# **HIGHER NITEC IN IT APPLICATIONS DEVELOPMENT (2 YEARS)**

## **CERTIFICATION**

Credits required for certification:

Sector Foundation Modules 6 **Cluster Core Modules** 6 : 27 **Specialisation Modules** Internship Programme Modules : 8 Life Skills Modules 9 **Cross Disciplinary Core Modules** 6 **Electives** 4 Total : 66

## **COURSE STRUCTURE**

Module Title	Credits
SECTOR FOUNDATION MODULES	
Fundamentals of Data	3
Introduction to UI/UX	3
CLUSTER CORE MODULES	
Software Development Practices	3
Programming Essentials	3
SPECIALISATION MODULES	
User Experience Development	3
Front-end Web Development	3
Server-side Development	3
Web Content Management	3
Website Optimisation Fundamentals	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 <u>here</u>	

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**

#### Fundamentals of Data

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.

#### Introduction to UI/UX

On completion of the module, students should be able to apply User Interface (UI) and User Experience (UX) development process to produce low-fidelity and high-fidelity wireframes and prototypes for websites and mobile apps.

#### **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 Essentials**

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 design, develop and maintain; mobile and web interfaces. Students will also be able to create and edit graphics and develop user interfaces.

## Front-end Web Development

On completion of the module, students should be able to apply the knowledge, techniques and skills to develop responsive web applications using front-end web development technologies.

## Server-side Development

On completion of the module, students should be able to develop dynamic database-driven web applications using server-side scripting tools.

## Web Content Management

On completion of the module, students should be able to create and deploy websites using a content management system. Students will also be able to setup payment tools through plugins.

## Website Optimisation Fundamentals

Upon completion of this module, students should be able to use various tools to improve the performance of a website to drive traffic, increase conversions and grow revenue.

#### 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 deploy native mobile applications for various platforms.

## 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 apply the knowledge, techniques and skills required to integrate frameworks and database into mobile applications.

#### **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.