The Destinations Programming and Software Development Pathway prepares students to learn the language of computers, create software programs, maintain computer systems and software, and help others solve computer program-related issues.

**DID YOU KNOW?**

**SAMPLE COURSE PROGRESSION**

**4-YEAR PLAN**

- **9TH**
  - IT and Manufacturing Explorations
  - Introduction to Computer Science
  - Programming Logic and Design

- **10TH**
  - Java™ Programming 1

- **11TH**
  - Java™ Programming 2
  - NOCTI (JAVA™) Exam Prep
  - Other elective, internship, or dual credit course if pre-requisites are met

- **12TH**
  - Other elective, internship, or dual credit course if pre-requisites are met

**3-YEAR PLAN**

- **9TH**
  - IT and Manufacturing Explorations
  - Introduction to Computer Science

- **10TH**
  - Programming Logic and Design
  - Java™ Programming 1

- **11TH**
  - Java™ Programming 2

- **12TH**
  - Other elective, internship, or dual credit course if pre-requisites are met

**Possible Careers**

- Applications Software Developer
- Computer Programmer
- Computer and Information Systems Manager
- Software Quality Assurance Engineer
- Systems Software Developer

**Industry-Recognized Credentials**

Destinations programs prepare students for the:
- National Occupational Competency Testing Institute Computer Programming Exam

**Success Beyond High School**

Destinations graduates may pursue:
- Computer science certificate
- Associate’s degree in information technology
- Bachelor’s degree in computer science

**DID YOU KNOW?**

**SOFTWARE DEVELOPERS CAN EARN**

- **$93,350/YR**
- **22% JOB GROWTH**
- Expected by 2022

**COMPUTER PROGRAMMERS CAN EARN**

- **$74,280/YR**
- **8% JOB GROWTH**
- Expected by 2022

IT AND MANUFACTURING EXPLORATIONS
This course is designed as an exploration of two career clusters. Students receive an introduction to these fields so they can better assess which pathway to pursue. The first half of the course provides a comprehensive introduction to the essentials of web design, from planning page layouts to publishing a complete site to the web. Students learn how to use HTML to design their own web pages. The course covers basic HTML tags for formatting text as well as more advanced tags. Through real-world design scenarios and hands-on projects, students create compelling, usable websites using the latest suite of free tools. The second half of the course has an introduction to engineering and to advanced manufacturing.

INTRODUCTION TO COMPUTER SCIENCE
This course provides a solid foundation using an algorithm-driven approach that is ideal for students’ first course in computer science. Students learn about emerging topics, such as privacy, drones, cloud computing, and net. Students also are introduced to programming languages such as C++, Java™, Python, C#, and Ada.

PROGRAMMING LOGIC AND DESIGN
This course prepares student programmers for success by teaching them the fundamental principles of developing structured program logic. This course takes a unique, language-independent approach to programming, with a distinctive emphasis on modern conventions and prepares students for all programming situations with introductions to object-oriented concepts, UML diagrams, and databases.

JAVA™ PROGRAMMING 1 AND 2
These courses introduce programmers to the power of Java for developing applications while learning the basic principles of structured and object-oriented programming. These courses incorporate the latest version of Java with meaningful real-world exercises, and a wealth of case problems helps students build skills critical for ongoing programming success.

NOCTI (JAVA™) EXAM PREP
This course prepares you for the NOCTI and A*S*K certification examinations. Industry-recognized certifications are based on the scores to these tests.

OTHER ELECTIVES
May not be offered at every school, every semester. Check with school for details.