

About This Specialization

Take your first step towards a career in software development with this introduction to Java—one of the most in-demand programming languages and the foundation of the Android operating system. Designed for beginners, this Specialization will teach you core programming concepts and equip you to write programs to solve complex problems. In addition, you will gain the foundational skills a software engineer needs to solve real-world problems, from designing algorithms to testing and debugging your programs.

Created by: **Duke** UNIVERSITY

- 5 courses**
Follow the suggested order or choose your own.
- Projects**
Designed to help you practice and apply the skills you learn.
- Certificates**
Highlight your new skills on your resume or LinkedIn.

Projects Overview

Centered around projects, this Specialization will help you create a portfolio of work to demonstrate your new programming skills. In the capstone you will create a recommender engine similar to those used by Netflix or Amazon. Additional projects in your portfolio will include:an interactive webpage that applies

More

Courses

Beginner Specialization. No prior experience required.

COURSE 1

Programming Foundations with JavaScript, HTML and CSS

Current session: Mar 5

Commitment

4 weeks of study, 3-7 hours/week

Subtitles

English

About the Course

Learn foundational programming concepts (e.g., functions, for loops, conditional statements) and how to solve problems like a programmer. In addition, learn basic web development as you build web pages using HTML, CSS, JavaScript. By the en... more

You can choose to take this course only. Learn more.

COURSE 2

Java Programming: Solving Problems with Software

Current session: Mar 5

Commitment

4 weeks of study, 4-8 hours/week

Subtitles

English, Turkish

About the Course

Learn to code in Java and improve your programming and problem-solving skills. You will learn to design algorithms as well as develop and debug programs. Using custom open-source classes, you will write programs that access and transform images, w... more

You can choose to take this course only. Learn more.

COURSE 3

Java Programming: Arrays, Lists, and Structured Data

Current session: Mar 5

Commitment

4 weeks of study, 4-8 hours/week

Subtitles

English

About the Course

Build on the software engineering skills you learned in "Java Programming: Solving Problems with Software" by learning new data structures. Use these data structures to build more complex programs that use Java's object-oriented features. At the en... more

You can choose to take this course only. Learn more.

COURSE 4

Java Programming: Principles of Software Design

Upcoming session: Mar 12

Commitment

4 weeks of study, 4-8 hours/week

Subtitles

English

About the Course

Solve real world problems with Java using multiple classes. Learn how to create programming solutions that scale using Java interfaces. Recognize that software engineering is more than writing code - it also involves logical thinking and de... more

You can choose to take this course only. Learn more.

COURSE 5

Java Programming: Build a Recommendation System

Upcoming session: Mar 26

Commitment

4 weeks of study, 3-6 hours/week

Subtitles

English

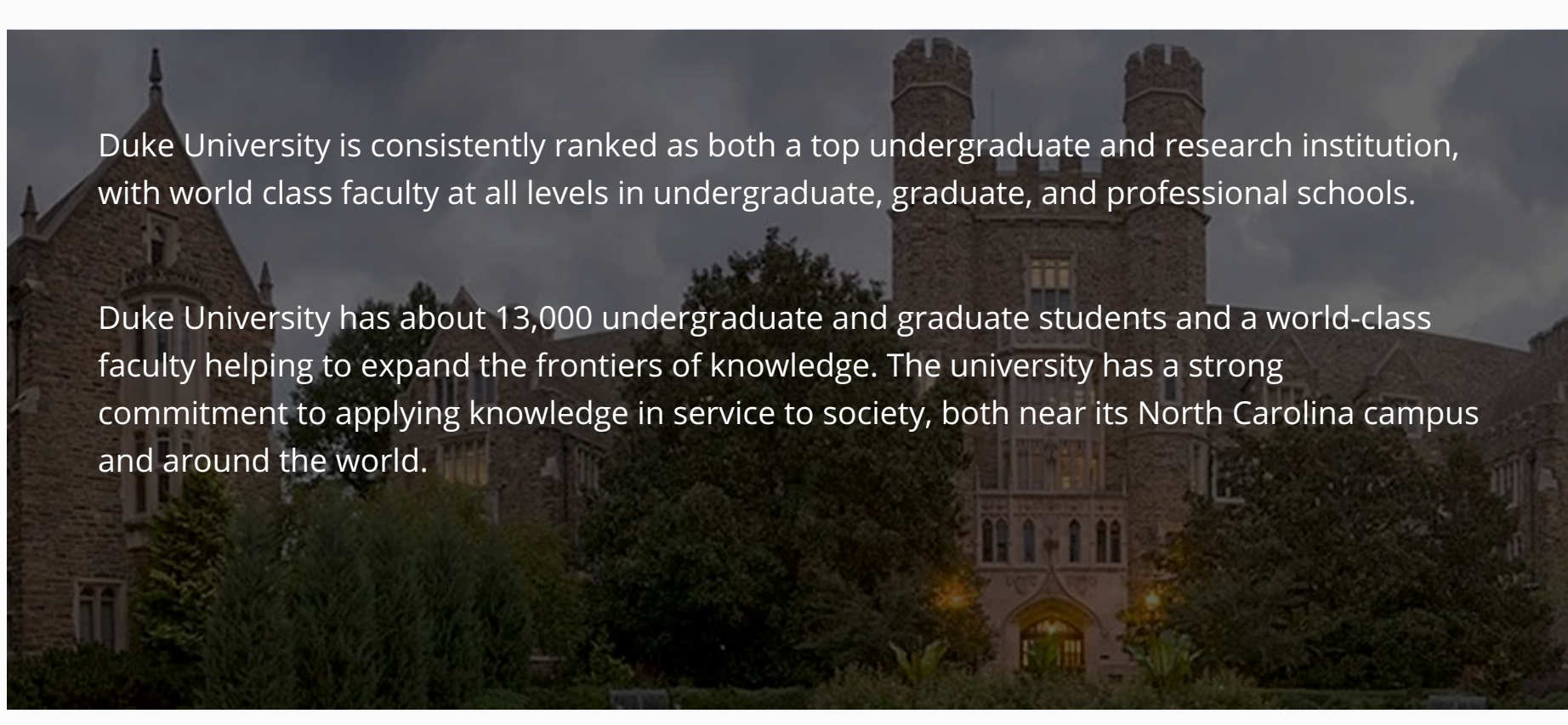
About the Capstone Project

Ever wonder how Netflix decides what movies to recommend for you? Or how Amazon recommends books? We can get a feel for how it works by building a simplified recommender of our own!

In this capstone, you will show off your problem sol... more

You can choose to take this course only. Learn more.

Creators



- Andrew D. Hilton**
Assistant Professor of the Practice
- Robert Duvall**
Lecturer
- Susan H. Rodger**
Professor of the Practice
- Owen Astrachan**
Pofessor of the Practice

FAQs

- >

What is the Capstone Project?
- >

What is the refund policy?
- >

Can I just enroll in a single course? I'm not interested in the entire Specialization.
- >

How long does it take to complete the Java Programming and Software Engineering Fundamentals?
- >

How often is each course in the Specialization offered?
- >

What background knowledge is necessary?
- >

Do I need to take the courses in a specific order?
- >

Will I earn university credit for completing the Java Programming and Software Engineering Fundamentals?
- >

What will I be able to do upon completing the Java Programming and Software Engineering Fundamentals?
- >

What software or equipment will I need to complete the assignments?
- >

Can I view the course materials for free?
- >

How is Google involved in content creation and teaching for this Specialization?

More questions? Visit the [Learner Help Center](#).