

2021 Backend Roadmap

By Web Dev Simplified <https://courses.webdevsimplified.com>

Each section, and all the items listed in each section, of this roadmap are listed in the order that you should learn them.

Each section also includes projects that you can complete in any order that require only the skills learned in that section and the sections prior.

Backend Language - (Choose Any)

JavaScript (Recommended If Also Learning Frontend)

Python (Recommended If Also Learning AI)

PHP (Recommended If Also Learning Wordpress)

Go

Rust (Difficult To Learn)

Ruby (Easier To Learn But Not Used As Much)

Backend Framework - (Choose Any)

JavaScript

Node.js With Express (Recommended)

Deno (Too New To Recommended)

PHP

Laravel (Recommended)

Wordpress (Also Recommended)

CodeIgniter

Python

Django (Recommended)

Flask

Go

Gin Gonic (Recommended)

Rust

Rocket (Recommended)

Ruby

Rails (Recommended)

Node.js/Express - [JavaScript Course](#), [Node.js Course](#)

Var vs Let vs Const - [Video](#), [Article](#)

Strict Equality - [Video](#), [Article](#)

Hoisting - [Article](#)

Scoping

Closures - [Video](#)

Reference Vs Value - [Video](#)

Arrow Functions - [Video](#), [Article](#)

Callbacks - [Article](#), [Related Video](#)

Promises - [Video](#)

Async Await - [Video](#)

Common Modules - [Article](#)

Template Literals - [Article](#)

Array Methods - [Video](#)

Null Vs Undefined - [Article](#)

Recursion - [Video](#)

Short Circuiting - [Article](#)

Ternary Operator - [Video](#), [Article](#)

Destructuring/Spread Operator - [Video](#), [Article](#)

Classes - [Video](#)

Node.js File System Library

Socket.io (Optional)

Express Middleware - [Video](#), [Article](#)

Express Routing

Templating Language (EJS, Handlebars, Pug, etc.)

Database ORM Of Your Choice

Projects (May Require A Database)

Easy

Basic Node.js Server - [Video](#)

Basic REST API - [Video](#)

URL Shortener - [Video](#)

Paginated API - [Video](#)

Discord Bot - [Video](#)

Basic Chrome Extension - [Video](#)

Medium

Amazon Web Scraper - [Video](#)

JSON Web Token Auth - [Video](#)

User Permission Roles - [Video](#)

Passport Auth - [Video](#)

Custom Auth - [Video](#)

Stripe Payments - [Video](#)

Hard

Markdown Blog - [Video](#)

Realtime Chat App - [Video 1](#), [Video 2](#)

Backend Concepts

REST - [Video](#)

GraphQL - [Video](#)

Client/Server Communication - [Video](#)

MVC Architecture - [Video](#)

Databases

SQL

PostgreSQL (Recommended)

MySQL (Also Recommended) - [Install Video](#), [Tutorial Video](#)

SQLite

NoSQL

MongoDB (Recommended)

Redis (Recommended For Caching)

Cassandra

DynamoDB

Other Important Topics

Version Control (Learn As Soon As Possible) - [Video](#)

JSON (Learn Alongside JavaScript) - [Video](#)

Regular Expressions (Optional) - [Video](#)

How To Deploy

Basic Security - [What Is JWT Video](#)

Testing - [Video](#), [Test Driven Development Video](#)

Things That Will Grow In 2021

TypeScript

Next.js (Fullstack Framework For React)

Nuxt.js (Fullstack Framework For Vue)