

Cyber Square[®]

PROFESSIONAL

where your IT work experience starts

CS DIPLOMA IN FULL STACK DEVELOPMENT USING PYTHON & REACT

COURSE BROCHURE

Duration: 6 Months

Lecture sessions: 72 Sessions & Hands on
Assignments/projects Soft Skill Sessions



200
Institutes



12
Countries



1M
Students

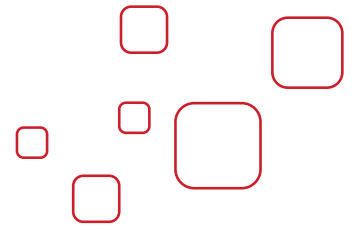
Empowering Tomorrow's High-Paying workforce
with Internship-Driven Industry Experience



ORAY
EDUCATION

<https://cybersquare.pro/>

About Cyber Square Professional



Immerse yourself in a unique learning experience where the virtual meets the real-world. Our courses go beyond conventional training, simulating a dynamic working environment that mirrors a global software company. Interns, dispersed worldwide, collaborate seamlessly on real projects, bringing the virtual workspace to life.

This international exposure not only sharpens the technical skills but also instills the collaborative spirit needed in today's interconnected software development landscape. Soft skills sessions are also seamlessly integrated, ensuring a holistic learning experience. Get ready to thrive in a virtual company setting, acquiring invaluable experience that transcends geographical boundaries.



An overhead view of a diverse group of people sitting around a round wooden table, engaged in a collaborative meeting. They are looking at documents and a tablet. A small red and blue banner with the text 'CEO's take' is overlaid on the top left of this image.

CEO's take



NP HARIS

Conceptualizer & CEO

OUR CEO'S MESSAGE

Dear Future Software Engineers,

For over 12 years, CyberSquare Professional has been a leader in technology training, dedicated to producing quality software engineers. Our experience has enabled us to create a unique learning experience that bridges the gap between academic learning and real-world industry demands.

Introducing CS Pro, our state-of-the-art virtual company environment hosted in the cloud. Here, interns from around the globe collaborate on real-world products, gaining invaluable hands-on experience.

In CyberSquare Pro, you join a project team, receive daily lectures, and work under a Product Owner (PO) and Scrum Master in a real Agile environment. You will actively contribute to product development, enhancing features based on backlogs and roadmaps.

We believe that working on actual projects in a real Agile environment is the best way to truly understand the role of a software engineer. This hands-on experience is unmatched and ensures you are well-prepared for your future job.

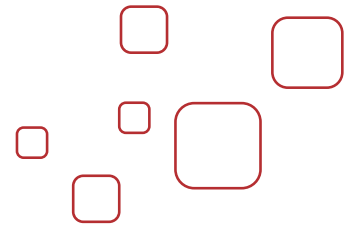
In addition to technical training, we focus on developing soft skills, human skills, and adhering to ethical standards in software development. This holistic approach ensures you are a well-rounded professional.

Join us at CyberSquare Pro and experience the most effective way to become a skilled software engineer. Let us help you build a successful career.

NP Haris

“Mastery in software development comes from hands-on experience. On-the-job training turns knowledge into skill and potential into excellence.”

About the Course



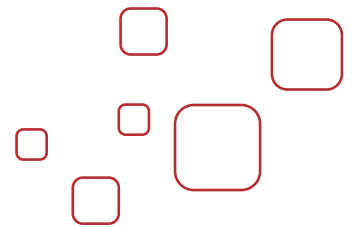
Embark on a transformative journey into the world of web development with our comprehensive course on React.js and Python. Designed for both beginners and experienced developers, this course provides a robust foundation in front-end and back-end development. You'll start with React.js, mastering the creation of dynamic, interactive user interfaces with components, state management, and hooks. Progress through essential topics like routing, life-cycle methods, and advanced performance optimization techniques. By the end of this section, you'll be equipped to build sophisticated, responsive web applications.



Hands-on projects will be integral to the learning experience, following agile methodologies to simulate real-world company operations. Learners will set up Python environments and connect the backend application with the frontend React application using Django Rest Framework.

Next, you will dive into Python and Django for back-end development. you will learn to create robust, scalable web applications using Django's powerful features, including its ORM, authentication system, and admin interface. Explore RESTful API development, database management, and deployment strategies. By the end of this section, you'll be able to seamlessly integrate your Django back-end with your React front-end, creating fully functional web applications.



