



School of Engineering, Computer & Mathematical Sciences  
AUT University  
and  
Vietnam National University, Ho Chi Minh University of Science

Collaborative Programme

HCMUS Associate Degree or Bachelor of Science Computer Science and  
AUT Bachelor of Computer & Information Sciences (BCIS)

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# Handbook

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**Full Version 2019**

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# 1. The 'On-site' Programme

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This programme allows HCMUS students to complete both the HCMUS Associate or BSCS degree and the AUT BCIS at the HCMUS campus.

Students will enrol as a full AUT student and complete the AUT BCIS papers over one and a half years. The AUT BCIS will be endorsed with the IT Service Science major.

Papers will be delivered by both online or on-site modes, and a combination of online and on-site, and are according to the following table of papers:

## 1.1 Mode of Delivery

<i>Core Papers:</i>	<i>Level</i>	<i>AUT Points</i>	<i>Prerequisite paper</i>	<i>Mode of student contact delivery</i>	<i>Assessment</i>
COMP601 IT Service Provision	6	15		2 days + Online + 2 days	1 x assignment which may include weekly submissions, written work and a presentation; 1 x exam.
INFS603 Needs Analysis, Acquisition and Training	6	15		2-3 days + Online + 1 day + Online	2 group assignments and 2 individual assignment submissions; no exam
COMP607 Information Security Technologies	6	15	CS205	5 days + 5 days classroom-based	1 x assignment and 1 x exam
INFS702 IT Service Management	7	15	COMP601	2 days + Online + 2 days	1 x assignment which may include weekly submissions, written work and a presentation; 1 x exam.
COMP718 Information Security Management	7	15		4 days + 4 days	1 x assignment which may include weekly submissions, written work and a presentation; 1 x exam.
INFS701 IT Strategy and Control	7	15		4 days + 4 days	1 x assignment which may include weekly submissions, written work and a presentation; 1 x exam.
COMP704 Research & Development Project	7	30	COMP601 INFS603 COMP607 CS101 CS301	Project (supervised) including some classroom sessions and presentations.	Project artifacts

### On-site Mode of Delivery:

All lectures are held on local campus classrooms with lab sessions for technical content. This is in the form of the 'days' sessions shown above which are approx. 2 months apart. In between these sessions, course work and contact with the lecturer is through Blackboard. The second classroom session is normally followed by an examination or a final assignment.

### Online Mode of Delivery:

Course lectures are delivered online in Blackboard, or there are online study guides in Blackboard. These are all directed by the lecturer.

## 1.2 Cross Credit Table

<i>HCMUS BCSC Paper</i>			<i>AUT BCIS Paper</i>
<i>(Course ID)</i>	<i>(Course's name in Vietnamese)</i>	<i>(Course name in English)</i>	<i>(Course name in English)</i>
CS101	Kỹ năng giao tiếp	Business Communication	COMM501 Applied Communications
CS103	Nhập môn lập trình	Introduction to Programming	COMP500 Programming 1
CS104	Cấu trúc dữ liệu	Data structures	
CS102	Các nguyên lý về máy tính và hệ thống thông tin	Principles of Computer and Information System	COMP501 Computing Technology in Society
CS107	Kỹ thuật lập trình hướng đối tượng	Object-Oriented Programming	COMP503 Programming 2
CS202	Kỹ thuật lập trình hướng đối tượng nâng cao	Advanced Object-Oriented Programming	
CS109	Giải tích	Calculus	<i>Elective</i>
CS106	Nhập môn cơ sở dữ liệu	Introduction to Database	INFS601 Logical Database Design INFS602 Physical Database Design
CS203	Cơ sở dữ liệu nâng cao	Advanced database	
CS201	Kỹ thuật lập trình Web	Web Programming	Elective x2
CS204	Kỹ thuật lập trình Web nâng cao	Advanced Web Programming	
CS105b	Nền tảng về hạ tầng Công nghệ thông tin	Foundations of IT Infrastructure	COMP502 Foundations of IT Infrastructure
CS205	Mạng máy tính	Computer Networking	COMP504 Computer Networking
CS205b	Quản trị hệ thống máy tính và mạng máy tính	Network & Systems Administration	COMP609 Network and System Administration
CS207	Nhập môn Công nghệ phần mềm	Introduction to software engineering	INFS600 Data and Process Modelling
CS206b	Đại số và toán rời rạc	Algebra & Discrete Maths	MATH502 Algebra and Discrete Mathematics
CS301	Quản lý dự án	Project Management	COMP600 IT Project Management
CS208	Nhập môn quản trị doanh nghiệp	Introduction to Business Management, AND Completion of HCMUS papers	INFS500 Enterprise Systems
CS209b	Các mô hình thống kê	Statistical Models	STAT500 Applied Statistics
<i>Total AUT points</i>			240
<i>Total AUT taught points (see teaching plan)</i>			120

### Notes:

1. The BCIS requires a total of 360 points. All BCIS papers are 15 points unless otherwise stated. 120 pts BCIS = 1 Year of full time study
2. AUT papers are subject to change. No changes to study schedules will be made without notification to and discussion with HCMUS.

## 1.3 Entry Requirements

### English requirements

Applicants whose first language is not English will have their English language proficiency considered on the following basis:

- an approved English language proficiency test with a score that satisfies entry to the programme. AUT's preferred proficiency test is IELTS. Applicants must score an average of 6.0 with no less than 5.5 in each band.
- Other approved tests are PearsonPTE and TOEFL
- Applicants with equivalent English proficiency passes should refer to AUT.

Applicants may also be considered proficient in English for admission purposes if they have successfully completed an appropriate qualification in recent years where the language of instruction and assessment was English. If this is the case, then this should be clearly indicated on the application form.

### **Academic requirements for University Entrance (UE) for bachelor's degree**

For more information refer to:

<https://www.aut.ac.nz/study/applying/entry-requirements/university-entrance?nav=inthissection>

Papers are subject to availability. Where papers are not available a suitable alternative will be offered. HCMUS and AUT reserve the right to change the contents of the programme at any stage prior to enrolment. Please check with the Academic Affairs of HCMUS, or Collaborative Provision office of AUT SECMS to obtain the latest information about the programme and its contents.

For further information, application form and fees information, contact:

Tel: (+84) 8 3830 3625

Email: [itec@hcmus.edu.vn](mailto:itec@hcmus.edu.vn)

Website: [www.itec.hcmus.edu.vn](http://www.itec.hcmus.edu.vn)

## 2. The 'Articulation' Programme

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This programme also allows students to complete their HCMUS BCSC at AUT University in New Zealand according to the options listed below.

### 2.1 Study Options

#### Option 1

Double Degree: 2 years at HCMUS plus 2 years at AUT.

- Year 1. Language and Social Sciences papers at HCMUS.
- Year 2. BSCS papers at HCMUS
- Year 3 and 4. BCIS papers at AUT

#### Option 2:

Single Degree: 3 years at HCMUS plus 1 year at AUT.

- Year 1 & 2 & 3 BSCS papers at HCMUS
- Year 4 BCIS papers at AUT

#### Option 3:

Single Degree from AUT. 2years at HCMUS plus 2 years at AUT

- Year 1 and 2. BSCS papers at HCMUS
- Year 3 and 4. BCIS papers at AUT

Note: If your desired study falls outside the published BCSC/BCIS curriculum, AUT can customise a programme of study based on HCMUS papers taken.

### 2.2 Majors and Specialties

Depending upon your study options and pathway, the following BCIS Majors and/or Specialties may be chosen.

<https://www.aut.ac.nz/study/study-options/engineering-computer-and-mathematical-sciences/courses/bachelor-of-computer-and-information-sciences>

#### BCIS Majors:

- Analytics
- Computational Intelligence
- Computer Science
- IT Service Science
- Networks & Security
- Software Development

## 3. The Postgraduate Programmes

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### 3.1 Master Programmes Study Options

1. Master of Computer and Information Sciences (MCIS 180 points)

This is a one and a half years programme full time. The structure has three options: a). four papers (60 points) + Thesis (120 points). b). six papers (90 points) + thesis (90 points). c). 8 papers (120 points) + Research Project (60 points). Discipline clusters include:

- Information Systems and Technology
- Software Systems Engineering
- Artificial Intelligence and Knowledge Engineering

2. Master of Service Oriented Computing (MSOC 180 points)

This is a one and half years programme. In the first year students take eight papers including five mandatory papers and three elective papers, and in the final semester students undertake a 60 points research project.

3. Master of Information Security and Digital Forensic (MISDF 180 points)

This is a one and half years programme. The structure has two options: a). six papers (90 points) + Thesis (90 points). b). eight papers (120 points) + Applied Research Project (60 points).

4. Master of Health Informatics (MHI 180 points)

This is a one and half year study programme. In the first year, students take eight papers 120 points, and 60 points applied research project in the final semester.

5. Master of Analytics (180 points)

This is a one and half year full-time study programme. There are 6 core and 2 elective papers and a Research Project.

More information can be found <https://www.aut.ac.nz/study/study-options/engineering-computer-and-mathematical-sciences>

### 3.2 Entry Requirements

Entry into the Master's programmes listed above require a B grade average or higher in papers at level 7 or above. An IELTS of average 6.5 with no less than 6.0 in each band is required.

#### **POSTGRADUATE DIPLOMA IN COMPUTER AND INFORMATION SCIENCES (PgDipCIS 120 points)**

A one year of eight papers programme that follows the same pathways and the MCIS above.

