

# MASTER PROGRAM on

# **Full Stack Web Development**



Certification 6 Months / 90-120 Hours Industry ready exhaustive program

# **Master Course Training Program**

Make Projects & Get Trained





#### About EduVitae Services

**EduVitae Services**, run by **IITians & industry experts**, is a renowned provider of education, training, research and development programs, with a large presence. We offer a wide range of specific industry ready courses and training opportunities in the areas of computer science and IT, animation and multimedia, as well as engineering, management and advanced technology. Our programs include workshops, training, internships, corporate training, certificate courses, placement training, research, and development programs, all designed to meet the needs of students, professionals, academic institutions, and industry. Our reputation as one of the best technology training providers, is a testament to our commitment to helping our students and clients acquire the skills and knowledge they need to succeed in their careers and goals.

### **Our Clientele/Collaborations**

Top private & government academic institutions, college's fests and corporates where directly/indirectly our presence have been felt:

Indian Institute of Technology, Kanpur

Indian Institute of Technology (Banaras Hindu University), Varanasi

Indian Institute of Technology (ISM), Dhanbad

Indian Institute of Technology, Jodhpur

Indian Institute of Technology, Bhubaneswar

Blithchron, Indian Institute of Technology, Gandhinagar

Indian Institute of Technology, Guwahati

Indian Institute of Technology, Patna

Indian Institute of Management (IIM), Lucknow

Indian Institute of Management (IIM), Indore

National Institute of Technology, Surat

National Institute of Technology, Bhopal

National Institute of Technology, Warangal

National Institute of Technology, Trichy

Chandigarh University

DIC, Department of Applied Arts (Visual Arts), Banaras Hindu University, Varanasi

Madan Mohan Malaviya University of Technology, MMMUT Gorakhpur

Maharaja Agrasen Institute of Technology, Delhi

Thapar Institute of Engineering & Technology, Punjab

Assam Engineering College, Assam

Jaypee University of Engineering & Technology

Shillong College, Meghalaya

SRCC, Delhi University

Kendriya Vidyalaya, India

DAV School, India

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#### Industry/Corporate/Startups/Government

MapsCrew

Rabbixel

CreativeHatti







Accenture Capgemini F1 Digitals TIH IIT Roorkee, DST, Govt. of India

and many more tech & non-tech colleges/universities/institutes/schools & organizations/startups/companies across India and globe.

#### **Achievements & Milestones**

- Our alumni / students are working in top notch company of India & MNCs VMware, Infosys, Cognizant, CGI, Fidelity, Razorpay, EXL, CARS24, Tata Steel, NVIDIA, MyKaarma, Oyo Rooms, Samsung, Walmart Labs, L&T, JIO, Citibank, TCS, Accolite, BNY Mellon, and many more.
- ✓ Conducted a number of workshop/training/internship programs in many colleges/universities/schools like IITs, IIMs, NITs, IISc & other prestigious institutions of India & with the corporates too.
- ✓ Trained many college/university/school students, some of them have created a milestone for **EduVitae Services** by meeting with **Shri Narendra Damodardas Modi** (Prime Minister of India) related to some **robotics projects**.
- ✓ Collaborating with Industries / Corporates / Startups to provide them hiring services (helping them to hire fresh trained talent with us).
- Signed MOUs / worked with top notch colleges / universities / schools / organizations like Techkriti IIT Kanpur, Technex IIT (BHU) Varanasi, Wissenaire IIT Bhubaneswar, Techniche IIT Guwahati, Concetto IIT (ISM) Dhanbad, Pravega IISc Bangalore, IGNUS IIT Jodhpur, Ranbhoomi IIM Indore, IIM Lucknow, MMMUT GKP, NIT Surat, NIT Bhopal, NIT Warangal, NIT Trichy, Chandigarh University, Thapar University, SRCC DU, KMC DU, TIH IIT Roorkee DST Govt. of India and many other academic institutions for professional / industry ready & learning skills training / workshop / internship programs.

# **Prerequisites**

Participants from CSE/IT/MCA/BCA/MSc/BSc-IT/ECE/EE/Other branch/stream will get more benefit after joining this program and other interested students / fresher / professionals can also participate in that as per their requirements and career goals.

