

NIIT

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**YOURSELF FROM
A GRADUATE TO
A PROFESSIONAL**

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BECOME THE MOST SOUGHT-AFTER
FULL STACK JAVA PROGRAMMER

INTRODUCTION



For over 38+ years, NIIT has taken pride in creating career opportunities for students from different walks of life and has trained millions of students in more than 40 countries. NIIT's expertise in content development, training delivery, and education process management makes it the most preferred training partner. The company ranks among the world's leading training companies owing to its vast, yet comprehensive array of talent development programmes. A world-leading, technology-driven, and skill development organisation, it is the first choice of smart students and professionals. At NIIT, we believe that our actions speak louder than our words.

Present in 40+ Countries

35 Million Learners

Learning solutions for individuals, enterprises, schools and colleges.

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INDIA – THE I.T. HUB



In 2018, the Indian I.T. industry appeared to be on the cusp of profound change. The global information technology industry surpassed \$4.5 trillion in 2017, according to the research consultancy IDC. At 3.9 million, I.T. is the largest private sector employer in India, with a quarter of the share in total services and merchandise exports. At \$154 billion, it has 3 sub-sectors with revenues of over \$20 billion. The Indian I.T. sector also boasts of 3.5 million new jobs since 2001, 6 lakh new jobs in the last 3 years and an additional 2.5 - 3 million new jobs by 2025. An entry-level and experienced workforce in I.T. is already attracting 50-60% more salaries than regular professionals from other industries.



I.T. is running in the veins of today's India. Even those who don't study about it, are living and breathing in an atmosphere powered by I.T. With 30% of the tech talent in Business Process Management and technical career tracks in leading companies, 50% of these employees are already trained in digital transformation technologies. New job roles are getting created in Cyber Security, Mobile App Development, New User Interfaces, Social Networking Sites, Data Sciences, Platform Engineering, etc. And new skills are being demanded in areas like Big Data Analytics, Cloud & Cyber Security Services, I.T., Service Delivery Automation, Robotics, AI / Machine Learning / NLP, etc.

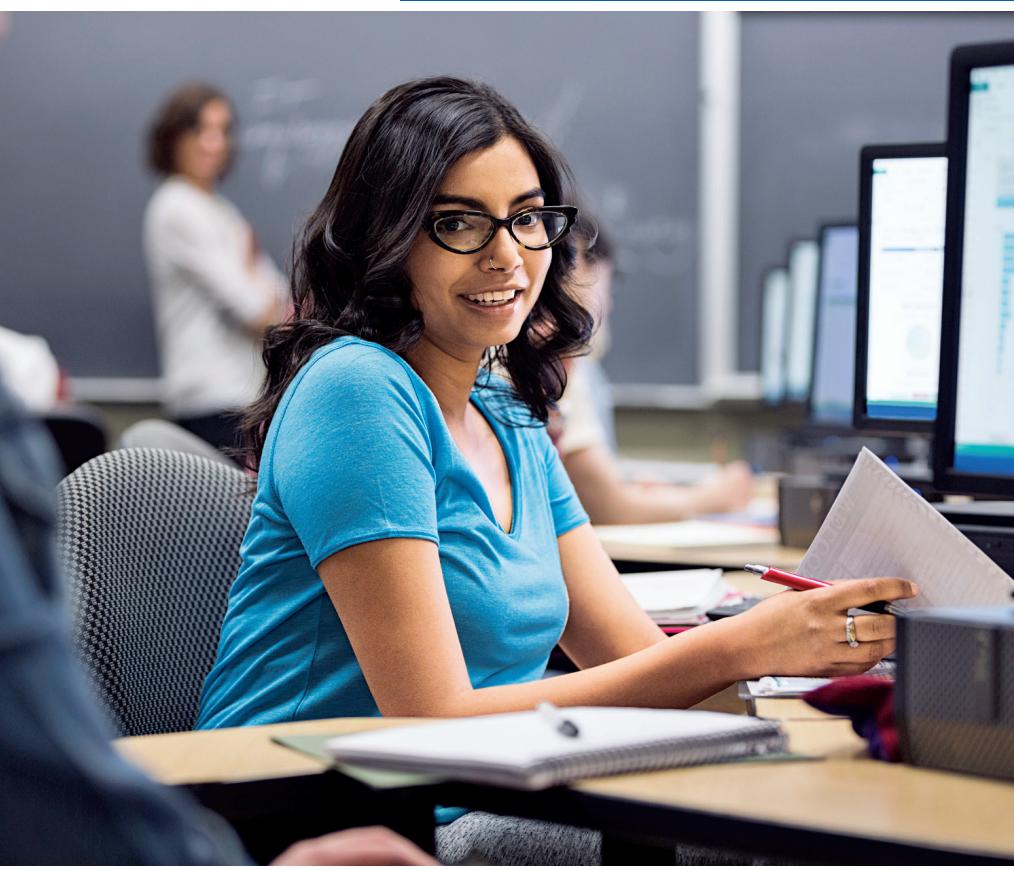
PRESENT



Opportunities knocking at the door

More than 1 lakh new jobs created annually by the tech start-up sector, with 60 thousand direct jobs in the e-commerce sector. In Digital India, there is 2X multiplier impact on job creation. Up-to-date tech skills are imperative across all job roles, with all future jobs across sectors ready to demand advanced tech skills.

