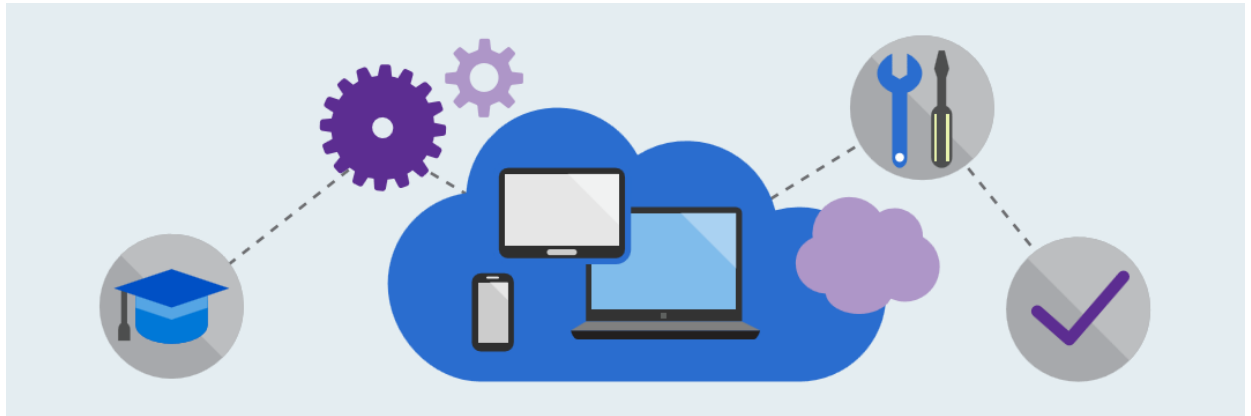


**562.615
Cloud Computing for Software Developers**



Attribution: Microsoft Azure Architecture graphic retrieved from:
<https://docs.microsoft.com/en-nz/azure/index#pivot=architecture&panel=architecture1>

Quarter 3 2018 - Course Outline

Academic Staff and Class Details

Name: *John Calder*
Email: *john.calder@manukau.ac.nz*
Phone: *09-9754612 (from tutor phone this is 4612)*
Office: *MC-326 – Lecturer Office Level 3*

Class Sessions:

Lecture / Tutorial / Workshop: Day **Mon** Time **11am-2pm** Room **Lab 315**

Lecture / Tutorial / Workshop: Day **Wed** Time **11am-2pm** Room **Lab 315**

Manukau Campus Information Desk:

Floor 2, 8.30am to 5.00pm, Monday to Friday
Programme Administrator: Parizad Dumasia, 975 4617
parizad.dumasia@manukau.ac.nz

Every effort is made to ensure that the outline is correct at the time of publishing, however MIT reserves the right to make changes that may be necessary.

COURSE PURPOSE

This course is designed to understand the fundamentals of cloud computing, its benefits and challenges as a software developer. The students are expected to design and implement a SaaS solution.

LEARNING OUTCOMES (LOs)

LO1: *Demonstrate an understanding of the fundamentals of cloud computing and different cloud delivery models (SaaS, PaaS, IaaS)*

LO2: *Design software using Service-Oriented Architecture*

LO3: *Demonstrate an understanding of security best practices for SaaS.*

LO4: *Implement and publish Software-as-a-Service*

LEARNING TIME

The total learning hours for this course are **150** hours (10 hours per credit).

For this course, it is expected that your learning time will be apportioned as follows:

In-class hours (including lectures, tutorials, seminars and workshops) = 48 hours

Independent reading and research = 20 hours

Graded Assessment activities (e.g., creating web apps) = 55 hours

Ungraded Assessment activities (e.g., formative quizzes) = 15 hours

Activity Based Learning not otherwise included above (e.g. exercises) = 12 hours

CANVAS LEARNING MANAGEMENT SYSTEM

Canvas is MIT's online teaching and learning tool. It is available to you 24/7 and you will need to check it regularly for updates on your course information, assessments, course content, and to receive messages. Any mandatory activities on Canvas will be explained to you by your lecturer. You can access Canvas from your own device and any computer on campus for which you have a valid log-on by logging in at

<https://canvas.manukau.ac.nz>

COURSE MARKS

All course marks are available online via the Learner Portal

<https://ebs4Portal-live.manukau.ac.nz> .

If you have any queries about course work marks you should discuss these with your lecturer. All final grades will be published via the Learner Portal online only within 10 working days from the course end date.

In many courses, marks for individual assessments are also made available via Canvas once marked. Please note that these marks are provisional only and as such are only intended to give you guidance on your progress. The Learner Portal is the only official source for the final marks and grades you are awarded for a course.

ASSESSMENT STRUCTURE

Assessment Type	Learning Outcome Assessed	Due date	Weighting
Test 01	1, 2	Week 03 Wed, 08 Aug 2018	20 %
Test 02	1, 2, 3, 4	Week 07 Wed, 05 Sep 2018	40 %
Project	2, 3, 4	Week 08 Mon, 10 Sep 2018	40 %

To pass this course you must achieve a total combined mark of (50%)

Further details concerning the above assessments will be provided via Canvas. It is your responsibility as a student to monitor Canvas for assessment related announcements and documents.

