

# Guides

## Guides

All guides in TCSS 460 use **TypeScript** as the implementation language. If you're coming from a Java background, start with the TypeScript Fundamentals tier and work your way through.

### TypeScript Fundamentals

Core TypeScript concepts for Java developers transitioning to web development. Covers variables, types, functions, objects, arrays, and modules.

### Async Programming

Understanding asynchronous programming – from general concepts like callbacks and event loops to TypeScript's Promises and async/await patterns.

### Back-End Development

Building web APIs with Express, connecting to PostgreSQL, and using Prisma ORM. Includes tooling guides for Postman and Swagger, plus deployment.

### Front-End Development

From HTML/CSS fundamentals through jQuery to modern React and Next.js development.