Entry into the PgDipCIS requires graduation from the BIT or GDIT. Students may then pathway into the MCIS on completion of two semesters of study with a B- pass grade average or higher. Students may transfer to the MCIS if the required B average is attained.

## 4. Information for Students

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### 4.1 HCMUS/ITEC Contact Information

Academic Affaires Office:  
Nguyen Le Ai, Duy  
nladuy@itec.hcmus.edu.vn

Vice-Director of ITEC  
Mr Tran Cong Danh  
tcdanh@itec.hcmus.edu.vn

### 4.2 AUT Contact Information

Coordinator Collaborative Provision:  
Ann Wu-Ross  
ann.wu@aut.ac.nz  
+64 9 921 9999 ext. 5054

Head of Collaborative Provision:  
Leo Hitchcock  
leo.hitchcock@aut.ac.nz  
+64 9 921 9999 ext. 5421

### 4.3 IT Services and Support

#### Getting started

To access most of AUT's online systems such as Blackboard, Outlook, Library and Internet, you need to use your network login and password, details are on your AUT student ID card.

#### Student IT Account Setup

It is mandatory for all AUT students to register their IT Account.

Step 1. Log in through <https://distance.aut.ac.nz> or <https://networkservices.aut.ac.nz> and new students are taken to ICT Services Policy page.

**Read** the policy then click **Accept**.

Step 2. ICT Service / Registration

Step 3. Account validation

[https://aut.service-now.com/nav\\_to.do?uri=%2Fkb\\_view.do%3Fsys\\_kb\\_id%3D8748ae5a0a0a780a0129a19a37a4d176%26sysparm\\_tsqueryld%3D17590199db31a740da64bd16f496197c%26sysparm\\_rank%3D1](https://aut.service-now.com/nav_to.do?uri=%2Fkb_view.do%3Fsys_kb_id%3D8748ae5a0a0a780a0129a19a37a4d176%26sysparm_tsqueryld%3D17590199db31a740da64bd16f496197c%26sysparm_rank%3D1)

#### Redirect emails to another account

Redirecting email means the email is received in your Office 365 Outlook mailbox as well as your Personal mailbox.

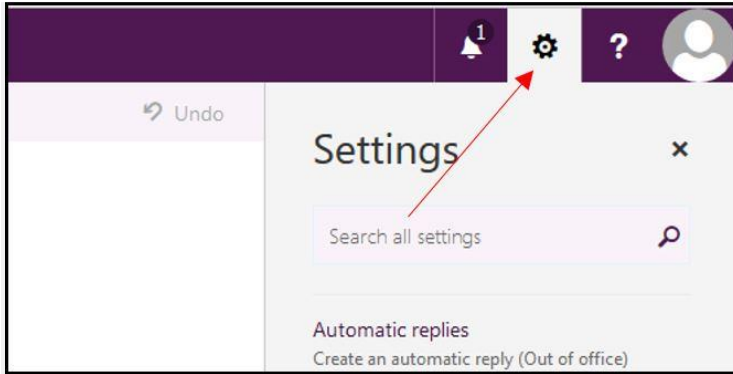
To set this up, follow these steps:



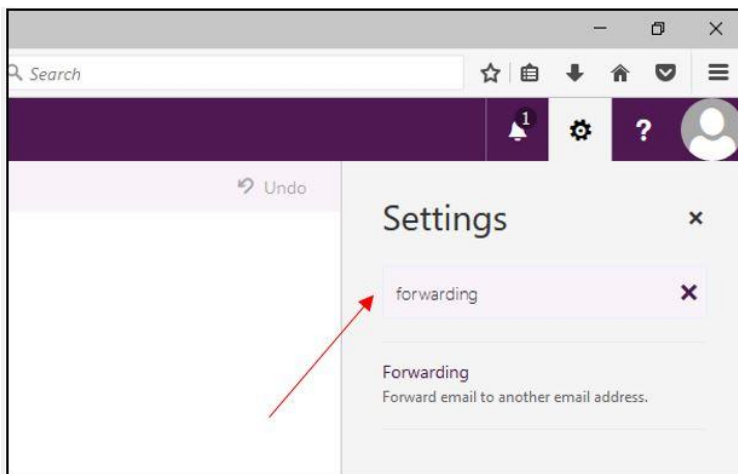
1. To access your student email account, go to Student Mail and login using your email address, Which is your network login ID @autuni.ac.nz and standard blackboard password or select Mail

From the Office 365 app (or waffle) on Student Digital Workspace

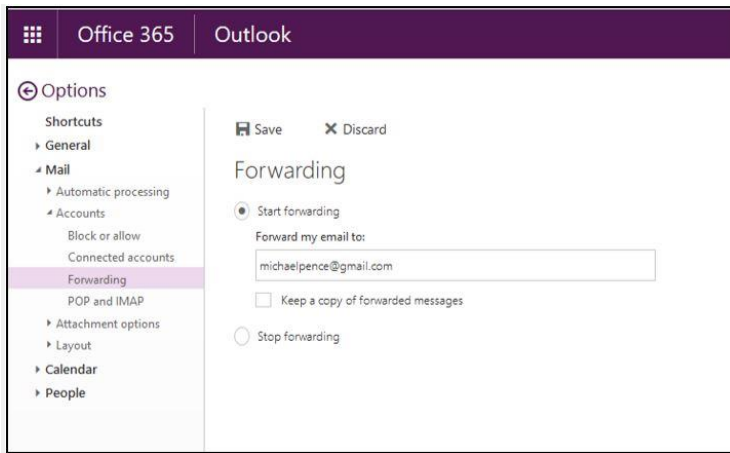
2. When your email inbox loads, click on the setting cog in the top right hand corner of the page



3. In the “Search all settings” box, search for “forwarding” then click on the forwarding option



4. After clicking the forwarding option, to the left of the settings menu the forward settings will open. Click on the “Start Forwarding” button then enter the email address you want the emails to be sent to, then click on save. Clicking “keep a copy of forwarded messages” will stop outlook from deleting any message that has been forward to your personal e-mail account



Any message sent to your student e-mail account will now be sent to your chosen e-mail address as well.

### Stopping Forwarding

To stop forwarding, follow the above steps but at Step 4, select the “Stop Forwarding” button instead then click on save.

[https://aut.service-now.com/autsp?id=kb\\_article&sys\\_id=2b0261ce94b2e10043e20b41f22b939e](https://aut.service-now.com/autsp?id=kb_article&sys_id=2b0261ce94b2e10043e20b41f22b939e)

**In the event the automated reset does not work you should contact Ms. Nguyen Le Ai Duy at ITEC who will assist you.**

## 4.4 Application for Enrolment Procedure

- HCMUS students must complete the International Application for Enrolment (IAFE) as per AUT website: <https://www.aut.ac.nz/> And, a).verified proof of DOB and legal name attached (e.g. Birth Certificate/Passport/Certificate of Identity). b). i.e. verified (by HCMUS) academic transcript, which is required to determine NZ University Entrance (UE). c). IELTS certificate. Any additional paperwork required is to be communicated by the SECMS. All IAFEs and required documents will be collated by HCMUS and courier to SECMS Collaborative Provision Office of AUT.
- Offers of Place/Acceptance Forms (OOP) are to be generated and sent to HCMUS ITEC Administrator and/or students.
- Applicant can accept/decline the offer of place via Arion. Alternatively, HCMUS/applicants will print OOPs, students sign them, and then all OOP acceptance form sent back to SECMS, the Collaborative Provision Office, or to the University international admissions as instructions on the OOP.
- Once papers are loaded and approved, students will be invoiced with a zero fee. Students’ AUT ID cards will be generated by the student services and delivered to HCMUS by SECMS. AUT network login details is on the ID card which gives students access to all online resources.

### Supervision and Tutors

HCMUS will allocate supervisors and tutors to students in accordance with the guidance for AUT’s own on-campus provision, or operate a system to its equivalence according to the Agreement. Such tutors and supervisors will provide a first line of contact for students on collaborative programmes and ensure that such students receive advice and tuition that is comparable to those received by students studying on the equivalent programmes at AUT.

## 4.5 Interim Results, Reconsideration of Assessment

Interim results will become available in ARION Web according to the published assessment schedule and as notified by the Collaborative Provision office at SECSM AUT or Academic Affaires office at HCMUS, prior to the Exam board meeting. Student view their provisional marks on Arion, if applicable to apply for reconsideration. Final marks are approved by the Examination Board of SECMS. Students will be notified by the Registry of final results.

In accordance with AUT academic regulations a student who believes an assessment item has been incorrectly graded may request a reconsideration of assessment (see Appendix for application form). Requests for Reconsideration of Assessment will be processed in accordance with AUT University policies and procedures. Reconsiderations may result in a mark being increased, decreased or remaining unchanged. Reconsiderations are passed to the examiner and processed under Examination Board procedures. Students will be notified of the final outcome.

## 4.6 Appeals against Final Results

Once a result becomes 'final', that is it has been approved by the Examination Board and locked, in accordance with AUT University academic regulations, a student may appeal against the overall result awarded for a paper in either of the following circumstances:

- Additional information has become available which was not available, and could not reasonably have been available to the Examination Board at the time it made its original decision
- There was a material irregularity in the conduct of the assessment, or in the examination board or board of studies procedures

Appeals against final results will be considered in accordance with the AUT academic regulations, policies and procedures. Contact collaborative provision at AUT for more information, email [collaborative@aut.ac.nz](mailto:collaborative@aut.ac.nz)

## 4.7 Academic Appeals and Complaints

Appeals and complaints on AUT programmes at HCMUS are governed by AUT Academic Appeals and Complaints regulations. Students at HCMUS are able to seek advice locally on how to address any appeal or complaint through the appropriate channels.