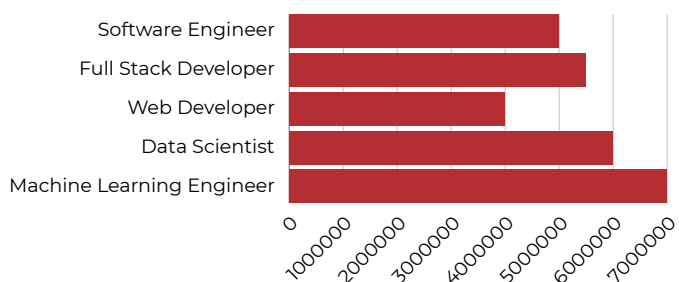


Reasons to Learn Python & React

High Package

Professionals proficient in Python and React command lucrative salaries due to their high demand. Python developers, especially those with expertise in frameworks like Django or Flask, are among the highest-paid in the industry. Similarly, React developers are in high demand, with many companies willing to offer competitive compensation packages to attract top talent.

Average Annual Salary



High Demand

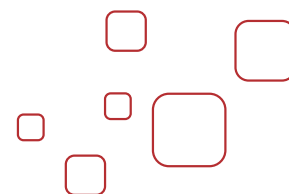
Both Python and React are in high demand in the tech industry. Python is extensively used for web development, data science, machine learning, and more.

React is widely used for building user interfaces for web applications. Learning both of these technologies increases your marketability and opens up a wide range of job opportunities.

Abundance of Job Opportunities

Learning Python and React significantly expands your job opportunities. Python developers are sought after by tech giants, startups, research institutions, and everything in between.

React developers are highly sought after by companies of all sizes looking to build modern and responsive web applications. By mastering both technologies, you increase your chances of landing a job in the tech industry.



Versatility

Python and React are versatile technologies that can be applied to various domains. Python's versatility allows you to work on diverse projects, from web development to data analysis, scientific computing, artificial intelligence, and more.

React's component-based architecture makes it suitable for building dynamic and interactive user interfaces for web applications across different industries.



Community Support

Python and React have large and active communities that provide extensive support, resources, and documentation. Whether you're a beginner or an experienced developer, you'll find a wealth of tutorials, forums, and open-source projects to help you learn and grow.

Being part of these communities also allows you to network with other professionals and stay updated on the latest trends and developments.

Scalability

Both Python and React are scalable technologies that can be used to build scalable and maintainable applications. Python's simplicity and readability make it easy to scale codebases and collaborate with other developers.

React's component-based architecture and virtual DOM enable developers to build scalable and efficient user interfaces that can handle large amounts of data and traffic.

Future-Proofing Your Career

Python and React are not just popular technologies today; they're also expected to remain relevant in the future. Python consistently ranks among the top programming languages in various indices, indicating its sustained popularity and relevance.







React continues to be widely adopted by developers and companies for building modern web applications. By learning Python and React today, you future-proof your career and ensure that you have the skills needed to thrive in the ever-evolving tech industry.

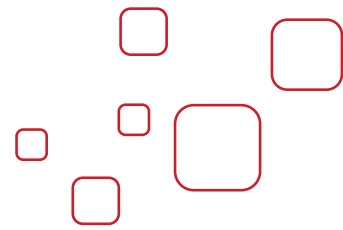
Who should take this course?



Python & React for whom?

This course is ideal for aspiring developers, tech enthusiasts, and professionals looking to enhance their skills and career prospects by mastering Python and React, two highly sought-after technologies in today's job market.

-  React enthusiasts seeking to master Python and React integration
-  Students pursuing a career in web development
-  Freelancers looking to enhance their skill set
-  Individuals aspiring to become Software Engineers, Full Stack Developers, Frontend Developers, Backend Developers, Web Developers, Data Scientists, Data Analysts, Machine Learning Engineers, Artificial Intelligence Engineers, or Software Developers
-  Entrepreneurs aiming to develop robust web applications
-  Anyone interested in learning Python & React



Student Intern Status – International Point System

Embark on a structured learning journey with our **International Point System**, an essential aspect of our internship placement process.

By integrating activities such as LinkedIn profile creation, StackOverflow participation, and project development, this system encourages a comprehensive development approach, preparing students for successful careers.