FULL STACK SOFTWARE ENGINEERING



As the line between what can be done on the front end versus back end increasingly blurs, and as things that were previously only possible on the back end become possible on the front end, more developers are becoming what we call “full stack.” A lot of employers (especially agencies who work on different kinds of sites) are looking for developers who know how to work on all the parts of a site, so they can use the best tools for the job regardless of whether it’s technically “front end” or “back end.” Hence there is a rise in companies listing full stack development on job requirements.

“Full stack” means that a developer knows enough about the codes across the entire stack, so that they can dive in anywhere if needed. And some full stack developers do code entire websites, including both the front and the back end.



Full stack engineers work with both the front and the back end of a website or application. They’re familiar with HTML, CSS, JavaScript, and one or more back end languages. Most full stack developers specialize in a particular back end programming language, like Ruby or PHP or Python, although some, especially if they’ve been working as a developer for a while, work with more than one.

POST GRADUATE PROGRAMME IN FULL STACK JAVA PROGRAMMING



Software Engineering/Development is a lifelong learning affair where trends and technologies keep on changing. Since technology has a risk of obsolescence with newer technologies/versions, one should always be ready to cope up with these sudden changes. There are many software engineering/development jobs, which are flooding the current job market. However, if we analyze closely we will find that companies today are looking for people with a wide range of skills. They are no longer looking for conservative candidates who have expertise in one tool or technology.

The large demand in development of business applications across the globe has helped in identifying Java as an ideal technology to create versatile, efficient, platform portable, and secure applications. In addition, the world is changing rapidly and the new generation of computing devices offers us an opportunity to conceive products and services that might never have been possible before.



Advanced technologies have revolutionized the way applications are used to accomplish day-to-day activities. Modern day applications must be quickly build, easy to maintain, and easy to scale as your traffic and data storage needs change.

Java is the most popular programming language for Android smartphone applications as well as for developing new-age technology like the Internet of Things. Knowledge of this language ensures a big boost to your career, right from the start.

This "**Post Graduate Programme in Full Stack Java Programming**" is designed to fill in this gap and provide graduates the necessary skills which would help them in riding this wave of change. The programme trains the learner to gain expertise in front-end, back-end, web development, application development and software development technologies at different levels which provides an edge over others in the extremely demanding field of software development. It will help them cut through the clutter and be ahead of others from the very first step that they take in the industry.



NIIT EDGE



STRONG FOUNDATION

Setting a strong foundation doesn't just mean filling our students up with all the concepts. It also means teaching them how to use those concepts in practical situations. In the practical world, there are no formats for an I.T. professional. There are just problems that they have to solve, and every problem comes with a new challenge. This programme has a very balanced curriculum design, which first creates a strong foundation for software development, moving towards developing proficiency in software / web development and then finally helping the students gain expertise in advanced Java Stack technologies. It trains the students to gain expertise in front-end, back-end, web development, application development, and software development technologies at different levels which provides an edge over others. The programme also enables the students to get hands-on expertise in the latest and advanced Java Stack technologies, which are currently in demand in the industry.

“ *NIIT has enabled countless young Indians to obtain employment. Without the help of such an institution, the domestic and export software industry would not have been where it is today.* **”**

– N.R. Narayana Murthy
Co-founder & Chairman, Infosys



INTENSIVE LEARNING

A good 301 hours of classroom training and 140 hours of guided practice in this programme will ensure you sweat it out and helps you crack the I.T. industry as an entrant. Guided practice is self-paced and is presented in the form of e-learnings through '**Training.com**'. The specially designed Guidance Cell allows students to reach out whenever they need help with questions or need to clarify their learnings on a regular basis.





NIIT EDGE



CERTIFICATIONS

The difference between any other certification and an NIIT certification will become clearer to you once you step into the field. The programme prepares the students for **MICROSOFT** and **ORACLE** certification. Our faculty cultivates the habit of problem solving from the very first day, as it is one of the most important virtues of Information Technology. In short, students taking this programme will receive a warm welcome by the I.T. fraternity.



