

## 1. General Course Information

## 1.1 Course Details

Course Code:	1004ITF
Course Name:	Information Technology Fundamentals
Trimester:	Trimester 3, 2020
Program:	Diploma of Information Technology
Credit Points:	10
Course Coordinator:	Dr Andrew Wixted
Document modified:	28 May 2020

## Course Description

This course provides students with the opportunity to develop core professional skills required to complete their IT degree, gain practical experience and develop insights into the IT industry. The course guides students using several modes including: Problem-, Project- and Experiential-Based Learning. Students learn by undertaking a project using commercial methods and practices. The course provides basic techniques in the use of software tools for preparation of documentation needed for their project. Preparations for oral and written communications also form major components of the course.

The course also contains generic skills required for tertiary study of IT including ethics, sustainability and project management theory. The course is intended to equip students with the generic IT skills and professional responsibility to others that should be integral to their University studies and later professional practice.

# Assumed Knowledge

An interest in the Information Technology industry.

## 1.2 Teaching Team

Your lecturer/tutor can be contacted via the email system on the portal.

Name	Email
Dr Andrew Wixted	andrew.wixted@staff.griffithcollege.edu.au

## 1.3 Staff Consultation

Your lecturer/tutor is available each week for consultation outside of normal class times. Times that your lecturer/tutor will be available for consultation will be found on the Moodle Course Site.

## 1.4 Timetable

Your timetable is available on the Griffith College Portal at Class Timetable in Student and Services.

## 1.5 Technical Specifications

All students must have access to a computer or suitable mobile device.

## 2. Aims, Outcomes & Generic Skills

### 2.1 Course Aims

Information Technology Fundamentals is designed to assist the beginning student in developing the skills and knowledge areas common to all IT professional occupations, namely:

- Problem solving, abstraction, design
- Ethics and Professionalism
- Teamwork concepts and issues
- Interpersonal communication

(paraphrased from the ACS Core Body of Knowledge for ICT Professionals, Australian Computer Society Inc. 2015)

While developing these foundational skills and knowledge the course will help students situate themselves within the broader IT discipline by exploring the three knowledge areas (or streams) within the IT discipline: Information Systems, Networks and Security and Software Development. This will guide them in making informed decisions when they subsequently choose their major area of study.

The course aims to develop writing, research and teamwork skills through a number of ongoing practical exercises where the students develop projects, write CVs and Professional Development Plans and present reports. These exercises require the students to build understanding of the terminology, standards and core skills associated with professional IT practice.



## 2.2 Learning Outcomes

After successfully completing this course you should be able to:

- 1. Demonstrate knowledge of the core skills in the IT industry and how they affect employability.
- 2. Apply creativity, innovation, problem solving and analytical skills in an exemplar IT project.
- 3. Prepare professional IT documentation.
- 4. Apply basic project management skills and tools within a team project.
- 5. Demonstrate the application of one or more design or development processes.

## 2.3 Generic Skills and Capabilities

For further details on the Generic Skills please refer to the Graduate Generic Skills and Capabilities policy.

Griffith College aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunities to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

Generic Skills and Capabilities		Taught	Practised	Assessed
Acquisition of discipline knowledge and skills with critical judgement	ô	<b>✓</b>	<b>✓</b>	<b>✓</b>
Communication and collaboration		<b>✓</b>	<b>✓</b>	<b>√</b>
Self-directed and active learning		✓	<b>✓</b>	<b>√</b>
Creative and future thinking	3	✓	<b>✓</b>	<b>√</b>
Social responsibility and ethical awareness	ŪΣ	<b>✓</b>	<b>✓</b>	
Cultural competence and awareness in a culturally diverse environment	††††	<b>√</b>	<b>✓</b>	



# 3. Learning Resources

# 3.1 Required Learning Resources

Nil

## 3.2 Recommended Learning Resources

Students will be provided with readings via the Learning@Griffith College website throughout the semester, which can be accessed online or downloaded and printed by the students. In addition, students are strongly encouraged to access the following textbooks for further reading:

- Dowling, D., Carew, A., & Hadgraft, R., (2016) Engineering your future : an Australasian guide, (3rd ed.), Milton, Qld. : John Wiley & Sons
- Fowler.J., Guddmundsson.A., Whicker.L (2011) groups work! A guide for working in groups, (2nd ed.). Palmer Higgs Books Online. **Note**: Copies of this text are available from the Griffith University library.

