Discover and create with technology

ABOUT COMPUTER SCIENCE

Changing technology has created a growing need for people with experience and education in computer science. Many employers are experiencing shortages of highly trained technical people, especially in computer science related fields. Whether students are planning to go to college, technical college or into employment right after high school, they will gain valuable information and technology skills through the MHS Computer Science program. Careers of today require strong academic and technical preparation. By carefully planning course selection, students will improve their employment opportunities.

Read more about Computer Science Courses

Visit the Skipper Log at **minnetonkaschools.org/ SkipperLog** to read descriptions of each Computer Science course.

CONTACT

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Department Chair

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COURSES OFFERED

Grades 9-12:

- Advanced Video Game Design
- AP Computer Science A
- AP Computer Science Principles
- App Development with Swift
- Artificial Intelligence & Machine Learning
- Cybersecurity
- Introduction to Computer Science
- Intro to App Development (Online)
- Programming in Python
- Video Game Design
- Web Design

Grades 10-12:

- User Experience (UX) Design (VANTAGE)

Grades 11-12:

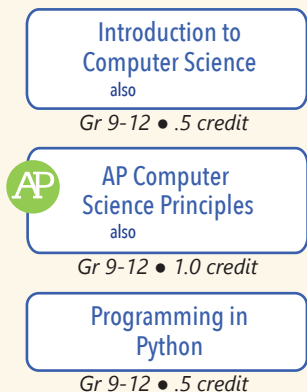- IB Computer Science SL
- IB Computer Science HL

Computer Science Course Sequencing Options

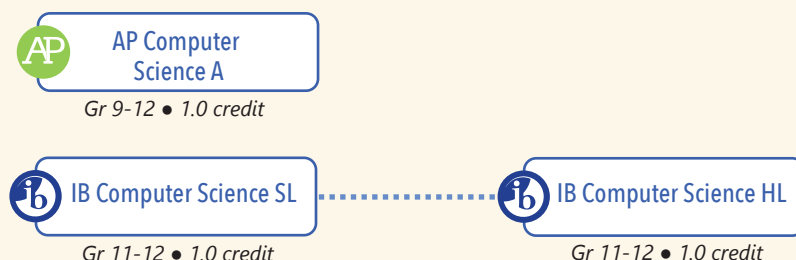## CHART YOUR COURSE IN COMPUTER SCIENCE

There are many pathway options in computer science, depending on your areas of interest and desired outcome from courses. You can start with an introductory overview course to get the broad scope of what computer science is all about, or you can begin with specialized courses in your interest area.

Have questions about which course is right for you? Talk to a computer science instructor or visit **minnetonkaschools.org/SkipperLog** to read in-dpth course sdescriptions.
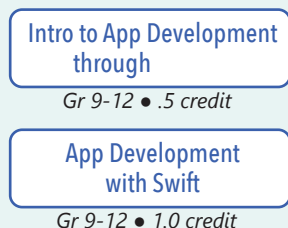
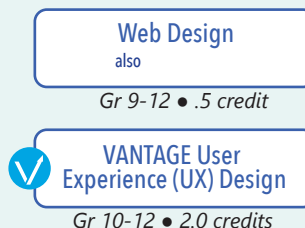### Introductory General Computer Science

Introduction to Computer Science also
Gr 9-12 ● .5 credit

AP **AP Computer Science Principles** also
Gr 9-12 ● 1.0 credit

Programming in Python
Gr 9-12 ● .5 credit

Advanced General Computer Science

AP **AP Computer Science A**
Gr 9-12 ● 1.0 credit

IB **IB Computer Science SL**
Gr 11-12 ● 1.0 credit

IB **IB Computer Science HL**
Gr 11-12 ● 1.0 credit

Specialized Classes: App Development

Intro to App Development through
Gr 9-12 ● .5 credit

App Development with Swift
Gr 9-12 ● 1.0 credit

Specialized Classes: Video Game Development

Video Game Design also
Gr 9-12 ● .5 credit

Advanced Video Game Design
Gr 9-12 ● .5 credit

Specialized Classes: Web Science

Web Design also
Gr 9-12 ● .5 credit

V **VANTAGE User Experience (UX) Design**
Gr 10-12 ● 2.0 credits

Specialized Classes: Others

Cybersecurity
Gr 9-12 ● .5 credit

Artificial Intelligence & Machine Learning
Gr 9-12 ● .5 credit
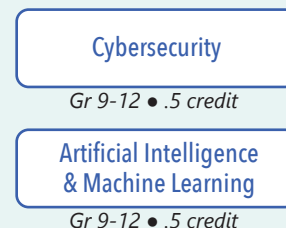
NOTE FOR INCOMING 9TH GRADERS

Freshmen are recommended to register for Introduction to Computer Science, Programming with Python & Shell or AP Computer Science Principles. Only freshman students with a very strong background in computer science and math should enroll in AP Computer Science A.

ONLY INTERESTED IN PROGRAMMING?

If students want to learn about programming alone, they should take the Programming with Python & Shell or AP Computer Science A. AP Computer Science Principles covers other aspects of Computer Science beyond programming. The IB SL and HL courses also have a more well rounded curriculum for CS topics, instead of solely focusing on programming.

OTHER SEQUENCE SUGGESTIONS

Students who wish to enroll in Artificial Intelligence & Machine Learning should first take Introduction to Computer Science or the Programming with Python & Shell course.