HCMUS will designate an officer responsible for advising and helping HCMUS students on an AUT programme with regard to appeals and complaints as well as identifying the formal processes to be followed by collaborative students in lodging such appeals and complaints.

## 4.8 Programme Regulations

### Enrolment and Study Regulations

On acceptance of enrolment, AUT provides all AUT students with a login name and password to access AUT Services such as logging onto the AUT network, student digital space, or BlackBoard. Students use their Student ID Number and, in the first instance, a default password as assigned by the University to log in to student digital space, Arion is AUT's student management system. This system provides details of enrolment into papers and study programme progress. Students are also given a login to Blackboard, the course management system for each paper the student is currently enrolled in, whether online or on-site. For online papers Blackboard becomes the paper delivery mechanism and the channel for communications with the lecturer, and for on-site, a repository for paper resources and other information.

**Blackboard also contains important study and assessment regulations which each student must become familiar with.**

In order to be recognised as an enrolled student of AUT, applicants must provide a completed application, including signed and dated International Student Application for Enrolment Form and verified proof of date of birth and legal name. This is a legal requirement in New Zealand that will ensure students can be formally enrolled as AUT students.

HCMUS will supply AUT with completed international application for enrolment forms, verified proof of date of birth and legal name, and evidence of English language proficiency for each enrolling student. Following receipt and approval of the applicants AUT will email an offer of place to each student and to the HCMUS contact. Students will then need to formally accept this offer.

Applicants must sign an enrolment contract with AUT. New students will sign the following declaration on entry to the AUT University programme of study prior to formal enrolment:

- Agreeing to abide by the laws and regulations of AUT, for the duration of the programme
- Consenting to AUT collecting, using and disclosing the student's personal data for business purposes in accordance with the New Zealand Privacy Act 1993.
- Acknowledging that providing false or incomplete information could render the student's admission/enrolment invalid.

### **Assessment**

Should a student fail a paper based on one assessment only but gain between 48 and 50% overall marks, subject to the decision of the SECMS Examiners Board, the student may be allowed to re-submit the assessment. Should a student fail a paper and not be granted a re-submission or re-sit by the SECMS Examiners Board, they may repeat the paper one more time.

The provisions of the above remain effective until the student has completed six (6) years of their study programme at which time they will be withdrawn from the programme.

### **Academic Discipline**

AUT has a responsibility to ensure the academic integrity and quality of all of its programmes. This includes responsibility for investigating and dealing with incidences of dishonesty in relation to assessment as outlined in the General Academic Regulations. Acting in ways that are unfair during assessments puts a student in breach of the academic regulations and subject to its discipline procedures.

Forms of dishonesty in assessment include:

- Unauthorised collaboration
- Plagiarism
- Resubmitting for assessment work which has been previously submitted.
- Submitting for assessment any work which has been copied from another person.
- Copying from or inappropriately communicating with another person in an exam.
- Taking any unauthorised material such as books, notes or electronic material into an exam.
- Using any other unfair means.

Disciplinary action taken by AUT may include the following:

- Reduction in the grade awarded for the assessment,
- Failure of the paper, or
- Suspension/Expulsion from AUT.

**AUT enrolled students at HCMUS will adhere to AUT's policies and regulations concerning dishonesty and academic discipline. The General Academic Regulations can be found online at: <https://www.aut.ac.nz/about/auts-leadership/official-aut-publications/read-by-section-academic-calendar>**

### **Changes to Student Details**

It is vital that any changes in student details are notified to AUT as they occur. The recording of accurate data on the student records ensures that any documentation is issued correctly. HCMUS will inform AUT of any changes to students' details as soon as they occur, or students may update their details themselves in student digital space. Changes to the legal status of a student's details such as a legal name, will require verified evidence.

## **Academic Progression**

The normal period of study will be outlined in the Programme Handbook. AUT and HCMUS programme regulations determine the maximum time limit, from the date of registration that is permitted for a student to complete the programme.

Academic progression and time limits for completing the AUT programme of study will be governed by the AUT academic regulations. Should a student fail a paper and not be granted a re-submission by the SECMS Examiners Board, they may repeat the paper one more time. The provisions of above remain effective until the student has completed six (6) years of their study programme at which time they will be withdrawn from the programme.

### **Withdrawal from the Programme or a Paper**

A student who wishes to withdraw from the programme must seek the approval of HCMUS and complete the official withdrawal form. HCMUS will forward the form to the Collaborative Programme Coordinator at AUT. Refund of fees is according to HCMUS refunds policy.

A student's enrolment in a paper or programme may be terminated by AUT if the student is deemed to have withdrawn through non-completion of any compulsory assessment events and has failed to give written notice. AUT will provide the student and HCMUS with written warning before withdrawing a student on this basis.

Where a student withdraws or is withdrawn from a paper their official academic transcript will record a grade of W (withdrawn) or DNC (Did Not Complete) in accordance with AUT's General Academic Regulations. A DNC will normally be applied if 75% of the course has been completed.

## **Examination Procedures**

### **Entry to exam room**

- AUT student identification (ID) card will be checked by invigilator(s) when entering the exam room.
- AUT student ID card must be displayed on the desk for the duration of exam.

### **Student conduct in the exam room**

- Can arrive up to 30 minutes late but no extra time provided. Can leave after first 30 minutes.
- No talking in the examination room from the point of entering the room until students leave the room.
- If a seating plan is used, advise students to 'only sit in the assigned seats, do not switch places with any other student'.
- Students are not permitted to leave in the last 15 minutes.
- Students must remain in their seats and put their hand up when requiring assistance.
- No sharing of any items or talking to any other student.
- Pens must be put down as soon as the Exam Supervisor signals the end of the examination.
- Any unauthorised papers or electronic-based materials in the possession of a student may result in a zero mark for the exam regardless of the content of the materials.
- All watches banned during exams.

## **Notification of Results**

Official results are issued by the Registry twice yearly following approval by Examination Boards. The academic transcript is a formal and complete record of a student's results and qualifications obtained at AUT including all papers where the assessment has been attempted, including fails.

Digital qualification documents are available online via My eEquals online service. As a student or graduate you can access and share these documents with third parties. For details, go to <https://www.aut.ac.nz/student-life/graduation/transcripts-and-graduation-certificates>

## **Graduation Ceremonies and the Issuing of Parchments**

AUT recognises that partner institutions may want to hold their own award ceremonies. However, they must inform students that their degrees will not be conferred until after the appropriate AUT ceremony has taken place. Students who owe tuition fees or library fines, or their record is 'flagged' will not be permitted to receive an award.

Students who have been awarded an AUT qualification will be entitled to attend and have their awards conferred at an AUT graduation ceremony, which will be held at Auckland. Students are responsible for their expenses in attending the ceremony, as for on-campus students. Students unable to attend AUT's ceremony may graduate *in absentia*.

## **4.9 Resources Available**

### **AUT Library**

All AUT library electronic services are fully available to AUT enrolled students at HCMUS. This includes electronic journals, online tutorials, library resources for individual papers available through Blackboard, etc.

Go to: <https://library.aut.ac.nz/>

### **AUT Resource Centre at HCMUS**

An AUT resources centre contains copies of the required text books and other useful resources. Enquire at HCMUS Library 10th floor, Building I.

## 5. Referencing

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### What is referencing?

Anything that you have read, and refer to in your academic writing, you must acknowledge in text (i.e. in the work / assignment/essay you are writing); and include in your reference list (i.e. the list at the end of your work of all the sources you refer to).

This means, books, articles from journals, magazines and newspaper, website, webpages, documents on website (PDFs, PPT slides), lecture notes, YouTube videos, annual reports etc. At AUT we use APA 6<sup>th</sup> to format references.

