

NEW ERA Software Engineering **E-Commerce and Financial Technology** (SECEF-DB) with IT Engineering Skills ▲ 20%理论 ▲80%实践训练 ▲16岁以上即可报读,无需入学资格 ▲ 教学媒介语以中文为主,英文为辅 Entry Requirement: 16 Years Old & Above Medium of Instruction: Chinese & Simple English













































































E-Commerce and Financial Technology(SECEF-DB

本课程为因应资讯科技的迅猛发展及有以下意愿的学生而设:

This qualification was developed to keep pace with the fast changing information technology sector and for candidates who want:

· 在资讯与通讯科技(ICT)谋求职业发展。

Career progression within the Information and Communication Technology (ICT) industry.

・掌握资讯业必须具备的知识和技能,成为专业的电子商务网站程序员、电子商务流动应用程序开发员、系统架构师、网页开发商

To gain knowledge and skills needed to work in the E-Commerce industry as a professional software engineer, E-Commerce web programmer, E-Commerce mobile application developer, system architect, web developer and etc.

· 分析有助于成功应用电子商务的全球商业环境(例如"一带一路")。

Analyze global business environments (such as "The Belt and Road") conductive to successful application of e-commerce.

· 专注于金融科技和金融创新。

Focus on financial technologies and financial innovations.

· 了解金融科技行业发展的驱动力。

Understand the drivers of the development of the FinTech industry.

· 熟练使用标准工具来处理大型财务数据集。

Be proficient in employing standard tools for manipulating large financial datasets.

为期两年的软件工程技职课程为学生提供有关电子商务、金融科技(FinTech)、电子商务网络编程和电子商务移动应用程序开发 技能的实践知识,以提高他们的教育和就业机会。

The two-year Vocational Course in software engineering provides student with hands-on knowledge of technologies and applications of E-Commerce, Financial Technology (FinTech), E-Commerce Web programming and E-Commerce mobile application development skills to enhance their educational and employment opportunities.

学生将学习 / Students will learn and be able to:

- ▲ 依据用户的要求以及系统与技术规范,掌握软件及应用程式 ▲ 用MySQL、物件导向分析与设计,面向对象程序设计 的设计、开发、测试、维护及记录文档程式代码。 Software and applications design, develop, test, maintain and document programme code according to user requirements and system and technical specifications.
- ▲ 如何创建、维护和优化电子商务平台、包括最重要的登录 页面,用户友好的导航和购物车。

How to create, maintain, and optimize a successful e-commerce site, including the all-important landing page, user-friendly navigation, and the shopping cart.

- 用C#、安卓移动(Android mobile)、Java及 iPhone/ iPad、Objective C,在Windows视窗移动开发移动程式。 Mobile application development for Windows mobile using C#, Android mobile using Java, RxJava, Kotlin and iPhone/iPad using XCode, Objective C, Swift and etc.
- 网络程式开发包含在三个关键方法中,即:PHP/MySQL, Java and C#.NET (ASP)

Web application development is included in three key approaches PHP/MySQL, Java and C#.NET (ASP).

具有R和Hadoop的大数据技术。通过Python学习数据 科学。

Big Data Technologies with R and Hadoop. Data Science

(Object Oriented Analysis and Design), 开发数据库 技术,以及用Visual Basic.Net, Java, C++开发基于 Window视窗的应用程式等技术。

Skills in database development with MySQL, NoSQL, etc. Object Oriented Analysis and Design, and Window-based application development with Visual Basic.Net, Java, C++

▲ 标记语言、网络设计、脚本、客户端编程、服务器端编程 及数据库集成等。

Markup languages, web design, scripting, client-side programming, server-side programming, database integration and etc.

