ACBI

ICT50220

Diploma of
Information Technology
(Front End Web Development)

About this course

Discover the exciting world of frontend website development. Build your skills in key IT areas such as virtual computing environments, database management, mobile applications, dynamic websites and more. By the end of this course, you'll have developed the skills you need to land a dynamic and exciting job as a Web Developer, Web Designer or Systems Administrator. You'll also have the option of entering into a Bachelor of Cyber Security at AIBI Higher education.

What will I learn?

- **Designing modern and responsive websites that aim to optimise user experiences**
- **Developing the frontend of websites using three essential and foundational web technologies: Hypertext Markup Language (HTML), Cascading Stylesheet (CSS) and JavaScript**
- **Using popular and in-demand backend web technologies, including employing MySQL as a database management system and PHP as a programming language**
- **Designing and developing mobile applications using software such as React Native, Kotlin and Android Studio**
- **The fundamentals of cybersecurity landscapes and security resolutions**
- **Leadership and IT project management, including being able to effectively communicate with clients**

Career Opportunities

- Web Developer
- Mobile Application Developer
- Systems Manager
- Systems Administrator
- IT Office Manager
- Web Designer
- IT Systems Administrator

What are the entry requirements

International students:

- Have completed Australian Year 12 or equivalent
- IELTS 6.0 English language equivalence if a non-native English speaker
- Be at least 18 years of age
- Have technological literacy (ability to use and access a computer with word processing applications)

Course Overview

Qualification
Diploma

CRICOS code
105685D

Study mode
Blended learning

Duration
78 Weeks

Units
19 Units of Competency

Course Units

Unit code	Unit name	What you'll learn
ICTCYS407	Gather, analyse and interpret threat data	Learn how to gather datasets from devices on router, firewall and systems information. Then identify inconsistencies within the data, document your findings and suggest action items. By the end of this unit, you'll have built your knowledge of data recognition software tools, Intrusion Detection Systems (IDS) and common cyber security threats. You'll also understand a wide range of cyber attacks, including cross-site scripting (XSS) attacks, denial-of-service (DDOS) attacks, SQL injection (SQLi) attacks and hardware attacks.
ICTWEB513	Build dynamic websites	In this unit, you'll build your understanding of dynamic websites that change their content based on people's interactions, preferences and other variables. For example, dynamic websites can show real-time updates and personalisedrecommendations. By the end of this unit, you'llunderstand how to create User Interface (UI) prototypes for websites, then develop and test dynamic websites.
ICTWEB514	Create dynamic web pages	Learn how to create both client-side and server-side content for dynamic website pages. Build your skills in creating boilerplate templates, designing databases and meeting data storage requirements. Also develop your skills in testing and debugging code for dynamic website pages.
ICTICT530	Design user experience solutions	Be equipped to put users' experiences at the centre of your website design approaches. Build your ability to apply User Experience (UX) best practices, develop wireframes, create UX prototypes and more.
ICTWEB520	Develop complex cascading style sheets	Learn how to use CSS effectively for complex websites. In this unit, you'll explore how to review user style requirements, then style and position document elements using advanced CSS techniques. Build your understanding of website accessibility requirements, CSS rules, debugging methods and more.
ICTWEB519	Develop complex web page layouts	Discover how to create complex website layouts that suit a wide range of devices and browsers. Learn how to use web libraries, web frameworks, web scripting design, World Wide Web Consortium (W3C) standards and more.
ICTICT532	Apply IP, ethics and privacy in ICT environments	In this unit, you'll discover how you can conduct yourself professionally, ethically and in ways that protects the intellectual property of any organisations you work for. You'll build your skills in interpreting and improving an organisation'scode of ethics and privacy policy documents. You'llalso learn how to test the confidentiality, securityand availability of an organisation's information.
ICTDBS507	Integrate databases with websites	Discover how to establish a database connection with a website and test it. In this unit, you'll build your skills in retrieving data using SQL, validatingdata, formatting data and managing user-supplied inputs. By the end of this unit, you'll understand database programming control structures, session management and database interfaces.
BSBXTW401	Lead and facilitate a team	In this unit, you'll build important management skills that IT supervisors and team leaders need. You'll discover how to plan team outcomes, communicate team responsibilities and allocatestaff. You'll also develop your ability to create performance plans, provide coaching to team members and provide constructive performance feedback.

Course Units

Unit code	Unit name	What you'll learn
ICTPMG505	Manage ICT projects	Build your skills in managing IT projects from planning to completion. Learn how to prepare for a project by creating a project plan, project charterand preliminary statement of project scope. Also develop your ability to establish IT project teams, manage project execution activities and coordinate project closure.
ICTPRG436	Develop mobile applications	Discover how to develop, debug, test and deploy applications for hand-held mobile devices, such as smartphones. Learn how to configure an application development environment, bind controls to data sources and design for different screen orientations and resolutions. By the end of this unit, you'll have the skills you need to successfully test and deploy mobile applications.
ICTSAS527	Manage client problems	Build your ability to provide client support and resolve IT problems. In this unit, you'll learn how to review service level agreements (SLAs) and diagnose potential troubleshooting. You'll also develop your skills in using quality assurance practices and documenting how client support activities were resolved.
BSBXCS402	Promote workplace cyber security awareness and best practices	In this unit, you'll explore the latest cyber security threats and trends impacting organisations. You'lllearn how to assess employees' understanding of cyber security practices. You'll also explore how you can develop initiatives that build your coworkers' understanding of cyber security threats and practical ways they can be avoided.
ICTICT443	Work collaboratively in the ICT industry	Build important skills that you need to effectively work within an IT team. In this unit, you'll explore how to work in virtual environments as part of an IT support team, including how you can best communicate, share knowledge and follow cyber safety protocols.
ICTWEB518	Build a document using extensible mark uplanguage	Dive into the world of Extensible Markup Language (XML). XLM is a standard, platform-independent markup language that presents data in a format that is readable by both humans and machines. In this unit, you'll learn how to design XML documents, then test and validate them in different browsers.
BSBCRT512	Originate and develop concepts	This unit will build your skills in recognising and analysing workplace issues. For example, these may be business problems or issues with an organisation's website or mobile application. You'llexplore how you can generate ideas for resolving these issues, then develop the most promising ideas into solutions.
ICTICT517	Match ICT needs with the strategic direction of the organisation	Learn how you can align your IT activities with the long-term goals and vision of your organisation. In this unit, you'll explore how you can analyse both a business's strategic plan and the current state of its IT systems and approaches. You'll then build your skills in identifying gaps and proposing IT improvements.
ICTWEB527	Research and apply emerging web technology trends	Discover emerging web technologies and trends in how developers are using them for web applications. Learn how to analyse these technologies and select ones that you can use in your website projects. Also develop your skills in applying code to web technologies, testing web applications and reviewing the test results.
ICTPMG505	Manage ICT projects	Build your skills in managing IT projects from planning to completion. Learn how to prepare for a project by creating a project plan, project charterand preliminary statement of project scope. Also develop your ability to establish IT project teams, manage project execution activities and coordinate project closure.