Te Hoe Hōkai Pakihi
Department of Enterprise and Digital Innovation

Bachelor of Information and Communication Technologies

Graduate Diploma in Information and Communication Technologies

Course outline for

Best Programming Practices (Web & Mobile Development) BCDE211

Semester One, 2021

Introduction –Kōrero whakatuwhera

This outline contains important information about the delivery and assessment of this course. Read it carefully and if there is anything you do not understand please ensure you ask a staff member listed below for clarification.

Please refer to your **programme handbook** for all programme related information, for example programme structure and regulations, grade scale and assessment regulations.
https://myara.ara.ac.nz/pages/student-admin/programme-information

Academic staff - Kā pouako

Name	Role	Phone	Office	Email address
Dr Luofeng Xu	Course Co-ordinator and Tutor	940 8394	S153	Luofeng.Xu@ara.ac.nz
Dr Mike Lance	Tutor/ Moderator	940 8318	S156	Michael.Lance@ara.ac.nz
Alister Macgregor	Tutor	03 687 2871	C Block	Alister.Macgregor@ara.ac.nz
Mehdi Asgarkhani	Academic Manager	940 8126	N122	Mehdi.Asgarkhani@ara.ac.nz

Please email your tutor directly to organise an appointment. The most convenient time is Friday 1-3 in X205.

Timetable - Wātaka

For timetable information for this course, please refer to:

- Tribal – through the student portal; or
- Moodle – EDI > ICT Student Information > Topic 6 Timetables; or
- Noticeboards – Ground floor N Block and Level 2 S Block

Required texts and resources - Kā rauemi kia tirohia

- This course has no required textbooks. The field is changing too quickly for a textbook to be up to date. On the course Moodle site, you will find links to the on-line documentation for the assorted frameworks that the course covers.
- Learning and Study Resources – to assist you in your study
  http://www.ara.ac.nz/services-and-support/library
- Moodle – for course resources
  https://moodle.ara.ac.nz
- Timetable Online – to find out rooms, staff members, etc
  https://ebs4portal-live.ara.ac.nz/

Reference to Student Handbooks / Kā Pukapuka Āwhina Tauira

Students should obtain a copy of the following:

- Ara Institute of Canterbury Ltd Enrolment Guide
- Programme Handbook

Each of these contains information for students about a range of policies and procedures including:

- Recognition of Prior Learning (RPL)
- Aegrotat Applications/Impaired Performance/Alternative Assessment Times
- Dishonest Practices
- Referencing

Course descriptor - Whakamāramataka

Best Programming Practices (Web and Mobile Development) BCDE211

Credits	15	*Level*	6
EFTS	0.1250	*Grade Scale*	G29aa
Notional Learning Hours	150	*Work Integrated Learning*	30
Effective from	January 2019	*Date of this version*	May 2018
Pre-requisites	BCDE102		
Co-requisites	Nil		

Aim

To develop student competency in a programming language to an industry-recognised standard, so they produce commercially viable software.

Learning outcomes

On successful completion of this course, the student will be able to:

1 Demonstrate skills and knowledge required to code to industry standards.

2 Demonstrate ability to implement a prototype system.

3 Apply knowledge of standards and tools to build complex systems.

Indicative curriculum

- Server-side programming, e.g. node.js
- JavaScript variant programming languages, e.g. Typescript
- Language competence to an industry certification level
- Multi-developer projects
- Database connectivity

Assessment

No	*Assessment Type*	*Pass Criteria*	*Weighting*	*Outcomes Assessed*
1	Practical Assessment 1		25%	1
2	Practical Assessment 2		25%	2
3	Portfolio	50%	50%	3

To pass this course, students must gain an average of at least 50% across all assessments, and gain at least 50% in Assessment 3.

Assessments - Kā Aromatawai

Assessment	Brief	Week of	Weighting
Practical Assessment 1	Exercises to ensure that the student can code to basic industry certification standard and can use all standard language features.	Fri 11 June 5pm	25%
Practical Assessment 2	Plan, design, code, and test the first iteration of a solution (a proof of concept) for a specified problem domain.	Fri 9 April 5pm	25%
Portfolio	For a given problem domain, plan and produce subsequent iterations that refine a solution system. The portfolio must explain and evaluate the process by which the system was refined. The portfolio must demonstrate that the system functionality and quality meet requirements.	Fri 11 June 5pm	50%

Note: Assignment submission details will be advised.

Assessment tasks - Kā tūmahi aromatawai

Teaching staff will provide you with specific details of what is required for each assessment in advance of the due date. This information may be uploaded to the appropriate course area in Moodle or be given to you in the form of a handout. Staff may also provide additional information, advice and tips regarding assessments during timetabled class sessions, so you are encouraged to attend class regularly.

Assessment criteria / Marking schedule - Kā paearu

Nearer the time of each assessment, teaching staff will provide you with information on the assessment criteria that will be applied and/or how marks will be awarded.

Read the up-to-date information on the BCDE211 Moodle site.

Course schedule - Maramataka

Week	Commencing	Topic	Assessments
1	22 February	Course overview, JavaScript variant programming language	
2	1 March	JavaScript variant programming language	
3	8 March	Package manager and tools	
4	15 March	Unit testing framework	
No classes Monday 22 March – Otago Anniversary (Oamaru Campus ONLY)			
5	22 March	Database connectivity	
Graduation Day Friday 26 March The optional Friday drop-in workshop WILL run as usual from 1-3pm in X205.			
6	29 March	Assessment support	
Easter Break No Classes Friday 2 April to Tuesday 6 April			
7	5 April	Assessment support	**Assessment #2 due at 5pm, Fri 9 April**
8	12 April	JavaScript framework	
Term Break Monday 19 April – Friday 30 April			
9	3 May	JavaScript framework	
10	10 May	JavaScript framework	
11	17 May	Progressive Web App	
12	24 May	Progressive Web App	
13	31 May	Progressive Web App	
No Classes Monday 7 June – Queen's Birthday Holiday			
14	7 June	Assessment support, course revision	**Assessments #1 & #3 due at 5pm, Fri 11 June**
15	14 June	Study Week	
16	21 June	Exam Week	
17	28 June	Exam Week	

Note: The schedule outlined above is indicative of topics and activities throughout the semester. If necessary, there may be changes to the schedule outlined above, of which students will be advised appropriately