▲ 实践技能,例如:

Practical skills such as :

- 电子商务基础架构, 软件和硬件
- E-commerce infrastructure, software and hardware
- 电子零售和在线支付系统
- Electronic retailing, and online payment systems
- 电子商务协议和标准
- Protocols and standards for e-commerce
- 电子商务网站的设计、维护和管理 Design, maintenance and administration of e-commerce sites
- 电子商务网站的安全性和隐私 Security and privacy of e-commerce sites

课程内容 | COURSE OUTLINE

- 编程概论 Introduction to Programming
- ·ICT实务技能 Practical ICT Skills
- · 操作系统(Linux) Operating System (Linux)
- 软件工程概论 Introduction to Software Engineering
- 咨讯科技与社会
- 管理资讯系统
- Managing Information Systems
- 由脑网络
- •数码影像 Digital Imaging
- •系统分析与设计
- ·以Java编写物件导向程式 Object-oriented Programming using Java
- ·以C++进行物件导向程式设计
- 网络安全 Cyber Security

- ·人机互动(HCI) Human Computer Interaction (HCI)
- 网站设计与开发(HTML5, JavaScript & XML) Web Design and Developme (HTML5, JavaScript & XML)
- ·财务管理创新技术 Technological Innovations in Finance
- •与工作相关的软技能
- ·电子商务网络应用程式开发(PHP) E-Commerce Web Application Development
- ·数据库管理系统(MySQL, NoSQL) Database Management Systems (MySQL, NoSQL)
- ·移动应用程式开发 Android(安卓) (RxJava & Kotlin) Mobile Application Development - Android (RxJava & Kotlin)
- 软件开发方法论 oftware Development Methodologies
- 电子商务应用程式 E-Commerce Applications
- •职场英语(1) Workplace English communication (1)

- . 职场英语(2) Workplace English communication (2)
- 数据结构与算法 Data Structures and Algorithms
- 区块链安全与隐私 Blockchain Security and Privacy
- ·以C#进行物件导向程式设计 Object-orientated Programming using C#
- 区块链技术: 应用和挑战 Blockchain Technologies: Applications and Challenges
- Pvthon编程 Python Programming
- ·电子商务移动应用程式开发-iOS (Objective-C和Swift) E-Commerce Mobile Application Development - iOS (Objective-C and Swift)
- •大数据、云端和机器技术 Big Data, Cloud Computing and Machine
- •多链动手实验
- Hands-on Lab with Multichain
- •电子商务/金融科技软件开发(毕业制作) Software Development (Major Project)



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评估标准 | ASSESSMENT

100%作业及实践练习,本课程提供电子商务与金融科技的理论20%与实践80%,聚焦于工作场所的实际应用。鼓励团队合作,让学生 学会分组合作或单独工作以完成专题作业。

100% Assignment and Practical Exercises. The course offers both the theory (20%) and practice (80%) of Software Engineering with specialization in E-Commerce and Financial Technology skills, with a focus on the practical application of these skills in the workplace. Teamwork is encouraged and students learn to work in groups or individual to complete their projects.



考取资格 | QUALIFICATIONS

英国国立西苏格兰学院专业文凭和高级专业文凭

Diploma and Advanced Diploma awarded by West College Scotland, UK

台湾文凭(由台湾各大学颁发)

Diploma Qualification from Universities in Taiwan

第五级专业文凭(资格获得OFQUAL英国政府学历及考试评审局承认) Level 5 Diploma (Regulated by OFQUAL - Office of Qualification & Examination Regulation)



就业前景 | CAREER PATHWAYS

电子商务软件工程师、金融科技软件工程师、软件开发工程师、软件工程师、软件系统分析师、互联网应用程序工程师、软件设计 开发工程师、数据软件开发工程师、软件测试师、移动应用程序工程师、系统构架师、主程式员、IT研发工程师、网页软件工程师、 网页设计师、多媒体软件工程师、IT项目经理等等。

E-Commerce Software Developer, Financial Technology Software Developer, Software Engineer, Systems Analyst, Web Programmer, UI Software Developer, Database Developer, Software Testing Engineer, Mobile Application Engineer, Systems Architect, Team-Lead Programmer, IT Developer, Web Application Developer, Web Designer, Multimedia Software Engineer, IT Project Manager, etc.