This system not only establishes a standardized evaluation process but also motivates students to excel in their internship, enhancing their preparedness for future professional endeavors. Embrace the International Point System and set yourself on the path to a rewarding placement experience.

Point Accumulation

Students earn points by successfully fulfilling the required tasks and objectives.

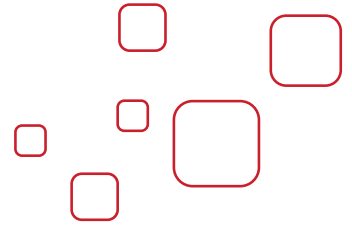


Mandatory Requirements

To be eligible for the placement process, students must complete a set of mandatory items outlined in our International Point System.

Minimum Required Points

Meeting the minimum required points is essential for students to qualify for the placement process. This ensures a fair and competitive environment.



Course content

Sprint 1

- LMS account creation, basic session
- Computer basics, computer architecture, input/output units. software, OS, cmd commands, shell commands, network, basic network commands
- Programming concepts, machine language, high level language, translators, programming language, framework, variables
- Operators, types of operators, introduction to git and GitHub
- GitHub collaboration
- HTML introduction, basic tag, formatting tags, comments, image, block level and inline tags
- Semantic tags, lists, hyper link, tables, forms, web hosting
- Introduction to css, selectors, pseudo class and pseudo elements

Project

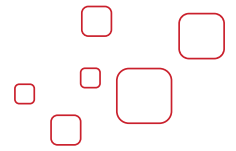
- Project Intro Session
- Project Setup
- Basics of NextJS
- Frontend folder structure & Code Familiarization
- Git Branching concepts

Sprint 2

- CSS box model, flex and grid
- Bootstrap and its component familiarization
- Introduction to js, data types, operators, message boxes,
- Conditional statements, loops and switch
- Introduction to functions, key aspects of functions,scope

Project

- Assignment of UI task
- REST Api Concepts



Sprint 3

- String and array method, DOM, Todo
- Introduction to jQuery, jQuery effects and animations

Project

- Task Assignment
- Basic concepts of State Management and JWT

Sprint 4

- jQuery ajax, json parsing, handling array
- Objects, OOPS, Advanced js- Asynchronous programming
- Status code, different types of browser storage, type script

Project

- Workflow familiarization of an existing feature

Sprint 5

- Introduction to React, Parent child communications, state and virtual DOM, React story book
- React routing, todo application, firebase and hosting
- Todo application using Typescript
- File upload, functional and class components, lifecycle

Project

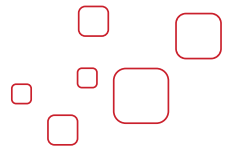
- Scrum and Sprint review meetings

Sprint 6

- Components styling
- Redux, redux toolkit
- Counter App, Shopping Cart
- Creating a simple application using routing config

Project

- Scrum and Sprint review meetings



Sprint 7

- Creating a simple application using API
- Creating a simple application using error boundary, logging and context Api
- LinkedIn clone

Project

- Scrum and Sprint review meetings

Sprint 8

- Server-side Rendering (SSR) and Client-side Rendering (CSR)
- Different kinds of rendering Initial, Reconciliation, Conditional, Dynamic, Optimizations
- Advanced routing techniques (nested routes, route guards, dynamic routing)
- Optimizing performance in React applications (memoization, lazy loading, code splitting)
- Authentication in React applications (JWT, OAuth, session management)

Project

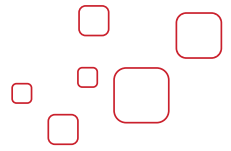
- Scrum and Sprint review meetings

Sprint 8

- Introduction to Postgresql, RDBMS, keys, DDL commands
- DML commands, like operator
- Psql functions, grouping, having, distinct keyword, data types
- Joins and subquery, views and index, stored procedure, normalization
- Introduction, script mode , interactive mode, python programs, comments, operators, variables, naming rules, coding standards

Project

- Scrum and Sprint review meetings



Sprint 10

- Comments and datatypes
- Making decision, loops, functions and modules
- File operation, exception handling, json parsing
- OOPS

Project

- Scrum and Sprint review

Sprint 11

- Logging
- Virtual environment, Django introduction, MVT
- Django templating, static files, master page, setting url
- CRUD using Class Based Views

Project

- Scrum and Sprint review

Sprint 12

- ORM, Ecommerce Project
- Ecommerce Project

Project

- Scrum and Sprint review



Learning Path

Cyber Square®

PROFESSIONAL
where your IT work experience starts

Basics of computer science

Computer architecture and organization of Programming, Computer networking

Plane Project Onboarding

Onboarding into the project team, checking out the repository and setting up the environment.

