



STREAM CAREER ACADEMY

REAL WORLD EXPERIENCE IN A STEM CAREERS

Partnering with local colleges and community organizations, Gross Catholic High School is offering a Career Academy in the STREAM fields giving students an opportunity to develop and apply skills in science, technology, religion, engineering, art and mathematics/computer science.

Prerequisite Courses

Freshman and Sophomore years:

- Biology, Chemistry or Physical Science
- Algebra 1/Algebra 2, Geometry, Pre Calculus or H. Pre Calculus
- Engineering Design, Game Design, Computer Security

Mathematics and Computer Science Track Details

This program begins in a student's junior year with the following courses:

Gross Catholic Courses

- Pre Calculus, Honors Pre Calculus, Elective: AP Statistics
- AP Computer Science

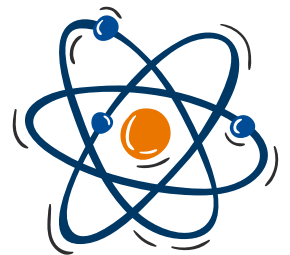
College Courses

- Information Systems and Literacy (Sophomore year)
- Computer Science and Security, Java Programming
- Calculus 1 (Metro math placement test required)

STREAM Field Experience

Senior year, approved by academy instructor

- Significant individual or team entry in national competition
- Work timeline includes entire year culminating in a written report and presentation
- Resources include members of the local professional community
- Possible experiences
 - Innovation Contests (e.g., UNO Innovation Cup or Congressional App Challenge)
 - Security Contests (e.g., CyberPatriot or CyberStart America)
 - Summer Internships (e.g., UNO CS or Gallup Internships)



Coursework

The preparation for STEM careers involves a number of courses in mathematics and science. These courses will be completed by the academy members within the regular curriculum at Gross Catholic High School. Advanced and specialized courses can be taken through local colleges and the delivery will depend on the course. College courses may be dual-credit, remote, hybrid, or on campus. Students will select college courses through consultation with high school and college representatives. Students will work in small agile learning teams and be required to keep a notebook and maintain a portfolio. Professional mentoring may be part of some programs.

Potential College Courses

- INFO 1003 Problem Solving and Program Logic (Sophomore Prerequisite)
- INFO 1521 Java Programming I
- MATH 2410 Calculus I (Placement Test Required)

Application Process

Interested students will complete an application and participate in an interview with a small panel. Students should see Mrs. McNamara if they are interested in beginning the application process.