RECOGNIZED BY NASSCOM AND COMPLIANT WITH NATIONAL SKILL QUALIFICATION FRAMEWORK (NSQF)

- **National Occupational Standards (NOS):** SSC/Q0501
- **Qualification Pack (QP):** Junior Software Developer
- **Certified by:** IT-ITeS Sector Skill Council - NASSCOM
- **NSQF Level:** 4



Learner will have National Skill Development Council (NSDC) logo to indicate the Programme is NSQF Compliant

Note: NSQF compliant is not equivalent to UGC/AICTE approved. NIIT is not a University as per the UGC guidelines and does not award any degrees. Centres should not give wrong information to the learners. The Validity of the Certificate is governed by the Govt. & NSDC regulations.



PLACEMENTS

What better assurance can a course give you than a fair chance of interviews with top companies? In fact, your proud association with our NIIT programme will give you a fair chance to get placed in top companies, thanks to our Placement Assistance Programme. The programme will include Placement Grooming/Preparatory module. This way, every year we happily serve as a launch pad for effectively trained minds to start a career in Information Technology with a bang.

PROGRAMME ARCHITECTURE



PGP is the quickest way from college to a career in I.T. This is a professional program of 318 hours of classroom learning for graduates. The industry-endorsed syllabus combined with NIIT's quality training not only equips a learner with advanced I.T. skills for Full Stack Programming, but also nurtures a complete industry ready professional.

Exit Profile

At the end of this program, the learner will be able to:

- Develop robust full stack Web applications using Java stack technologies
- Use front-end, back-end, and various application frameworks for building dynamic and modern applications, such as mobile, desktop and Web that are lighter and faster

PROGRAMME DETAILS

Admissions

Programme Eligibility

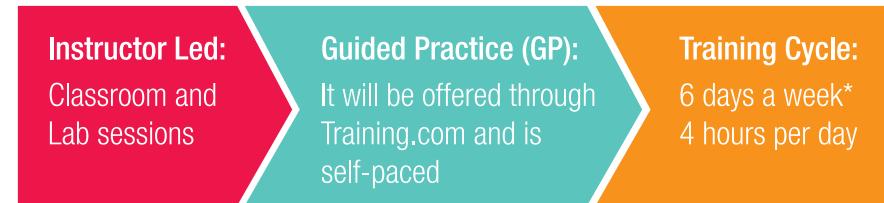
- Graduates with academic scores $\geq 50\%$ in Class 10th, 12th and Graduation.
- Not more than 1 year gap between Class 12th and start of graduation
- Able to interact in English in a classroom environment
- Comfortable working in the Windows environment



ACADEMIC DETAILS



Training Methodology



Programme Objectives

Foundation of software development, object orientedness and its implementation using C++	Sharpen problem solving and logic building aptitude by gaining expertise in data structures and algorithms	Proficiency in Java
Foundation in database management and proficiency in SQL programming	Mastery in HTML5, CSS3 and JavaScript, tools which are used by everyday web page coders	Proficiency in Servlets, MVC, JSP and Web applications life cycle
Integrate the practice of experimentation by learning how to structure and implement software testing	Master Spring and Hibernate and gain expertise in advanced Java application framework	Proficiency in the front-end and back-end application frameworks
Master the concepts of React JS to develop skills for a successful client-side application developer	Communicate to client server using Restful API	Professional skills and cracking your first interview

After engineering, not getting placed in any company was a blow to my confidence. But I made the smart move and joined the programme from NIIT and got placed in a top company.

— J. Kaushik, Student NIIT

I thought it would be difficult to learn new-age I.T. skills as I am from Electronics Engineering. But the tech-mentors & expert faculty taught us so well that it helped me not only pick up the skills but also helped me get a job.

