





American Certified Full Stack Developer



SYLLABUS & CONTENTS

Certified and Approved by the American Board of Education



This course covers the principles and techniques of full-stack web development using Python and the Django framework. Students will learn how to build dynamic web applications from scratch, from the backend server to the frontend user interface. Students will gain practical knowledge of web development best practices, database design, and user authentication.

Understand the principles and practices of full-stack web development

• Develop skills in building web applications using Python and Django

• Learn how to properly design and implement a database

 Gain practical knowledge of user authentication and web development best practices



COURSE SYLLABUS

1. Introduction to Full Stack Web Development

- Overview of Full Stack Web Development
- Web Development Best Practices
- Tools and Technologies Used in Full Stack Web Development
- Building a Development Environment

2. Django Fundamentals

- Introduction to Django Framework
- Setting up Django Environment
- Creating a Django Project
- Understanding URL Routing

3. Database Design and Implementation

- Introduction to Relational Databases
- Database Design Principles
- Creating Database Models with Django
- Querying and Modifying Data

4. User Authentication

- User Authentication Fundamentals
- Creating User Authentication System with Django
- Password Security and Encryption
- User Roles and Permissions

5. Building Dynamic Web Pages

- Building Dynamic Web Pages with Templates
- Template Inheritance and Customization
- Adding Forms and User Input
- Understanding AJAX and Asynchronous Requests

6. Front-end Web Development



- Introduction to Front-end Development
- HTML and CSS Fundamentals
- Integrating Bootstrap Framework
- JavaScript Fundamentals

7. Deploying and Maintaining a Django Web Application

- Deploying a Django Application to a Web Server
- Testing and Debugging
- Application Maintenance and Updates
- Performance Optimization



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Assessment and Evaluation:

- Quizzes and exams
- Class participation and discussion
- Assignments and Projects
- Final Project (Full Stack Web Application)

100% Placement Support and Interview Grooming



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