Sources from AUT library: <http://aut.ac.nz.libguides.com/APA6th>

## Reference List

Referencing with APA 6 <sup>th</sup> – Brief Guide			
The Publication Manual for APA is now in its 6th edition (in 2010). It includes several significant changes, such as the use of DOIs and URLs in retrieval statements. Refer to this brief guide, or for more examples and explanations, use the detailed <a href="http://aut.ac.nz.libguides.com/APA6th">guide</a> on the AUT Library website: <a href="http://aut.ac.nz.libguides.com/APA6th">http://aut.ac.nz.libguides.com/APA6th</a>			
AUT Library → Study Help → Referencing → APA 6th edition Guide at AUT			
Item	Reference list entries	In text citation	Note
Book one author	Pilger, J. (2006). <i>Freedom next time</i> . London, England: Bantam.	(Pilger, 2006) or ... Pilger (2006).	Short direct quote: Enclose in "..." and give page number. E.g. Pilger (2006) says that "... (p. 257).
Book two authors	Shaw, R., & Eichbaum, C. (2008). <i>Public policy in New Zealand: Institutions, processes and outcomes</i> . Auckland, New Zealand: Pearson Education.	(Shaw & Eichbaum, 2008) or According to Shaw and Eichbaum (2008) ...	In text: In a sentence: use 'and' between authors Within brackets: use '&' between authors For each citation: always give both authors Reference list: use '&' between authors
Book three - five authors	Alred, G. J., Brusaw, C. T., & Oliu, W. E. (2009). <i>The business writer's handbook</i> . New York, NY: St Martin's Press.	First citation: (Alred, Brusaw, & Oliu, 2009) Subsequent citations: (Alred et al., 2009)	Reference list: list all authors, use '&' before final one In text: First citation: give all authors Subsequent citations: first author et al., year Sentence style: use 'and' before final authors Within brackets: use '&' before final author
Book six - seven authors	Gazda, G. M., Balzer, F. J., Childers, W. C., Nealy, A. U., Phelps, R. E., & Walters, R. P. (2005). <i>Human relations development: A manual for educators</i> (7th ed.). Boston, MA: Pearson Educational.	(Gazda et al., 2005)	Reference list: list all authors, use '&' before final author In text, first and subsequent citations: surname of the first author et al., year
Book eight or more authors	Watson, S., Gunasekara, G., Gedye, M., van Roy, Y., Ross, M., Longdin, L., ... Brown, L. (2003). <i>Law of business organisations</i> (4th ed.). Auckland, New Zealand: Palatine Press.	(Watson et al., 2003)	Reference list: use ... between 6 <sup>th</sup> and final author In text, first and subsequent citations: surname of the first author et al., year
Book chapter	Easton, B. (2008). Does poverty affect health? In K. Dew & A. Matheson (Eds.), <i>Understanding health inequalities in Aotearoa New Zealand</i> (pp. 97-106). Dunedin, New Zealand: Otago University Press.	(Easton, 2008) or Easton (2008) states that ... (p. 101).	Reference list: the main entry in your list is the author of the chapter include the page numbers of the chapter In text citation: give the author of the chapter, year. Give page number for paraphrased ideas or quotes Editors' names: initial before family name
Book corporate author	New Zealand Health Information Service. (2003). <i>Report on maternity: Maternal and newborn information</i> . Wellington, New Zealand: Ministry of Health.	First citation: (New Zealand Health Information Service [NZHIS], 2003) Then: (NZHIS, 2003)	Well known organisation abbreviations: First citation: give the name of the organisation in full, plus its abbreviation in [...], date Subsequent citations: give abbreviation, year
e-book from a library database	Best, A. (2004). <i>International history of the twentieth century</i> . Retrieved from <a href="http://www.netlibrary.com">http://www.netlibrary.com</a>	(Best, 2004)	Give the URL of the database remove the part of the URL after the domain / host name; do not include the full link to the book
Journal article with DOI	Li, S., & Seale, C. (2007). Learning to do qualitative data analysis: An observational study of doctoral work. <i>Qualitative Health Research, 17</i> , 1442-1452. doi:10.1177/1049732307306924	(Li & Seale, 2007)	DOI (digital object identifier): Most academic journal articles will have a DOI. Find it: on the PDF, or in the article record on the database, or underneath the abstract Read our <a href="#">online guide</a> for information about DOIs
Magazine article online DOI not available	Read, E. (2007, November 1). Myth-busting gen Y. <i>New Zealand Management, 54</i> (10), 63-64. Retrieved from <a href="http://www.management.co.nz">http://www.management.co.nz</a>	(Read, 2007)	Reference List: give the exact date of the article do not give a date of retrieval give the home page URL of the publication (not of the article or database)
Newspaper article online DOI not available no author	Nuke test inquiry doubted. (2009, April 23). <i>The Dominion Post</i> , p. 5. Retrieved from <a href="http://www.stuff.co.nz/dominion-post/">http://www.stuff.co.nz/dominion-post/</a>	("Nuke test inquiry doubted," 2009)	Reference List: give exact date of article, but no date of retrieval give home page URL of the publication (not the article) No author: alphabetise by first significant title word In text citation: use a short title, or part of a long title, enclose in quotes with a comma: ("...", year)
Website html no date	Flesch, R. (n.d.). <i>How to write plain English</i> . Retrieved April 12, 2009, from <a href="http://www.mang.canterbury.ac.nz/writing_guide/writing/flesch.shtml">http://www.mang.canterbury.ac.nz/writing_guide/writing/flesch.shtml</a>	(Flesch, n.d.)	Reference List: html websites are likely to change or be updated so include a date of retrieval Reference List and In text: (n.d.) for no date
Website PDF	Radio New Zealand. (2008). <i>Annual report 2007-2008</i> . Retrieved from <a href="http://static.radionz.net.nz/assets/pdf_file/0010/1796761/Radio_NZ_Annual_Report_2008.pdf">http://static.radionz.net.nz/assets/pdf_file/0010/1796761/Radio_NZ_Annual_Report_2008.pdf</a>	(Radio New Zealand, 2008)	PDF documents are not likely to change so do not include a date of retrieval
Video online	Bellofolletti. (2009, April 8). <i>Ghost caught on surveillance camera</i> [Video file]. Retrieved from <a href="http://www.youtube.com/watch?v=Dq1ms2JhYBI&amp;feature=related">http://www.youtube.com/watch?v=Dq1ms2JhYBI&amp;feature=related</a>	(Bellofolletti, 2009)	Reference List: If only the screen name is available, in this case Bellofolletti, give that as the author. Give exact date of online post, format [Video file], no date of retrieval. For other sorts of videos and DVDs see the AUT Library's detailed <a href="#">Referencing guide</a>



## 6. Appendix A: Information for Students

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[International English Language Testing System](#)

[AUT Student Digital Space](#)

[AUT Library](#)

[AUT Student Websites](#)

[AUT Campus Maps](#)

## International English Language Testing Systems

The following are the minimum IELTS (Academic) scores required for AUT University qualifications. Postgraduate Programmes (Master's, Postgraduate Diplomas, Postgraduate Certificates and Bachelor with Honours)

- 6.5 overall with all bands 6 or higher  
Bachelor's Degree
- 6 overall with all bands 5.5 or higher

## Other recognised tests of English language proficiency

Minimum overall score					
IELTS	Cert EAS	GIE	TOEFL iBT	CAE	Pearson (PTE)
5.0	C-	C	65	41	41
5.5	C/C+	C+	70	47	49
6.0	B/B+	B	80	52	58
6.5	A	B+	90	58	64
7.0	N/A	A	100	67	73
Individual skill/band score					
IELTS (R/L/S/W)	Cert EAS	GIE	TOEFL iBT\$ (R/L/S/W)	CAE specific skill profile	Pearson (PTE) communicative skills RLSW
5.0	C-	C	15/15/17/18	-	41
5.5	C/C+	C+	15/15/18/20	-	49
6.0	B/B+	B	19/19/20/22	Borderline	58
6.5	A	B+	20/20/20/24	Borderline	64
7.0	N/A	A	24/24/23/27	Good	73

### Note:

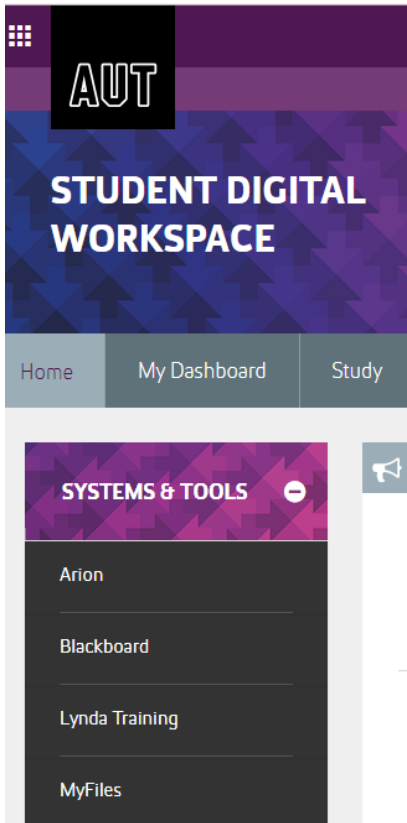
Individual band scores for TOEFL iBT are indicative and variations of up to 2 points may be accepted, so long as the minimum overall score is achieved.

### General information

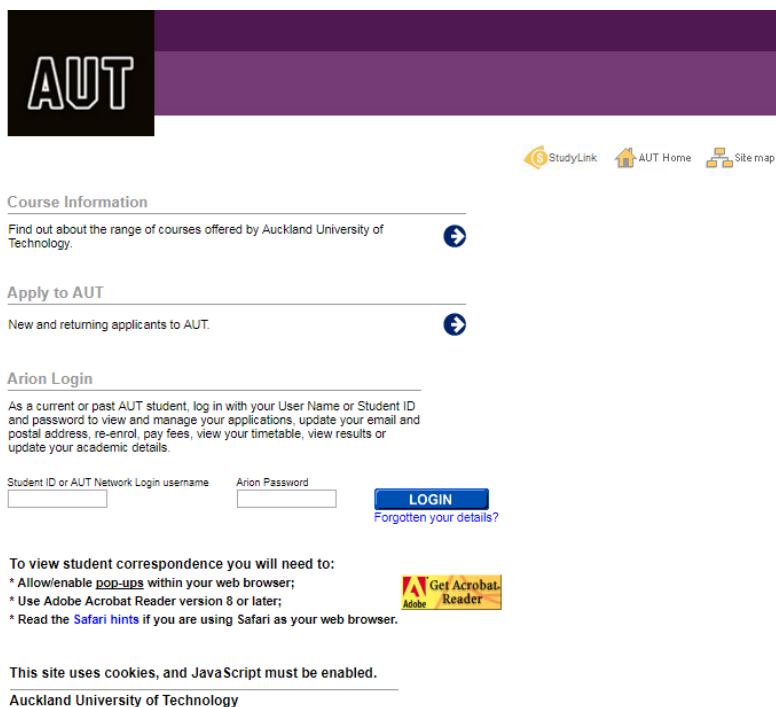
- Any evidence of English language proficiency must be no more than two years old.
- Other recognised tests of English language proficiency may be accepted on a case-by-case basis or as agreed by the University.
- The University does not accept responsibility for academic failure which can be attributed to a student's lack of competence in English. <https://www.aut.ac.nz/study/applying/entry-requirements/english-language-requirements?nav=inthissection>

## AUT Student Digital Workspace

Arion student online is a new responsive web interface for students to access all their existing Arion services and academic information.