# What is required before joining this training program?

Here's the checklist

- 1. A laptop with Microsoft Windows (7 or later) configuration along with smartphone as per need/requirement.
- 2. Laptop Charger/Adapter for charging purpose.
- 3. USB Mouse for designing purpose (if required).
- 4. Internet Connectivity (Typically to be able to do video call / conferencing).
- 5. Notepad & Pen/Pencil for important notes.
- 6. Most important your interest and seriousness of learning.

# Training Deliverables & Takeaways

Every participant will get

✓ Industry Ready Curriculum





- ✓ Certification Program
- ✓ Projects/Practical Based Learning
- ✓ Career Guidance
- ✓ Interactive & Doubt Session (online)
- ✓ Internship/Placement Assistance

#### **Course & Content**

All of the sessions will be theoretical & practical oriented, so it will be really great if participant(s) can look on the syllabus which we are going to cover during master program training days.

## **Full Stack Web Development**

#### Month 1: Introduction to Web Development and Front-End Basics (20-25 hours)

- Introduction to Web Development and the MERN Stack (3 hours)
- HTML Fundamentals (4 hours)
- HTML Structure and Tags
- CSS Fundamentals (4 hours)
- CSS Styling and Layout
- Introduction to JavaScript (4 hours)
- Variables, Data Types, and Operators
- DOM Manipulation (3 hours)
- Introduction to React.js (7 hours)
- Components, JSX, State, and Props

**Assignment:** Building a Static Portfolio Website (4-5 hours)

#### Month 2: Advanced Front-End Development (20-25 hours)

- Advanced React Concepts (8 hours)
- React Hooks, Context API
- React Router (3 hours)
- Responsive Web Design (4 hours)
- Media Queries and Flexbox/Grid
- Redux for State Management (6 hours)
- Actions, Reducers, Middleware
- Consuming RESTful APIs with Axios (4 hours)

**Assignment:** Building a CRUD Application with React and Redux (5-6 hours)

#### Month 3: Back-End Development with Node.js and Express.js (20-25 hours)

- Introduction to Node.js (3 hours)
- Setting Up Node.js Environment
- Modules and NPM
- Building RESTful APIs with Express.js (8 hours)
- Routing, Middleware, Error Handling
- Authentication and Authorization (6 hours)
- Passport.js for Authentication





- Role-Based Access Control
- MongoDB and Mongoose (6 hours)
- Schema Design and CRUD Operations

Assignment: Creating a RESTful API and Implementing User Authentication (4-5 hours)

#### Month 4: Advanced Back-End Development and Deployment (20-25 hours)

- Advanced Database Queries (6 hours)
- Aggregation Framework, Indexing
- File Uploads and Cloud Storage (4 hours)
- Deployment Strategies (6 hours)
- Hosting on AWS, Heroku, or Vercel
- CI/CD Pipelines
- Real-Time Web Applications with WebSockets (5 hours)
- Performance Optimization (4 hours)
- · Caching, Load Balancing

**Assignment:** Implementing Real-Time Features and Deploying (5-6 hours)

#### Month 5: Advanced Topics and Specialization (20-25 hours)

- GraphQL and Apollo Server (8 hours)
- GraphQL Schema, Queries, Mutations
- Security Best Practices (6 hours)
- Handling Security Vulnerabilities, OWASP Top Ten
- Unit Testing and Debugging (5 hours)
- Specialization Track Selection (6-7 hours)
- Choose from options like Mobile App Development, E-commerce, or Social Media Platform

Assignment: Building Specialization Project (4-5 hours)

#### Month 6: Final Projects and Career Preparation (10-15 hours)

- Final Project Development
- Students work on their final full-stack web application projects
- Portfolio Development (10-12 hours)
- Preparing a Portfolio to Showcase Final Projects
- Mock Job Interviews and Resume Building (2-4 hours)
- Internship and Job Assistance (1 hour)

#### Disclaimer

Please make sure that this workshop/training/internship/seminar/webinar/master program will be organized by EduVitae Services, it is to note that if any IIT/IIM/NIT/Organization is EVS partner then they are only responsible for providing certification to attending students/professionals accordingly, marketing, publicity and rest operations, scheduling, payment processing, training, content development etc. will be taken care by EduVitae Services.

All of the matters/disputes related to internship/training/workshop/master program needs to be addressed to EduVitae Services team only. See our terms and conditions on www.eduvitae.co.in and fees once paid is non-refundable and non-transferrable. Company reserves full right to withdraw any offer/discount anytime without any prior notification, also it's important to understand that center & batches date/time/duration etc. of any program/event can be changed as per requirements in India and across globe.

