

# TOP UNIVERSE BACKEND CURRICULUM

## WEEK 1

Introduction to Backend Development

Introduction to Javascript

- a. Javascript Basics (Variables, Scopes etc)
- b. Data Types (String, Number, Boolean, Undefined, Null, Symbol, BigInt, Array, Object)
- c. Primitive and Reference types
- d. Control Flow Statements
- e. Conditional Statements
- f. Functions and Types
- g. Object Oriented Javascript
- h. Javascript Promises

## WEEK 2

Application Prototyping with Javascript

## WEEK 3

Installing & exploring Nodejs

File systems and command line args

## WEEK 4

Introduction to packages (npm)

Introduction to web servers

Debugging in NodeJS

## WEEK 5, WEEK 6, WEEK 7

Introduction to Rest API's

Working with Postman (GET, PUT, PATCH, DELETE, POST) HTTP Verbs

## WEEK 8

Introduction to Database Systems (MongoDB)

## WEEK 9

Crud Operations using mongoose (mongoose)

## WEEK 10

Asynchronous Nodejs

API Authentication and Security

## WEEK 11

Sorting, Pagination and Filtering

## WEEK 12

File Upload

Sending Email & SMS

Automated Testing

## WEEK 13

Introduction to cloud deployment Part 1 (Heroku PaaS)

Introduction to Cloud Deployment Part 2 (DigitalOcean)