



# Job Ready Certification Program Full Stack Development

*(Duration - 8 Months)*

# About RV College of Engineering®

RV College of Engineering (RVCE) established in 1963 is one of the earliest self-financing engineering colleges in the country. The institution is run by Rashtreeya Sikshana Samithi Trust (RSST), a not for profit Trust. RVCE is an autonomous college offering 15 Bachelors, 14 Master Programs and departments have Research Centre affiliated to Visvesvaraya Technological University (VTU), Belagavi. The institution has set itself the Vision - Leadership in Quality Technical Education, Interdisciplinary Research and Innovation, with the focus on Sustainable and Inclusive Technology.

Recent awards and achievements include - Ranked 89<sup>th</sup> in the country by National Institutional Ranking Framework (NIRF: 2022), QS-IGUAGE-Diamond/University Rating (2021-2024).

EduFuture Excellence Award - Best Private Engineering University (South) by Zee Digital, "Engineering College of the Year-2022" by the Higher Education Review Magazine, ranked 13th in the country & 2nd in Karnataka - IIRF Ranking (2021-22), Ranked 6th among the top 10 - 100 private engineering colleges in the country by Education World Magazine.

Eleven UG programs and eligible M.Tech & MCA programs have been accredited by NBA multiple times. The institution has to its credit over 1500 National and International Journal publications, filed 52 patents, 45 published patents, 15 granted patents, completed sponsored research and consultancy projects worth Rs. 25.0 crores in the last three years. The institution has established Centers of Competence / Excellence in the campus.





# COMPUTER SCIENCE AND ENGINEERING DEPARTMENT

Established in year 1984, offers three undergraduate programs, B.E (CSE), B.E (CSE- Data Science), B.E (CSE- Cyber Security) and two postgraduate programs M.Tech (CSE) & M.Tech (CNE). The department has research center affiliated to Visvesvaraya Technological University (VTU), Belagavi. The two new B.E programs namely B.E (CSE- Data Science) and B.E (CSE- Cyber Security) are offered from academic year 2022-23.

Department of Computer Science and Engineering has MoUs for Research, Consultancy and Training with various government agencies and multinational companies. Students are encouraged to take up interdisciplinary research in various domains of computer science such as Computer Vision, Data Mining, Artificial Intelligence, Machine Learning, Networking,

High Performance Computing etc. and are placed in reputed companies.

The Department has undertaken many research/consultancy projects funded both by multinationals and government agencies worth Rs. One Crore. During last five years the department has, to its credit nearly 450 publications. The Department has an excellent placement track record where in various companies offer salary packages with an average salary of INR 15 Lakhs per annum. Internship opportunities are provided for final year and pre-final year students to carry out projects.



# About upGrad Campus

upGrad Campus, a vertical of upGrad, has a mission to bridge the industry academia gap in Higher Education Institutions across the country. We aim to improve students' employability by aligning the institutional curriculum with industry requirements with our learning solutions.

The education system of today is undergoing major changes and keeping up with the emerging revolution of Education 4.0 is our Job Ready Certification Programs that empower institutions to provide their students with new-age and industry relevant certifications to let them face the job market and get placement ready.



**Duration-  
8 Months**



**10+ Job  
Ready Skills**



**480+ hrs of learning  
with 224+ hrs of  
live sessions**



**28 LPA Highest  
Package**

***Our vision is to empower students with value added Skill Enhancement Programs for Employment and Career Progression. And our mission is to evolve continually as a centre of excellence in quality education and collaborate with industries to enhance research in emerging areas.***



# Program Introduction



Full-stack development is the development of both the front-end, i.e, client-side and back end, i.e, server-side portions of a web application. Full-stack developers work on the front-end, back-end, databases and debugging of web applications or websites. The front-end is the visible part of a website or web application that is responsible for user interface. Meanwhile, the back end is the server-side development of a web application or website with a primary focus on how the website works.

When you navigate easily through a website or see those interactive designs on apps, a full stack developer is at work to make every experience easy for you. A full stack developer has knowledge of each layer of an application and possesses both technical and soft skills to assess a situation. Full Stack Developers are engineers who work on both the client-side and server-side of the software application.

“Full-stack” refers to a group of programming languages and tools. A developer learns to handle both the front-end and back-end development of a website and applications.

# Course Curriculum

## Object Oriented Programming in Java

Java - Variables & Datatypes  
Java - Conditionals, Loops & Functions  
Abstraction & Encapsulation  
Inheritance & Polymorphism  
Arrays & Linked Lists

## Foundations of Web Development

Internet & Networking Basics  
HTML & CSS  
JavaScript  
Advanced JavaScript  
Back-End Integration Using HTTP

## Algorithm Analysis & Techniques

Algorithm Analysis  
Searching & Sorting Algorithms

## Introduction to MERN

Introduction to ReactJS  
Introduction & Installation of Node.js  
NoSQL & MongoDB  
Setting Up Express.js

## Data Structures

Stacks & Queues  
HashTables, HashMaps and HashSets  
Binary Trees & Binary Search Trees  
Priority Queues & Heaps  
Graphs & Graph Algorithms

## Specialization 1-

### Advanced Frontend Development

React.js - Part I  
React.js - Part II

## Specialization 2-

### Server-Side Development

NoSQL Databases & MongoDB - I  
NoSQL Databases & MongoDB - II  
Express.js

# Tools and Skills



& many more...



# Program Highlights



## Live Classes by Top Industry Experts

Students get an opportunity to learn exclusive insights into the industry from Experts



## 360° Training & Placement Module

Designed by industry experts preparing students for interviews, group discussions, aptitude training and helping them build their resumes



## Curriculum aligned with Industry Requirements

Exclusively designed curriculum by industry experts that integrate with industry requirements



## Exclusive Capstone Projects

Implementation of practical skills through projects (e.g E-com Website) that are guided by Industry Experts



## Complete Placement Assistance

With our placement training module, students gain skills and experience to increase their chances of getting placed at top companies



## Access to Exclusive Job Portal by upGrad

Students get access to an exclusive job portal of upGrad that comes with more than 350+ hiring partners



# Future of Full Stack Development



## Exponential industry growth

The IT and Tech industry in India has grown exponentially in the last few years and this industry will be worth around 350 billion by 2025.

*Source: The Hindu Businessline*

## Increasing demand for Full Stack Developers

There will be 8,53,000 open job roles for Full Stack Developers by the year 2024. In India alone, there has been a 30% increase of open positions for Full Stack Developers since 2021.

*Source: United States Bureau of Labour Statistics*







# Previous Recruiters



& many more...



# Learner Testimonials

I would like to thank upGrad Campus for offering great opportunities to upscale my skill sets, ace my placements and land my dream job. I strongly recommend upGrad Campus programs to anyone looking to grow and excel in their career!

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**Deepanshu Paliwal,**  
**Lovely Professional University**

100% appreciation goes to team upGrad Campus. They helped me during the entire interview process. I am very happy to be part of upGrad Campus and the mentors at upGrad Campus are very supportive.

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**Lokeshwar Kumar,**  
**Lovely Professional University**  
**Placed in Nobrokerhood**

upGrad Campus has been a major factor behind providing me with such a great opportunity and assisting me at every moment. I learned a lot from the mentors and teachers, and improved my skills and knowledge through their guidance.

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**Yuvraj Chaudhary,**  
**Chitkara University**  
**Placed in PlanetSpark**

## Certificate

Upon successful completion of this program, you will receive a Certificate of Completion from **upGrad Campus** and RV College of Engineering®





**upGrad**  
Campus

# Be Future-ready with **upGrad Campus**



## Contact us-



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