

Carlson Cybersecurity (Automotive emphasis)



This program offers excellent career opportunities for both male and female students.

Credits, Articulations & Prerequisites

Credits:

Cross credit with some academic courses (including 4th year related math, VPAA, math & science) may be available and will be reviewed on a case-by-case basis with each district's counseling department.

Dual Enrollment:

- Henry Ford College up to 19 credit hours
- Credential awarded upon graduation

Prerequisite:

- Junior Status
- GPA of 2.0 or higher in core class
- Program application required before acceptance.

Program Description

The courses offers a mid-level understanding of the technological needs, threats, and vulnerabilities of hardware, software, operating systems, networks and the Internet. Students will examine operating systems, networks, tools and protocols needed to navigate, use, and manage security technologies as well as gain insight into the legal, social, and political dynamics of the cyber universe. Designed for students interested in cyber defense or IT professionals seeking a fundamental understanding of cybersecurity.

Students will learn to write UNIX shell scripts and manipulate the UNIX operating system, along with an introduction to other language. They will recognize networks, operating systems and analyze the security requirements for cybersecurity. Additionally they will learn to defend systems against unauthorized access using various tools (KALI, NMAP, SNORT, Wireshark, etc..) and learn to restrict access through privilege assignment, and control structors.

Attendance history must meet the standard of the sending school district and additional prerequisites may be required by Henry Ford College.

Special Features

In cooperation with Henry Ford College, the successful Machine Trades and Engineering student will finish high school having completed up to 19 hours of undergraduate credit. Should a student choose to, they can complete an Associate's degree at HFC within one year of high school graduation.

Leadership and work-based learning opportunities available.

Students will meet at Michigan Technical Education Center of Henry Ford College located at: 3601 Schaefer Road, Dearborn,