## 3.3 College Support Services and Learning Resources

The College provides many facilities and support services to assist students in their studies. Links to information about College support resources that are available to students are included below for easy reference.

<u>Digital Library</u> – Databases to which Griffith College students have access to through the Griffith Library Databases.

MyStudy – there is a dedicated website for this course via MyStudy on the Griffith College Portal.

<u>Academic Integrity Tutorial</u> - this tutorial helps students to understand what academic integrity is and why it matters. You will be able to identify types of breaches of academic integrity, understand what skills you will need in order to maintain academic integrity, and learn about the processes of referencing styles.

Services and Support provides a range of services to support students throughout their studies including academic advice and assignment help from Student Learning Advisors, and personal and welfare support from Student Counsellors.

<u>Jobs and Employment</u> in the Student Hub can assist students with career direction, resume and interview preparation, job search tips, and more.

IT Support provides details of accessing support, information on s numbers and internet access and computer lab

# 3.4 Other Information about your Learning

#### **Attendance**

You are expected to actively engage in all learning experiences and learning activities which underpin the learning content in this course. You are expected to engage with the learning content and learning activities outside of timetabled class times. This requires you to be an active agent of your learning. You are expected to bring all necessary learning resources to class such as the required textbook and /or Workbook. In addition, you are encouraged to BYOD (bring your own device) to class such as a laptop or tablet. This is not a requirement as computer lab facilities are available on campus, however, the use of such devices in the classroom is encouraged with appropriate and considerate use principles being a priority.

## **Preparation and Participation in Learning**

In order to enhance your learning, you need to prepare before participating in the learning experiences. Absorb the learning content and complete the learning activities that are provided online before you attend the scheduled learning experiences. Make sure you complete the learning activities set each week, they are designed to support your learning. Active participation in your learning will enhance your success. Ask questions when something is unclear or when you want to bring some issue to your lecturer or tutor's attention; respond to questions to test your knowledge and engage in discussion to help yourself and others learn.

#### **Consultation Sessions**

Teachers offer extra time each week to assist students outside the classroom. This is known as 'consultation time.' You may seek assistance from your teacher on email or in person according to how the teacher has explained this to the class. Attendance during consultation time is optional but you are encouraged to use this extra help to improve your learning outcomes.

## **Course Learning Materials**

Learning materials are made available to you in MyStudy on the Griffith College Portal. The learning materials are arranged in Modules. In each Module you will find the learning content, learning activities and learning experiences. Actively working your way through these course learning materials together with your lecturer or tutor will prepare you to succeed when completing the evidence of learning (assessment).

### **Self-Directed Learning**

You will be expected to learn independently. This means you must organise and engage with the course learning content even when you are not specifically asked to do so by your lecturer or tutor. The weekly guide will be helpful to organise your learning. This involves revising the weekly course learning material and completing the learning activities. It also means you will need to find additional information to evidence your learning (assessment) beyond that given to you, and to construct your own response to a question or topic. All of this requires careful planning of your time. Expect to spend, on average, at least 10 hours per week including class time for each of your courses.

### **Program Progression**

You are reminded that satisfactory Program Progression requires that attendance in classes is maintained at equal to or greater than 80%, and that GPA is maintained at equal to or greater than 3.5 [please see Griffith College Policy Library - <a href="Program Progression Policy">Program Progression Policy</a> - for more information].

### **Teacher and Course Evaluation**

Your feedback is respected and valued by your lecturers and tutors. You are encouraged to provide your thoughts on the course and teaching, both positive and critical, directly to your lecturer and tutor or by completing course and lecturer evaluations via Griffith College's evaluation tool whenever these are available.