Programing Concepts

Programming concepts, language translators etc

Git & Github

Using Git & Github for version control and collobaration.

UI Development

HTML, CSS , Bootstrap & JavaScript/jQuery

React

Introductio n to React, Virtual DOM, Firebase, Server Side Rendering

Design the Database

Introduction to PostgreSQL, RDBMS, keys, DDL commands

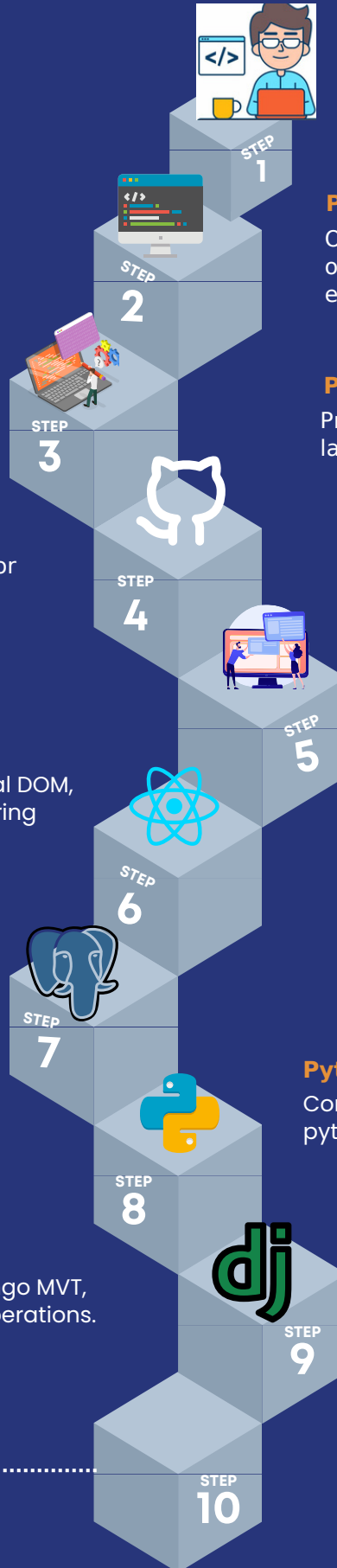
Python Programming

Core concepts of python, OOPS

Introduction to Django

Setting Django project, Django MVT, loading static files, CRUD operations.

 **Completion Certificate**



CERTIFICATE



Classroom-Level Immersion: Delivered Digitally

- Any Where, Anytime access
- Online Self learning
- Courses designed by alumni of IIT, NIT & IIM.
- CS Certificate Internship Certificate & UK Certificate
- CS Talent Show



Cyber Square®
PROFESSIONAL
where your IT work experience starts

Our Branch All Around World



ORAY
EDUCATION

UK (Headquarters)

29, The Sphere,
1 Hallsville Rd, London E16 BE, UK Ph-
+44 7448 241977

CANADA

299 Senator street, Pickering,
ON L1V6N2, Canada
+1 647 3722376

Cyber Square[®]
PROFESSIONAL
where your IT work experience starts

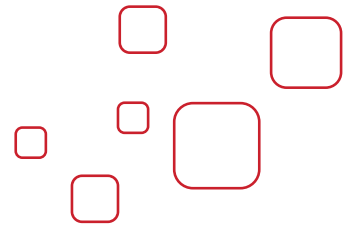
INDIA

Cafit Square,
5th Floor,
Hilite Business Park, Calicut, India
+91 9739954676

UAE

Suit No 51, Oasis Centre,
Sheikh Zayed Road, Dubai, UAE
+971 508881947

More Information About us?



Contact Us!

Cyber Square Pro is a learning platform and resource hub for professionals looking to learn cutting-edge digital skills, whether they're coding novices or programming pros.

Phone :

+91 859 205 8444

Website :

<https://cybersquare.pro/>

Address :

5th Floor, HiLite Business
Park, Thondayad Bye-Pass,
Kozhikode

Thank You!