Login screen:



Academic Details tab where students can apply for a new programme or see their current programme information as well as view their timetable, paper enrolments, and status of graduation application.

Assessment details tab where students can view further information about each paper that they are enrolled in.

Period	Class	Description	Status	Level	Points
S2	DIGM808/50	Digital Strategies	Paid	8	15.00

Correspondence tab, where students will receive any correspondence (letters) sent by AUT University. Students can accept or decline Offer of Place letters here.

Sent	Correspondence	Opened
21-Jul-2017	Fees zero balance statement	21-Jul-2017
20-Jul-2017	Fees Invoice	21-Jul-2017
20-Jul-2017	Fees Invoice - Payment now due	21-Jul-2017
11-Jul-2017	AUT ID Card Despatch	13-Jul-2017
11-Jul-2017	Fees Invoice	11-Jul-2017
05-Jul-2017	Offer of Place	05-Jul-2017
05-Jul-2017	Admission Letter	05-Jul-2017
04-Jul-2017	Admission Letter	04-Jul-2017
29-Jun-2017	PDF Document Attachment	30-Jun-2017
15-Jun-2017	Admission Letter	15-Jun-2017
20-Nov-2012	Final Academic Results	15-Jun-2017
01-Oct-2012	PDF Document Attachment	15-Jun-2017

Enrolment tab, students can view the status of their application, download forms, and view their paper enrolments.

Enrolment tracking tab, students can see when ID cards, offer of places, results, and invoices are issued.

Description	Status	Date	Barcode
Zero Balance Statement	Sent For Printing	21-Jul-2017	
First Reminder Statement	Sent For Printing	20-Jul-2017	
ID Card	Sent For Printing	11-Jul-2017	C01355080D
Statements	Sent For Printing	11-Jul-2017	
Offer Of Place	Received Online	05-Jul-2017	
Offer Of Place	Inhouse Printed	05-Jul-2017	1347154120
Application for Enrolment Form	Received Online	28-Jun-2017	
Application for Enrolment Form	Received Online	14-Jun-2017	

Course Info tab, more information about courses and papers offered at AUT University and downloadable forms available.

The screenshot shows the AUT Library website homepage. At the top, there is a navigation bar with the word "LIBRARY" on the left and "AUT" on the right. In the center of the top bar, there are links for "Doing assignments", "How to 'library'", "For researchers", "For lecturers", and "About". On the far right of the top bar, there are links for "City 8 am - 10 pm", "North 8 am - 10 pm", "South 8 am - 10 pm", "More hours", and a "LOGIN" button.

Below the navigation bar, there is a search section. On the left, there is a vertical menu with the following items: "Search our:", "Library search", "Catalogue", "Databases", "eJournal titles", and "AUT Google Scholar". In the center, there is a large search box with the text "Library search" and a subtext "search for articles, books, e-books & more". To the right of the search box is a green "SEARCH" button.

Below the search section, there are three main content areas:

- REFERENCING AND APA**: This section is titled "Referencing & EndNote guides" and contains a list of links: "> APA 6th referencing guide", "> Chicago Turabian referencing guide", and "> EndNote for PC".
- LIBRARY WORKSHOPS**: This section is titled "Featured workshop" and contains the text "Library search skills - introduction" followed by "For undergraduates at City, North & South" and a link "Book now". Below this, the word "Camina soon" is partially visible.
- What's new**: This section is titled "Welcome to the new Library website" and contains the text "The new website is the result of more than a year of user research." and "We've done querilla interviews, post-it sessions,".

At the bottom right of the page, there is a small blue chat bubble icon.

## **AUT Student Websites**

### **Useful Information for transferring students to AUT Auckland**

International Application Process online

<https://www.aut.ac.nz/>

International Student Support Services

<https://www.aut.ac.nz/student-life/student-support>

- Immigration matters
- Visas
- Insurance
- Accommodation
- Life in New Zealand
- Talking to faculties
- Setting up a bank account



## AUT CITY CAMPUS

55 Wellesley Street East, Auckland 1010



**SCHOOLS**

- Art & Design** – Level 3, WE building
- Business** – Level 1, WF building
- Colab** – Level 11, WG building
- Communication Studies** – Level 12, WG building
- Engineering, Computer & Mathematical Sciences** – Level 1, WT building and Level 3, WS building
- Hospitality & Tourism** – Level 3, WH building
- Language & Culture** – Level 8, WT building
- Law** – Level 6, WY building
- Science** – Level 5, WS building
- Social Sciences & Public Policy** – Level 14, WT building
- Te Ara Poutama** – Level 3, WB building

**STUDENT HUB**  
Level 2, WA building

Phone: 0800 AUT UNI (0800 288 864)  
Web: [www.aut.ac.nz/studenthub](http://www.aut.ac.nz/studenthub)

**SERVICES AND FACILITIES**

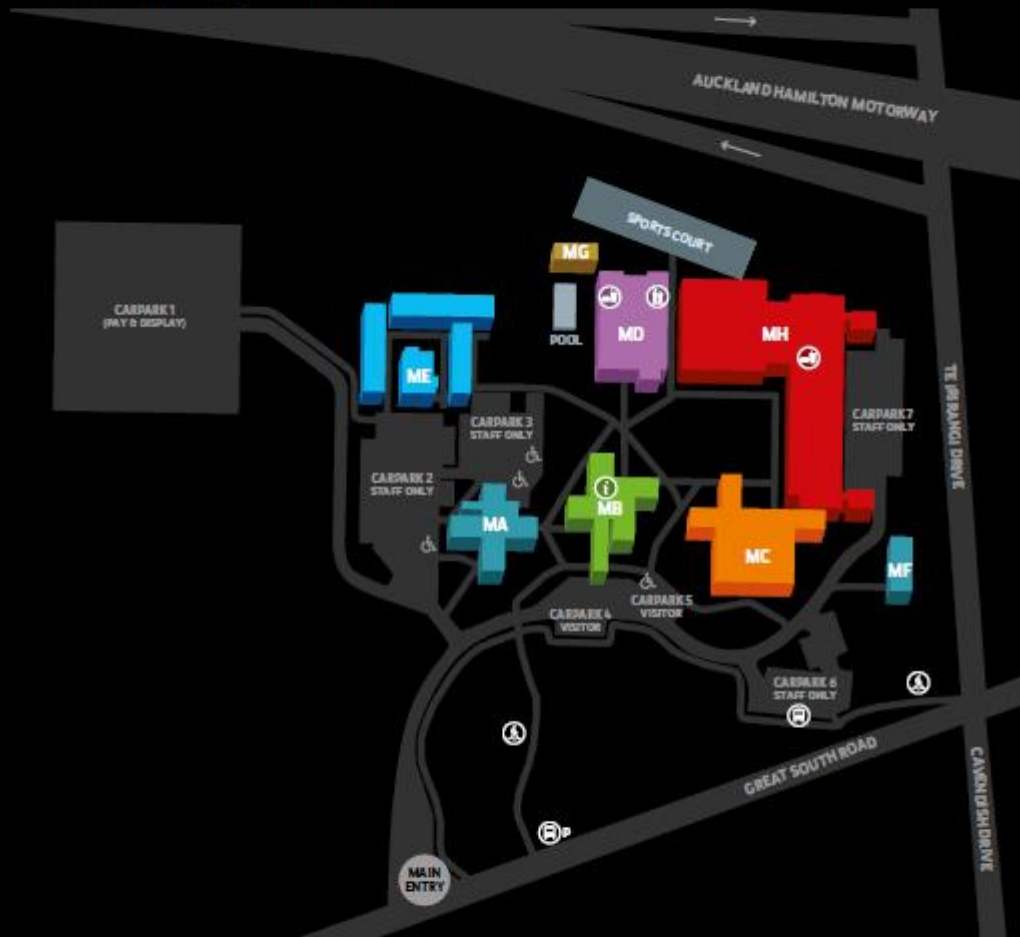
- Student Hub** – Level 2, WA building
- Learning Lab** – Level 3, WA building
- Library** – Level 4, WA building
- Early Childhood Centre** – Level 2, WA building via Gate 2
- AUT International Centre** – Ground Floor, WY building
- AuSM (Auckland Student Movement @ AUT)** – Level 2, WC building
- Estates Service Centre, Security** – Corner St Paul & Wakefield St, WO building
- PinkLime (print services)** – Level 3, WA building
- Student Medical Centre** – Room 219, WB building
- Student Counselling & Mental Health** – Room 204, WB building
- ubiq (formerly University Bookshop)** – Room 122, WC building

