

# Logiciel de création site web

## Semester 1: Advanced Front-End Development

**Total Duration: 14 weeks**

### Split 1: Front End Development with Bootstrap

**Duration: 7 weeks**

#### Week 1: Bootstrap Overview

- Deep dive into Bootstrap components and utilities
- Responsive design using Bootstrap grid system

#### Week 2-3: Customizing Bootstrap

- Theming and custom styles
- Using SASS with Bootstrap

#### Week 4-5: Bootstrap JavaScript Components

- Incorporating JS components like Modals, Tabs, Carousel
- Creating interactive forms with validation

#### Week 6-7: Project

- Design and develop a multi-page responsive website
- Focus on UX/UI principles using Bootstrap

### Split 2: Front End Development with React

**Duration: 7 weeks**

#### Week 8-9: React Components and State Management

- Advanced component architecture
- State management using Context API and Hooks

#### Week 10-11: Routing and Data Fetching

- Single Page Applications with React Router
- Fetching data from APIs and handling state with React

#### Week 12-13: Advanced React Patterns

- Higher Order Components and Render Props
- Utilizing React Portals and Fragments

#### Week 14: Capstone Project

- Develop a complex interactive application, such as a shopping cart or a social media feed

## Semester 2: Progressive Web Applications and Advanced Topics

**Total Duration: 14 weeks**

### Split 1: Front End Development with Next.js

**Duration: 7 weeks**

### **Week 1-2: Next.js Fundamentals**

- Pages, routing, and APIs in Next.js
- Static Site Generation (SSG) and Server-Side Rendering (SSR)

### **Week 3-4: Next.js Features**

- Image Optimization
- Internationalization and Localization

### **Week 5-6: SEO and Performance**

- Optimizing Next.js apps for SEO
- Performance metrics and best practices

### **Week 7: Intermediate Project**

- Create a marketing site or small e-commerce platform with Next.js

## **Split 2: Advanced Frontend Development with Next.js**

**Duration: 7 weeks**

### **Week 8-9: State Management in Next.js**

- Integrating Redux or Zustand for complex state scenarios
- Client-side vs. Server-side state management

### **Week 10-11: Authentication and Middleware**

- Secure applications using NextAuth.js
- Exploring middleware for server-side logic in Next.js

### **Week 12-13: Deployment and Optimization**

- Deploying and scaling Next.js applications
- Continuous integration and continuous deployment (CI/CD) workflows

### **Week 14: Capstone Project**

- Design and develop a full-fledged application incorporating all learned techniques
- Focus on a real-world problem, integrating external APIs, authentication, and state management