberth Rocket

- Goal: Mach 1 (767 mph)  
- speed of sound

-Design is based on math calculations



# STEM : Programming and Software Development

Core Courses : Sciences, math, history, english, P.E., arts, foreign language, electives

## 8th Grade

Computer Science Fundamentals

- computational thinking
- problem solving
- programming concepts
- digital citizenship

## 9th Grade

AP Computer Science Principles

- College Credit (pass test)
- Programming
- Algorithms
- Pseudo programming language

## 10th Grade

Computer Science I

- Parts of a computer
- JavaScript language

## 11th Grade

AP Computer Science A

- College Credit (pass test)
- Java language

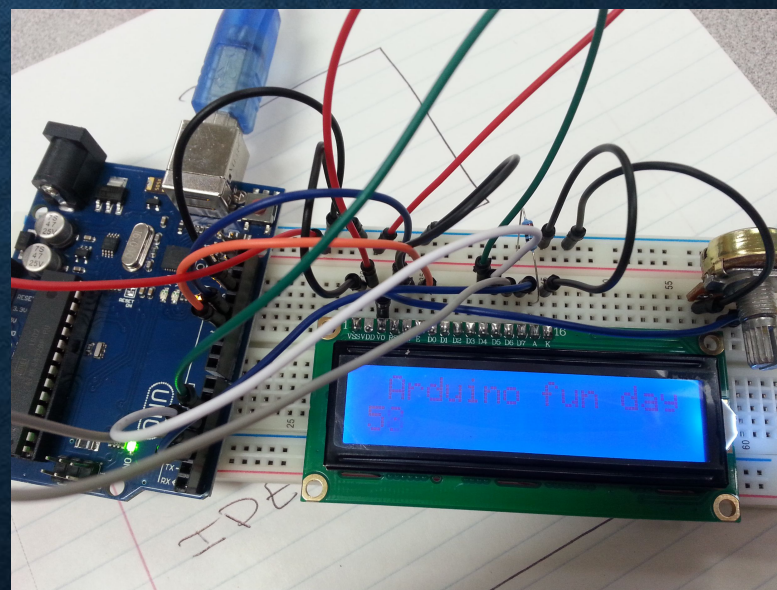
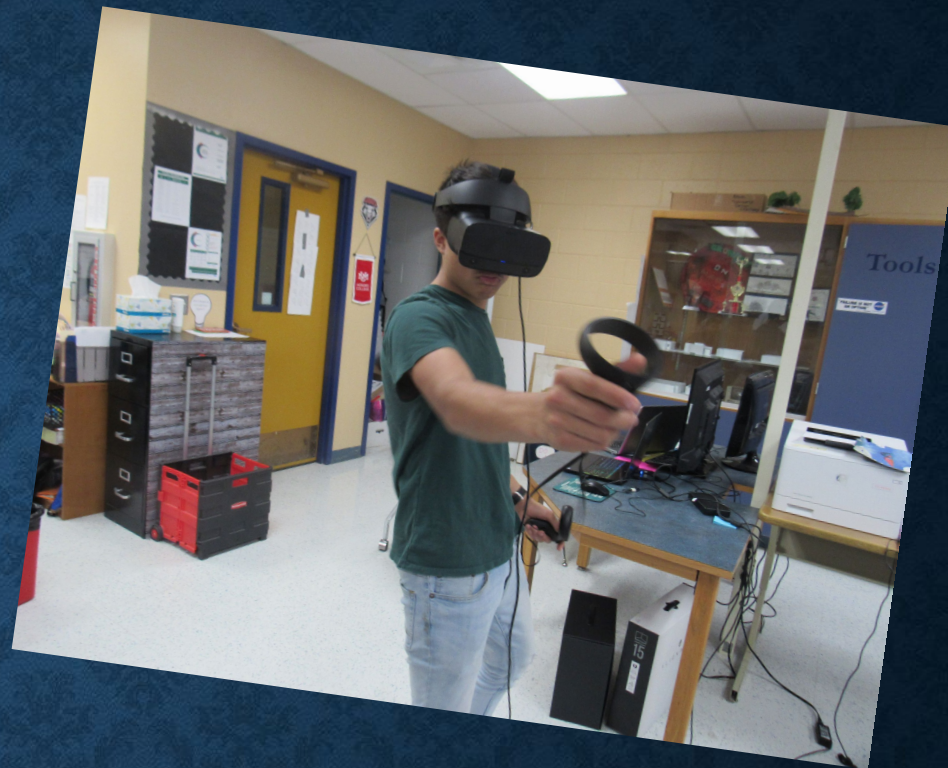
## 12th Grade

Computer Science III

- Hands on
- Program to solve real-world solutions

Optional Courses: does NOT replace any of CS courses

- Robotics 1: various robots
- Robotics 2: Vex Robotics; competition
- Drones: Certification license for Part 107 Pilot license for unmanned aerial vehicles (UAV)



# STEM Alumni % 2019



# FHS Points to Ponder

- Sit down and have a discussion with your parents. What is the best endorsement for your needs and your personal growth?
- Remember, in Eighth grade you can only choose one endorsement
- Dual Credit (college credit) is available for anyone no matter the endorsement.
  - TSI
- Reflection of what your high school goals are.
- Reflection of your goals after high school graduation.
- **COMMUNICATE!** Talk to someone, ask questions

**We are available!**

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