-  Student Hub
-  Student lounge
-  Cafés
-  Library
-  Early Childhood Centre
-  Gym
-  Conference facility
-  Intercampus shuttle bus stop
-  Mobility parks



## AUT SOUTH CAMPUS

640 Great South Road, Manukau 2025



### SERVICES AND FACILITIES

**Library** – Ground floor, MA building  
**Learning Lab** – Level 1, MA building  
**Café** – Level 2, MD building and Level 1, MH building  
**Fitness Centre** – Level 1, MD building  
**Boardroom** – Level 3, MB building  
**Estates Service Centre, Security** – MF building

### STUDENT HUB & RECEPTION

Level 1, MB building  
 Phone: 0800 AUT SOUTH (0800 288 768)  
 Web: [www.aut.ac.nz/studenthub](http://www.aut.ac.nz/studenthub)

**PinkLine (print services)** – Level 2, MC building  
**Student Medical Centre** – Level 1, MB building  
**Student Counselling & Mental Health** – Level 1, MB building  
**AuSM (Auckland Student Movement @ AUT)** – ME building

- Student Hub
- Cafés
- Conference Facility
- Intercampus shuttle bus stop
- Public transport
- Pedestrian access
- Mobility parks

## AUT NORTH CAMPUS

90 Akoranga Drive  
Northcote  
Auckland 0627



### FACULTY

**Health & Environmental Sciences**  
**Reception** – Room 129, AG building

### SCHOOLS

**Education Reception** – Room 101, AR building  
**Education** – Specialty rooms, AJ building  
**Clinical Sciences Reception** – Room 124, AA building  
**Interprofessional Health Studies**  
**Reception** – Room 419, AF building  
**Public Health & Psychosocial Studies**  
**Reception** – Room 128, AR building  
**Sport & Recreation Reception** – Room 223, AF building

### STUDENT HUB











Level 2, AS building  
Phone: 0800 AUT UNI (0800 288 864)  
Web: [www.aut.ac.nz/studenthub](http://www.aut.ac.nz/studenthub)

### CAMPUS CARPARKS

Carparks 2 and 7 (Pay & Display)

### SERVICES AND FACILITIES

**Visitor enquiries** – Level 1, AG building  
**Learning Lab** – AL building  
**Library** – AL building  
**Sports Stadium** – AH building  
**AUT Health** (AUT Integrated Health; Student Medical Centre; Student Counselling & Mental Health; Dizziness and Balance Centre) – AX building/ Northmed, 3 Akoranga Drive (800m from campus)  
**Health & Safety Advisor** – Room 201A, AC building  
**AuSM** (Auckland Student Movement @ AUT) – Room 133, AS building  
**Estates Service Centre and Security** – Room 101, AT building  
**ubiq** (formerly University Bookshop) – Room 101, AB building  
**PinkLime** (print services) – Room 105, AM building

-  Student Hub
-  Student lounge
-  Cafés
-  Early Childhood Centre
-  Conference facility
-  Intercampus shuttle bus stop
-  Public transport
-  Pedestrian access
-  Mobility parks
-  Covered pedestrian motorway overbridge

## 7. Appendix B: AUT Course Descriptors

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COMP601 IT Service Provision

COMP607 Information Security Technologies

INFS603 Needs Analysis, Acquisition, and Training

COMP704 Research & Development Project

COMP718 Information Security Management

INFS701 IT Strategy and Control

INFS702 IT Service Management

\*Subject to change according to customisation for Vietnam requirements. Similarly, paper content may change due to Vietnamese context.

## PAPER DESCRIPTOR

AUT

TE WĀNANGA ARONUI  
O TAMAKI MĀKAU RAU*Te Kura Mātai Pūhanga, Rorohiko, Pāngarau*

SCHOOL OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES

PAPER TITLE:	IT Service Provision
PAPER CODE:	COMP601
POINTS:	15
LEVEL:	6
PREREQUISITE/S:	None
COREQUISITE/S:	None

**STUDENT LEARNING HOURS:**

The learning hours are a guide to the total time needed for a student to complete the paper:

Contact Hours	48 (In class or direct online)
Student Directed Learning	102
<b>Total learning hours</b>	<b>150</b>

**PRESCRIPTOR:**

Provides an introduction to IT Service Science and its role in the development and provision of high quality IT services. The foundations of high quality services are covered, including standard procedures, techniques and tools. Students will gain IT service and operations orientated skills.

**LEARNING OUTCOMES:**

On successful completion of this paper students will be able to:

1. Discuss the concepts of IT Service Science in the use of IT service and operations standards and procedures.
2. Discuss the elements involved in providing quality customer service.
3. Describe processes and techniques that comprise IT services acquisition.
4. Analyse and apply processes that comprise IT service and solutions deployment essentials

**CONTENT:**

Overview the concepts of IT Service Science

Overview of IT service, operations and management standards and procedures

- How standards assist in providing quality service
- What procedures are required
- How to use procedures to ensure pro-activeness

IT Organisation: Roles and responsibilities

Overview of processes that comprise IT service management essentials

- Service requirements management
- Service lifecycle management
- Service level management and attainment

- Service portfolio management

IT strategy and governance overview:

- Service Strategy
- Planning and Organising IT Operations

Service Design and Deployment: Overview of IT service architecture essentials

- Management system architecture
- Service & Component design
- Service oriented architecture

Solutions evaluation and acquisition

- Methods for solutions evaluation, comparison and acquisition

Overview of processes that comprise IT operations management essentials:

- Event & Fault Management
- Problem Management
- IT Operations Activities

Continuous Service Improvement: Providing Quality Customer Service

- Introduction to Capability Maturity models
- Application of techniques to ensure effective understanding of customer needs
- Common mistakes in providing service
- Measuring customer satisfaction and performance
- Managing customer expectations

**LEARNING & TEACHING STRATEGIES:**

Lectures and classroom discussion in which topics will be related to relevant needs, Handouts, Worksheets, Role plays, Practical help desk assignments and simulated exercises, Assignments, PowerPoint presentations, Portfolio, Case studies, Tests, Research

**ASSESSMENT PLAN:**

Assessment Event	E-submission <sup>1</sup>	Weighting %	Learning Outcomes
Coursework – Written Assignment	Available	50%	2,3
Final Examination	Not Available	50%	1,4
<b>Grade Map</b>	Grade Map 1: A+    A    A-    Pass with Distinction B+    B    B-    Pass with Merit C+    C    C-    Pass D                      Fail		
<b>Grade Boundaries</b>	A+ ≥ 90%, A ≥ 85%, A- ≥ 80% B+ ≥ 75%, B ≥ 70%, B- ≥ 65% C+ ≥ 60%, C ≥ 55%, C- ≥ 50% D < 50%		
<b>Overall requirement/s to pass the paper:</b> To pass the paper, the student needs to gain a minimum of 35% in each assessment with 50% overall.			

**READINGS:**

**Prescribed Text**

The Introduction to the ITIL Service Lifecycle, Office of Government Commerce (OGC).

Additional readings list will be provided.

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<sup>1</sup> As per AUT protocol, e-submission should be provided for all assessments except where a BOS has approved otherwise.

*Te Kura Mātai Pūhanga, Rorohiko, Pāngarau*

SCHOOL OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES

**PAPER TITLE:** Information Security Technologies

**PAPER CODE:** COMP607

**POINTS:** 15

**LEVEL:** 6

**PREREQUISITE/S:** COMP504 or 735316

**COREQUISITE/S:** None

**STUDENT LEARNING HOURS:**

The learning hours are a guide to the total time needed for a student to complete the paper:

On Campus Sessions	48
Student Directed Learning	102
<b>Total learning hours</b>	<b>150</b>

**PRESCRIPTOR:**

Addresses security technology and systems; basic crypto-graphy and public key infrastructure, physical security, logical security, access controls, securing networks, network operations, systems, databases and applications, mobile and wireless security, web-services security, and security strategies for e-commerce. The intrinsic relationship between security technologies, ethics, legal and regulatory requirements, forensics and fraud, business strategy, and risk management is addressed.

**LEARNING OUTCOMES:**

On successful completion of this paper students will be able to:

1. Discuss the building blocks of IT security
2. Identify ethical and legal requirements for IT security
3. Compare models designed to meet the fundamental principles of security
4. Discuss physical and logical security requirements for IT systems
5. Suggest suitable technical, operational and managerial controls for securing networks, network operations, systems, databases and applications
6. Explain mobile and wireless security and web-services security issues, and suggest security strategies for e-commerce
7. Describe the relationship between security technologies forensics and fraud, business strategy, and risk management

**CONTENT:**

- Analyse and evaluate the operating systems role in Computer System Structures.
- Apply models, concepts and theories of:
  - Building blocks of IT security
  - Examples of legal and ethics frameworks
  - Electronic crime and forensic computing

- Basic cryptography and public key infrastructure
- Securing networks and hosts
- Securing network and systems operations, databases and applications
- Strategies for e-commerce security
- Mobile and wireless security
- Security of web-services
- Current and emerging issues in IT security

**LEARNING & TEACHING STRATEGIES:**

Will include:

- Readings, Exercises
- Lectures
- Student presentations
- Class discussion
- Guest speaker/lecturer, site visit if appropriate
- Laboratory sessions
- Online learning modes: online tutorial(s)
- Student self study

**ASSESSMENT PLAN:**

Assessment Event	E-submission <sup>1</sup>	Weighting %	Learning Outcomes
Weekly Coursework Tests / Quizzes		20%	1, 4, 6, 7
Written assignment	Available	40%	5
Final Exam	Not available	40%	1 - 7
<b>Grade Map</b>	Grade Map 1: A+    A    A-    Pass with Distinction B+    B    B-    Pass with Merit C+    C    C-    Pass D                Fail		
<b>Grade Boundaries</b>	A+ ≥ 90%, A ≥ 85%, A- ≥ 80% B+ ≥ 75%, B ≥ 70%, B- ≥ 65% C+ ≥ 60%, C ≥ 55%, C- ≥ 50% D < 50%		
<b>Overall requirement/s to pass the paper:</b> To pass the paper, the student needs at least a minimum 35% pass in each assessment item and to obtain at least 50% overall.			

