COURSE SYLLABUS

Computer Science Certificate Online (High School & College)

In this online summer certificate, high school students will master the fundamentals of programming in both Java and Python. Students will get a head start on the AP Computer Science Exam as well as learn the fundamentals of data science and machine learning.

> Group classes (Live Online) and onsite training are available for this course. For more information, email onsite@graduateschool.edu or visit: https://www.graduateschool.edu/certificates/computer-science-certificate-online



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Course Outline

This package includes these courses

- Java Programming Summer Program Online (High School & College) (45 Hours)
- Python for Data Science & AI Machine Learning Online (High School & College) (45 Hours)

Java Programming Summer Program Online (High School & College)

- Write and use industry-standard algorithms
- Write your own program in both the object and procedural paradigm
- Read and understand large programs
- Understand how to think like a programmer
- Write your own functions

Python for Data Science & AI Machine Learning Online (High School & College)

- Programming fundamentals in Python
- How to write conditional statements in Python
- Import data using the pandas package
- Clean and wrangle data
- Visualize and understand complex data
- Use machine learning algorithms