— Arun Reddy, Student NIIT

PROGRAMME MODULES



POST GRADUATE PROGRAMME IN FULL STACK JAVA PROGRAMMING

Module Name	Objectives	Benefits to Students
OOPs Fundamentals with C++	Build the foundation of Software Development by learning object oriented concepts and their implementation using C++	Students will be able to implement real-world entities like inheritance, hiding, polymorphism, etc. in programming
Data Structures and Algorithms	Sharpen problem solving and logic building aptitude by gaining expertise in data structures and algorithms	Students will be able to develop skills for effective data representation and write effective programme logic to build efficient programmes
Programming in Java - Part 1	Get introduced to Java, one of the most in-demand programming languages	Students will be able to write programmes and design algorithms using Java
RDBMS and SQL Programming	Build the foundation in database management and development and develop proficiency in SQL programming	Students will be able to appreciate the need of database and will be able to design a database. They will also be able to manage database using SQL
Test Driven Development in Java	Build a culture and integrate the practice of experimentation by learning how to structure and implement software testing	Students will be able to test and fix bugs in software applications
Programming in Java - Part 2	Develop proficiency in Java, and build the foundation for web and app development	Students will be able to develop object oriented applications using Java
HTML5, CSS3 and JavaScript	Develop proficiency in Java, and build the foundation for web and app development	Students will be able to develop object oriented applications using Java
Servlets and JSP	Proficiency in Servlets, MVC, JSP and web applications life cycle	Students will be able to develop web user interfaces using JSP and Servlets
Hibernate, Spring and Rest	Learn Spring and Hibernate and gain expertise in advanced Java application framework	Students will be able to develop real-world applications using Spring framework and solve RDBMS problems using Hibernate
Node JS	Get introduced to server side development and gain expertise in Node JS	Students will be able to setup Node JS environment, implement callbacks, events and develop scalable application using built-in APIs
Angular JS and React JS	Learn how to work within a back-end environment and communicate to client server using Restful API. Become proficient in the front-end development using Angular JS and master the concepts of React JS to develop skills for a successful client-side application developer	Students will be able to create scalable, enterprise and performant client-side web applications to become a successful application developer
Professional Skills Training	Learn tools and skills that provide valuable insights needed at all levels in an organisation and help to create a positive first impression, crack interviews, give effective presentation and thus become a role model at work	Students will be able to develop an aptitude and a personality which will help them in getting a job and starting a successful career in the field of software development

ROLES IN IT



WEB DEVELOPER

As a web developer, we make it easy for businesses to present products and services to a wide audience by creating websites that serve a purpose or cater to a problem. We identify who uses the websites and then design the same to appeal to their sentiments. From constructing the layout to creating a visually interesting home page and user-friendly design, we do all that to add emotional appeal to a technically sound website with interactive capabilities using the Java programming language.

KEY SKILLS

JavaScript, HTML5, CSS3, Angular JS & Test Driven Development

INDUSTRIES

I.T. / ITES, e-commerce, Product-based companies, etc.



APPLICATION DEVELOPER

As application developers, we do the testing for you before the apps go in your hands, computers and mobile systems. We apply our knowledge of coding languages to create something new and user-friendly. When it reaches you, it is free from bugs that could have hampered the experience.

KEY SKILLS

Java, SQL, JavaScript, Hibernate, etc.

INDUSTRIES

I.T. / ITES, E-commerce, Mobile etc.



SOFTWARE DEVELOPER

As a Software Developer, we analyse users' needs and then design, test, and develop software to meet those needs. Our job is to make sure that nothing comes between the user and the ease with which he is able to operate the software.



FRONT-END DEVELOPER

A good front-end developer creates interactions and user experiences with scripts embedded in HTML sites, and we do exactly the same. What you see is not just a website, but an experience rendered by all that work.

KEY SKILLS

Java, JavaScript, Angular JS, HTML5 and CSS3, etc.

INDUSTRIES

I.T. / ITES, E-commerce, Mobile, etc.

KEY SKILLS

Java, JavaScript, Angular JS, Node JS, HTML5 and CSS3, etc.

INDUSTRIES

I.T. / ITES, E-commerce, Mobile, etc.

ROLES & PLACEMENTS

Our students work as...

- Testing & QA
- Web Designer
- Software Developer
- Application Developer
- Trainee Engineer
- Research Analyst
- I.T. Tech Support
- Web Developer
- Database Developer
- Data Analyst & MIS
- Front-End Developer



“
Before I joined NIIT, I was unaware of the technologies needed for the I.T. sector. But NIIT gave me the opportunity to establish myself by utilizing my skills to the fullest for my development as a professional. I would like to thank NIIT and all my faculty for my successful career.

Vishnu KB
Associate Software Engineer, Netcracker



“
To be honest, when I first thought about joining NIIT, I was quite skeptical. But this experience turned out to be opposite of what I had envisioned. NIIT not only gave me an opportunity to broaden my knowledge in the field of software industry but also helped me broaden my technical horizon.

SK Mehraj Pasha
Associate Software Engineer, Ivy Comptech



“
NIIT goes beyond the conventional practices and methods and fuses cloud learning with hands-on learning in a perfect balance. When I started the course, Java Enterprise App Development with Devops, I didn't have any foundation in Software Engineering. NIIT has helped me a lot in gaining practical knowledge. In merely 5 months, NIIT has made me industry ready and placed me in the I.T. industry with the role of my choice.

Soma Shruthi, Java Developer, Solix Technology

KEY RECRUITERS

Over 900 Organisations recruit from us

Infosys **ATS** **Tech Mahindra**
HCL Technologies **Wipro**
csc **Amazon** **IOCL** **TCS**
Capgemini **Conduent**
Concentrix **Accenture**
Pinkerton **BHEL** **Genpact**