**READINGS:**

**Prescribed Text**

Slay, J. & Koronios, A (2006). *Information Technology Security and Risk Management*. John Wiley & Sons (3 Jan 2006)

Recommended reading lists will be provided.

<sup>1</sup> As per AUT protocol, e-submission should be provided for all assessments except where a BOS has approved otherwise.



## PAPER DESCRIPTOR

AUT

TE WĀNANGA ARONUI  
O TĀMARI MĀKAU RAU*Te Kura Mātai Pūhanga, Rorohiko, Pāngarau*

SCHOOL OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES

PAPER TITLE:	Needs Analysis, Acquisition and Training
PAPER CODE:	INFS603
POINTS:	15
LEVEL:	6
PREREQUISITE/S:	None
COREQUISITE/S:	None

**STUDENT LEARNING HOURS:**

The learning hours are a guide to the total time needed for a student to complete the paper:

On Campus Sessions /online	48
Student Directed Learning	102
<b>Total learning hours</b>	<b>150</b>

**PRESCRIPTOR:**

Focuses on skills required to identify a user's information technology solution requirements: to investigate and evaluate suitable solutions including software, platform and vendors, to plan the acquisition of a solution, to identify training requirements, and to plan a training programme using various delivery methods including flexible/blended delivery.

**LEARNING OUTCOMES:**

On successful completion of this paper students will be able to:

1. Obtain information about a user's needs for a solution to align with strategic and operational issues.
2. Develop a COTS (Commercial Off-The-Shelf) acquisition project
3. Identify & recommend suitable IT solutions.
4. Prepare appropriate artefacts for the acquisition of a total solution.
5. Evaluate possible solutions and recommend a solution with justification.
6. Identify training needs.
7. Develop a training programme using different training delivery methods and support.

**CONTENT:**

1. Develop a Needs Analysis Report and System Requirements Specification using a Joint Applications Development (JAD) approach:
  - Explain how to strategically deploy IT based on Strategic Objectives and Critical Success Factors
  - Analyse a business Value Chain
  - Use the value chain model to determining IT solution needs
  - Explain the Joint Application Development (JAD) approach
  - Follow a JAD methodology in a COTS (Commercial Off-The-Shelf) acquisition project
2. Write a System Requirements Specification using a Service-oriented Work System model to determine functional requirements

3. Develop an Acquisition Plan using a COTS life cycle model
4. Building the Request for Proposal (RFP). Evaluating Suppliers. The Service Contract
  - List what is included in an RFP
  - Prepare an RFP for distribution to vendors
  - Evaluate vendors
  - List the required inclusions of a Service Contract
5. Software, Platform, Vendor Selection & Evaluation
  - Explain software selection methodology
  - Use software selection methodology & research and to find and evaluate possible software solutions
  - Explain the methodology and tools for selecting and evaluating a hardware/operating system/network platform
  - Select a suitable platform using selection methodology and evaluation tools
6. Present and justify your proposed project to a Client management group
7. Training Needs Analysis. Planning Training
  - Explain education & training and the need for both in the workplace
  - Explain how to analyse training needs
  - Undertake a training needs analysis
  - Plan training
8. Training
  - Write training aims and objectives.
  - Explain what assessment is and the difference between formative & summative assessment and use both formative & summative assessment effectively Explain the reasons for moderation and have the proposed training and its assessments moderated
  - Explain pedagogy: the practice and structure of good teaching
  - Use student-centred lesson delivery techniques
  - Explain evaluation and draw up and use an effective course evaluation form

**LEARNING & TEACHING STRATEGIES:**

- - Lectures and/or online study guides
  - Group JAD work
  - Readings, Exercises
  - Classroom or online forum discussion

**ASSESSMENT PLAN:**

Assessment Event	E-submission <sup>1</sup>	Weighting %	Learning Outcomes
Needs Analysis, Needs Analysis Report & Artefacts (Group Individually assessed), Reflective Report (Individual)	Available	65%	1 - 6
Training Needs Analysis and Training Delivery Programme (Individual)	Available	35%	6, 7
<b>Grade Map</b>	Grade Map 1: A+    A    A-    Pass with Distinction B+    B    B-    Pass with Merit		

	C+	C	C-	Pass Fail
<b>Grade Boundaries</b>	A+ ≥ 90%, A ≥ 85%, A- ≥ 80% B+ ≥ 75%, B ≥ 70%, B- ≥ 65% C+ ≥ 60%, C ≥ 55%, C- ≥ 50% D < 50%			
<b>Overall requirement/s to pass the paper:</b> To pass the paper, the student needs at least a minimum 35% pass in each assessment item and to obtain at least 50% overall.				

**READINGS:**

**Prescribed Text**

Recommended reading lists will be provided.

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<sup>1</sup> As per AUT protocol, e-submission should be provided for all assessments except where a BOS has approved otherwise.

## COMP704 Research & Development Project

**NOTE:** Prerequisites for R&D Project are successful completion of ITEC delivered AUT papers and AUT Level 6 papers.

### PAPER DESCRIPTOR



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*Te Kura Mātai Pūhanga, Rorohiko, Pāngarau*

SCHOOL OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES

**PAPER TITLE:** Research & Development Project

**PAPER CODE:** COMP704

**POINTS:** 30

**LEVEL:** 7

**PREREQUISITE/S:** None

**COREQUISITE/S:** None

#### STUDENT LEARNING HOURS:

The Research and Development (R&D) Project is undertaken in one semester. The learning hours are a guide to the total time needed for a student to complete the paper:

On Campus Sessions	65
Student Directed Learning	235
<b>Total learning hours</b>	<b>300</b>

#### PRESCRIPTOR:

An investigation into a selected area whether that be a specific problem domain, or an area of business opportunity. The project is typically an original investigation but considerable flexibility is allowed. Typically projects will involve software or systems development for business clients, commercial research and development projects on behalf of clients, or supervised research projects in selected areas specific to the Major of the student.

#### LEARNING OUTCOMES:

On successful completion of this paper students will be able to:

1. Show the ability to successfully undertake original work.
2. Demonstrate a professional attitude.
3. Demonstrate the ability to integrate the different skills required to bring a project to a successful conclusion.
4. Communicate effectively with clients and sponsors.
5. Communicate effectively in both written and verbal presentations and in group situations.
6. Effectively manage, monitor and control the activities involved in a research and development project.
7. Determine an appropriate process and accompanying set of deliverables for their project.
8. Show the ability to document appropriately the deliverables for their project (e.g. software specifications, project plans, source code, technical reports, white papers, literature reviews, academic articles for publication etc.), as agreed with the project supervisor(s).
9. Select and justify an appropriate methodology for their project.

**CONTENT:**

The project aims to bring together the material covered from the many other courses studied as part of a BCIS.

- R&D Project drawn from "real life" or more theoretical situations and of significant proportions, testing the student's ability to apply the principles and skills they have gained to an original piece of work, while under supervision.
- Projects should be based on a student's existing skills and knowledge, and may be influenced by their work situation, if they are in work. Projects will preferably be completed within groups, but under certain circumstances may be done individually.
- The project must be of sufficient complexity to stretch the student. Projects should be significantly different from any major case study or practical work undertaken in other subjects of the BCIS.
- Commercial R&D project, which might involve investigating, evaluating, establishing some proof of concept and recommending a solution to a given problem for a commercial client.
- Applied or theoretical research project, which might involve investigating, evaluating, developing a proof of concept or prototype application and recommending an algorithmic, software or system solution to a given problem for a research sponsor. Such a project might be undertaken as one subcomponent within the umbrella of a larger research project.
- Selection of a suitable methodology
- Planning and managing the project
- Presenting the project for approval, review and assessment at defined stages
- Conducting the necessary analysis, design, testing, implementation and evaluation steps, as appropriate for the project and as agreed with the project supervisor
- Production of appropriate project deliverables

**LEARNING & TEACHING STRATEGIES:**

- Research and Development Projects
- Online progress reporting
- Project joint reviews
- Supervision

**ASSESSMENT PLAN:**

Assessment Event	E-submission <sup>1</sup>	Weighting %	Learning Outcomes
Project Proposal & Progress Review	available	15	1,5,6,7, 8, 9
Project Presentation	not available	10	1,2,4,5,
Project Portfolio	available	75	1,2,3,4,6,7,8,9
<b>Grade Map</b>	Grade Map 1: A+    A    A-    Pass with Distinction B+    B    B-    Pass with Merit C+    C    C-    Pass D    Fail		
<b>Grade Boundaries</b>	A+ ≥ 90%, A ≥ 85%, A- ≥ 80% B+ ≥ 75%, B ≥ 70%, B- ≥ 65% C+ ≥ 60%, C ≥ 55%, C- ≥ 50% D < 50%		
<b>Overall requirement/s to pass the paper:</b>			

- To pass the paper, the student needs at least a minimum 35% pass in each assessment item and to obtain at least 50% overall.