Be professional about backup! You must keep a copy of all assessment materials which you submit to your lecturer.

International Students

International students studying or intending to study at MIT have dedicated support staff to assist with the applications' process, student visas/permits issuing and renewal, medical and travel insurance claims, accommodation, pastoral care, and day to day study issues. For more information go to:

<https://www.manukau.ac.nz/international-students>

ACADEMIC REGULATIONS AND POLICIES

Students are strongly advised to read the www.manukau.ac.nz/FBIT-Handbook and the [MIT Student Regulations](#) for details concerning:

- Your rights and responsibilities (Student handbook)
- Attendance (Student regulation 9 MIT Student Regulations)
- Aegrotats (Student regulation 12.12 MIT Student Regulations)
- Anti-harassment policy (Student regulation 18 MIT Student Regulations)
- Complaints (Student regulation 19 MIT Student Regulations)
- Misconduct, cheating and disciplinary proceedings (Student regulation 13, MIT Student Regulations)
- Assessment Extensions (Student handbook)
- APA referencing <http://library.manukau.ac.nz/apareferencing>

TE TIRITI O WAITANGI: THE TREATY OF WAITANGI.

MIT has a clear commitment to the advancement of Mātauranga Māori (Māori Knowledge), Te Tiriti o Waitangi (the Treaty of Waitangi) and the application of Ako (Māori pedagogy). All MIT staff are expected to:

- Have, or are developing, an understanding of the value and principles of Te Tiriti o Waitangi and how this can be applied to support educational success for Māori¹ at MIT; and
- Are aware of their responsibilities to apply the values and principles of Te Tiriti o Waitangi in support of a bicultural environment.

MIT staff are happy to support and champion MIT's commitment to Te Tiriti o Waitangi and to demonstrate this through behaviour and actions that support MIT as a culturally responsive and inclusive environment for all students, staff and the general public.

Any Manukau Campus students who have questions, queries or are looking for assistance in this area, then email the Maori Partner, Dr Wiremu Manaia, at maoripartners@manukau.ac.nz

MAORI PARTNER: KAIPAKIHI MAORI.

MIT has recently appointed three Maori Partners (Kaipakihi Maori) at Otara, Tech Park and Manukau Campuses as part of a process for developing an inclusive bicultural learning environment. The Maori Partner for Manukau Campus is Dr Wiremu Manaia. Dr Manaia is also a Senior Lecturer in Business & Information Technology at Manukau Campus.

He will be working in collaboration with other MIT services to address the following six strategic objectives and associated deliverables:

1. Student Engagement.
2. Academic Teaching Support.
3. Cultural Support.
4. Operational Assistance
5. Pedagogy Support
6. Industry Engagement

At this stage, MIT is in the process of establishing a structure that will enable the Maori Partner role to function and operate. For 2018, the focus is on student engagement, academic teaching and cultural support.

If you have any questions or queries then contact the Maori Partner, Dr Wiremu Manaia, at maoripartners@manukau.ac.nz

¹ Retrieved from <http://www.education.govt.nz/ministry-of-education/our-role-and-our-people/careers-in-education/our-policy-graduateprogramme> on 21 Feb 2017, 12.32pm.

COURSE SCHEDULE: QUARTER 3 2018

Week	Date	Topics	Activities, Project with est hours.
1	23-Jul	<ul style="list-style-type: none"> Cloud delivery models (SaaS, PaaS, IaaS) Introductions to "Azure" and "manukautech.info" 	In-class hours = 6 Independent Study = 6 Exercises = 4
2	30-Jul	<ul style="list-style-type: none"> Service-Oriented Architecture Fundamentals of SaaS 	In-class hours = 6 Independent Study = 6 Exercises = 5 Practice Test Qus = 3
3	06-Aug	<ul style="list-style-type: none"> Test 01 Basics of WebApi Serving data from a database 	Test 01 Wed, 08 Aug 2018 ----- In-class hours = 6 Practice Test Qus = 5 Independent Study = 2 Project = 8
4	13-Aug	<ul style="list-style-type: none"> Consuming WebApi 	In-class hours = 6 Independent Study = 2 Exercises = 3 Project = 9
5	20-Aug	<ul style="list-style-type: none"> Consuming your WebApi Deployment to a SaaS system 	In-class hours = 6 Independent Study = 4 Project = 10
6	27-Aug	<ul style="list-style-type: none"> Security in the Cloud – oAuth, owin, etc Securing SaaS 	Test practice questions. ----- In-class hours = 6 Project = 10 Practice Test Qus = 3
7	03-Sep	<ul style="list-style-type: none"> Prep Test Work on Assignment Test 02 	Test 02 Wed, 05 Sep 2018 ----- In-class hours = 6 Practice Test Qus = 4 Project = 10
8	10-Sep	<ul style="list-style-type: none"> Work on Project Recovery sessions 	Project hand-in Mon, 10 Sep 2018 ----- In-class hours = 6 Project = 8

The order of topics may change. Notice of changes will be given in class and on Canvas.