

HIGHER NITEC IN IT APPLICATIONS DEVELOPMENT (2 YEARS)

CERTIFICATION

Credits required for certification:

| | |
|---------------------------------|------|
| Sector Foundation Modules | : 6 |
| Cluster Core Modules | : 6 |
| Specialisation Modules | : 27 |
| Internship Programme Modules | : 8 |
| Life Skills Modules | : 9 |
| Cross Disciplinary Core Modules | : 6 |
| Electives | : 6 |
| Total | : 68 |

COURSE STRUCTURE

| Module Title | Credits |
|--|---------|
| SECTOR FOUNDATION MODULES | |
| Applied Data Fundamentals | 3 |
| Generative AI Essentials | 3 |
| CLUSTER CORE MODULES | |
| Software Development Practices | 3 |
| Programming 2 | 3 |
| SPECIALISATION MODULES | |
| User Experience Development | 3 |
| Low-Code Development | 3 |
| Server-side Development | 3 |
| Web Content Management | 3 |
| Robotic Process Automation | 3 |
| Enterprise Web Development | 3 |
| Mobile Apps Development | 3 |
| Enterprise Solutions Development | 3 |
| Mobile Solutions Development | 3 |
| INTERNSHIP PROGRAMME MODULES | |
| Internship Programme | 8 |
| ELECTIVES (GENERAL) AND LIFE SKILLS MODULES | |
| For details, click here | |

Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.

MODULE OBJECTIVES

Sector Foundation Modules

Applied Data Fundamentals

On completion of the module, students should be able to import data from external sources, perform basic data manipulation and present simple visualisation of the data.

Generative AI Essentials

On completion of the module, students will gain knowledge in Generative AI applications for design and content creation.

Cluster Core Modules

Software Development Practices

On completion of the module, students should be able to apply their knowledge and skills in software development methods on recommended solutions.

Programming 2

On completion of the module, students should be able to apply fundamental programming concepts and computational thinking for basic programs.

Specialisation Modules

User Experience Development

On completion of the module, students should be able to apply the UX design process to create effective and user-friendly interfaces. They should also be able to use digital tools to design, prototype, and refine their work based on user feedback.

Low-Code Development

On completion of the module, students should be able to apply the knowledge, techniques and skills in developing web applications using a low-code platform.

Server-side Development

On completion of the module, students should be able to develop interactive application with database integrations on cloud/repository.

Web Content Management

On completion of the module, students should be able to configure and publish websites, with online payment support and social media integration. They should also be able to perform website testing.

Robotic Process Automation

Upon completion of this module, students should be able to design and implement automation solutions to streamline workflows, improve efficiency, and reduce human errors in routine procedures.

Enterprise Web Development

On completion of the module, students should be able to develop Enterprise Web applications using techniques to manage operations of an organisation.

Mobile Apps Development

On completion of the module, students should be able to design, develop and enhance feature-rich mobile applications, while effectively managing their codebase through version control systems, supported by advanced GenAI tools to create innovative user experiences.

Enterprise Solutions Development

On completion of the module, students should be able to develop, test and deploy secure web services.

Mobile Solutions Development

On completion of the module, students should be able to enhance and optimise cross-platform mobile applications. They will also be able to integrate relevant mobile features, apply generative AI tools to refine UI and code; and improve app performance.

Internship Programme Modules

Internship Programme

On completion of the module, students should be able to apply and integrate the skills and knowledge that they have acquired at ITE College and develop competencies in other areas not covered in the curriculum, at the workplace.

Electives (General) and Life Skills Modules

For details, click [here](#).