**READINGS:**

**Prescribed Text**

Recommended reading lists will be supplied.

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<sup>1</sup> As per AUT protocol, e-submission should be provided for all assessments except where a BOS has approved otherwise.

## PAPER DESCRIPTOR



TE WĀNANGA ARONUI  
O TĀMAKI MAKĀU RAU

*Te Kura Mātai Pūhanga, Rorohiko, Pāngarau*

SCHOOL OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES

<b>PAPER TITLE:</b>	Information Security Management
<b>PAPER CODE:</b>	COMP718
<b>POINTS:</b>	15
<b>LEVEL:</b>	7
<b>PREREQUISITE/S:</b>	None
<b>COREQUISITE/S:</b>	None

### STUDENT LEARNING HOURS:

The learning hours are a guide to the total time needed for a student to complete the paper:

On Campus Sessions	48
Student Directed Learning	102
<b>Total learning hours</b>	<b>150</b>

### PRESCRIPTOR:

A holistic view on managing information security within an organisation, examining its relationship with laws, ethics, culture, standards. Includes the examination of the frameworks, processes, and measures, as well as practical problems involved in building secure operational environments for businesses and individual users. Develops the ability to design secure information technology environments.

### LEARNING OUTCOMES:

On successful completion of this paper students will be able to:

1. Design and evaluate processes and frameworks involved in achieving high standards of information systems security management in the context of organisations and the regulatory compliance requirements.
2. Evaluate risk assessment, policy development, security management and auditing frameworks.
3. Critique the role of culture and security awareness in information systems security.
4. Critically analyse the key concepts of computer forensics, disaster recovery, incident response, and cybercrime.

### CONTENT:

- Introduction to Information Security Management
- Risk Management
- Security Policies
- Security Performance
- Designing Security
- Contingency Planning
- Cyber Crime & Law
- Incident Response

- Security Culture & Personnel Security
- Auditing
- Developing the Security Programme

**LEARNING & TEACHING STRATEGIES:**

- Readings, Exercises
- Lectures
- Student presentations
- Class discussion
- Guest speaker/lecturer, site visit if appropriate
- Laboratory sessions
- Online learning modes: online tutorial(s)

**ASSESSMENT PLAN:**

Assessment Event	E-submission <sup>1</sup>	Weighting %	Learning Outcomes
1. Course work activities		40%	1-2, 4
a. Quiz 1		5%	
b. Quiz 2		5%	
c. Quiz 3		5%	
d. Assignment	Available	10%	
e. Group presentation	Not Available	15%	
2. Final Examination	Not Available	60%	1-4
<b>Grade Map</b>	Grade Map 1: A+    A    A-    Pass with Distinction B+    B    B-    Pass with Merit C+    C    C-    Pass D      Fail		
<b>Grade Boundaries</b>	A+ ≥ 90%, A ≥ 85%, A- ≥ 80% B+ ≥ 75%, B ≥ 70%, B- ≥ 65% C+ ≥ 60%, C ≥ 55%, C- ≥ 50% D < 50%		
<b>Overall requirement/s to pass the paper:</b> To pass the paper, the student needs to obtain at least a 35% pass in both assessment item 1 and assessment item 2, and to obtain at least 50% overall.			

**READINGS:**

**Prescribed Text**                      A recommended reading list will be provided.

<sup>1</sup> As per AUT protocol, e-submission should be provided for all assessments except where a BOS has approved otherwise.



## PAPER DESCRIPTOR

AUT

TE WĀNANGA ARONUI  
O TĀMAKI MAKAU RAU*Te Kura Mātai Pūhanga, Rorohiko, Pāngarau*

SCHOOL OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES

PAPER TITLE: IT Strategy and Control

PAPER CODE: INFS701

POINTS: 15

LEVEL: 7

PREREQUISITE/S: None

COREQUISITE/S: None

**STUDENT LEARNING HOURS:**

The learning hours are a guide to the total time needed for a student to complete the paper:

On Campus Sessions	52
Student Directed Learning	98
<b>Total learning hours</b>	<b>150</b>

**PRESCRIPTOR:**

Examines the practice and theory of IT Services Management with a focus on industry best practices in managing information technology in an organisation. Such practices are put in context through the presentation of an overall framework for aligning IT strategies with business strategies, monitoring, evaluating and improving IT operations performance, and auditing the relevant processes.

**LEARNING OUTCOMES:**

On successful completion of this paper students will be able to:

1. Demonstrate thorough understanding of all the key IT Operations Management frameworks such as (but not limited to) ITIL and CobiT and processes.
2. Analyse processes required for aligning IT infrastructure and operations with the business goals of an organisation.
3. Critically evaluate operational IT organisations and their processes against the studied models.
4. Analyse problems and current issues arising from the implementation of the framework, communicate this analysis and make recommendations solving any problems.

**CONTENT:**

The course covers the following topics:

- Integrating Frameworks, Standards and Tools
- Business requirements for information
- IT Resources & Enterprise Architecture
- Plan and Organise IT Services and Operations
- Implement Service Strategy
- Design Process Controls
- Financial Management
- HR Management and Communication
- IT Resources: Enterprise Architecture

- CobIT: Monitor and Evaluate & ITIL: Continuous Service Improvement
- ITIL: Continuous Service Improvement
- IT Audit: ITAF Information Technology Assurance Framework

**LEARNING & TEACHING STRATEGIES:**

Will include:

- Readings, Exercises
- Lectures
- Student presentations
- Class discussion
- Guest speaker/lecturer, site visit if appropriate
- Laboratory sessions
- Online learning modes: online tutorial(s)

**ASSESSMENT PLAN:**

Assessment Event	E-submission <sup>1</sup>	Weighting %	Learning Outcomes
Course assignment	Available	40%	3,4
Examination	Not available	60%	1,2
<b>Grade Map</b>	Grade Map 1: A+    A    A-    Pass with Distinction B+    B    B-    Pass with Merit C+    C    C-    Pass D                Fail		
<b>Grade Boundaries</b>	A+ ≥ 90%, A ≥ 85%, A- ≥ 80% B+ ≥ 75%, B ≥ 70%, B- ≥ 65% C+ ≥ 60%, C ≥ 55%, C- ≥ 50% D < 50%		
<b>Overall requirement/s to pass the paper:</b> To pass the paper, the student needs at least a minimum 35% pass in each assessment item and to obtain at least 50% overall			

**READING S:**

**Prescribed Text**

No prescribed text.

Recommended reading lists will be provided.

<sup>1</sup> As per AUT protocol, e-submission should be provided for all assessments except where a BOS has approved otherwise.

## PAPER DESCRIPTOR



*Te Kura Mātai Pūhanga, Rorohiko, Pāngarau*

SCHOOL OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES

PAPER TITLE:	IT Service Management
PAPER CODE:	INFS702
POINTS:	15
LEVEL:	7
PREREQUISITE/S:	COMP601
COREQUISITE/S:	None

**STUDENT LEARNING HOURS:**

The learning hours are a guide to the total time needed for a student to complete the paper:

Lectures	48
Student directed learning	102
<b>Total learning hours</b>	<b>150</b>

**PRESCRIPTOR:**

A critical analysis of the service techniques and procedures required to provide supervision, technical support, IT operations services and customer service in an IT operations environment.

**LEARNING OUTCOMES:**

On successful completion of this paper students will be able to:

1. Investigate and analyse the requirements for supervision, staffing, and scheduling of IT service operation
2. Demonstrate an ability to manage and develop service level agreements to support high quality service provision and management
3. Critically evaluate approaches for monitoring and reporting on key IT operations performance indicators and providing quality service strategies.
4. Explain the use of standards and procedures in an IT operations environment
5. Demonstrate a thorough knowledge of the diagnostic techniques used to troubleshoot problems
6. Develop service management procedures to support providing proactive service.

**CONTENT:**

- Service strategy
- Service operations and processes and organisation
- Service Level & Supplier Management
- Service Asset & Configuration Management
- Capacity & availability management
- Change & knowledge management
- Service Desk Function, Process & Metrics
- Incident Management
- Problem Management
- Common service operation activities

**LEARNING & TEACHING STRATEGIES:**

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Valid From: 01/01/2019

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- Lectures and classroom discussion in which topics will be related to relevant needs.  
Online options.
- Resource material and web links
- Worksheets
- Role plays
- Practical help desk assignments and simulated exercises
- PowerPoint presentations
- Portfolio
- Case studies
- Tests
- Research

**ASSESSMENT PLAN:**

Assessment Event	E-submission <sup>1</sup>	Weighting %	Learning Outcomes
Course assignments	Available	50%	1-6
Examination	Not available	50%	1-6
<b>Grade Map</b>	Grade Map 1: A+    A    A-    Pass with Distinction B+    B    B-    Pass with Merit C+    C    C-    Pass D    Fail		
<b>Overall requirement/s to pass the paper:</b> To pass the paper, the student needs at least a minimum of 35% in each assessment and an overall C- grade.			

**READING S:**

**Prescribed Text**

A recommended reading list will be provided.

<sup>1</sup> As per AUT protocol, e-submission should be provided for all assessments except where a BOS has approved otherwise.