# 4. Learning Content, Learning Activities and Learning Experiences

# 4.1 Modules for Learning and Weekly Learning Content, Learning Activities and Learning Experience

	Learning Content	Learning activities	Learning experiences	Evidence of learning	Learning	
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	Module 1: Project Initiation (and Requirements Analysis)					
1	Course Introduction Introduction to IT Teaming	Developing Reflective Practice	Notetaking & Discussion (for all weeks)	Writing Skills #1	1, 4	
2	Project Management	Team Meetings without mentoring (TM)  Documentation	Demonstrations of Software  Team Meetings with mentoring (TMM)		1, 2, 3, 4	
	The Engineering	Creation (DC)	Critical Thinking	Writing Ckillo #2	2.5	
3	The Engineering Method	Problem Solving, Analysing Requirements TM, DC	Critical Thinking, Problem Solving TMM	Writing Skills #2	2, 5	
	Module 2: Project Planning					
4	IT Evolution IT Jobs & Job Market	Creating CV Project Planning TM, DC	Reviewing Resumes & CVs and Job market TMM	Project Concept Planning Due	2	
5	Enabling Skills Technical Communications	Risk Management  Peer Evaluation  TM, DC	Project Management Planning TMM	Individual Project Presentations	2, 3	
6	Agile Development	Finalising project planning.	Scrum / Kanban scheduling	CV & Analysis of Job Market (JCA)	2, 4, 5	
		TM, DC	TMM			
	Module 3: Project Execution					
7	Problem Solving Information Skills	Evaluation of Alternatives, choosing 'best' options TM, DC	Decision Analysis, Brainstorming TMM	Project Management Planning Due	1, 2, 3	
8	Design Processes Professional Development Planning	Monitoring product development.  Peer Evaluation  TM, DC	Requirements Tracing Individual Project Presentations  Professional Development  TMM		1, 2, 5	
9	Systems	Monitoring product development	Analysis of existing systems	Individual Project Presentations	2, 5	
		Peer Evaluation	TMM			
		TM, DC				

	Module 4: Project	Module 4: Project Closure					
10	Ethics & Professional Responsibility	Reflective Practice  Root cause analysis.  Synthesizing solutions  TM, DC	Investigating ethical & unethical practice.  TMM	Writing Skills #3	1, 2		
11	IT and Sustainability	Developing closure report  TM, DC	Investigating the use of IT in enhancing sustainability  TMM	Professional Development Plan (& CV & JCA updates)	1, 2 ,3		
12	IT Futures	Peer Evaluation TM, DC	Reflective Practice	Individual Project Presentations  Complete Project & Project Management Plan	1, 2, 3		



# 5. Evidence of Learning (Assessment Plan)

## 5.1 Evidence of Learning Summary

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	Evidence of learning	Weighting	Learning outcome	Due Date
1	In-class "Writing Skills" (3 x 5%)	15%	1, 2, 3, 4	Week 1, 3, 10
2	Individual Project Presentations (one quarter of class each presentation week)	10%	2, 3, 4, 5	5, 8, 9, 12
3	ePortfolio Professional Development Planning	25%	1, 3	6, 11
4	Project Reporting	50%	2, 3, 4, 5	4, 7, 12

## 5.2 Evidence of Learning Task Detail

#### Item 1:

#### Writing Skills

Three short <u>in-class</u> "writing exercises" are required for Writing Skills assessment. The three short writing exercises are worth 5% each for a total of 15% of the final trimester mark. Students will write using a specific given problem-solving methodology on a topic as detailed by the class tutor. The sequence of the three exercises will assist students in developing Reflective Practice. This is an individual submission.

#### Item 2:

## **Individual Project Presentations**

The project involves you working together with other students as a team. As your project progresses, you will be required to report to the class on your team progress using PowerPoint slides to guide the audience through the presentation. A 1 to 2 page executive summary, at least 11 PowerPoint slides and a seven [7] to ten [10] minute talk will be required from each student for assessment worth 10% of the final trimester marks. A hardcopy of the presentation and any handouts are to be presented to the tutor BEFORE the presentation begins. Each team member will have an opportunity to present in one of the four tutorial classes reserved for presentations. The schedule is to be coordinated by the team. This is an individual submission within the context of the group project.

#### Item 3:

#### ePortfolio Professional Development Plan (PDP)

PDP consists of three separate items and two separate assessment submissions. The first involves completing a CV (5%), reflecting your current skills and abilities, and producing a job-cluster skills summary analysis (10%). These assessment items are due in Wk06. They will then be updated as the trimester progresses and will act as a base for the remaining PDP item. This is an individual submission worth 15/25%. The second PDP assessment submission is to complete a Professional Development Plan. This item is to provide the student with initial guidance, a path to follow through their academic and professional careers and use in future subjects. This is an individual submission worth 10/25%.

#### Item 4:

# **Project Reporting**

The project is a team exercise with some individual assessment. All electronic project documentation, with the initial exclusion of some individual work, <u>must</u> be stored in the online team folder and most documentation will be created with online tools.

The Project will become a comprehensive written report, which will include a critique on the project product and the strengths of your project, as well as on your team dynamics and team and peer assessments. Peer assessments of individual contributions are also collected, and peer assessment factors are applied to determine an individual team member's Project results. The Design Projects must be available for inspection by your tutor upon request in Weeks 3-11. Details and specifications for the Project will be provided by your lecturer.

A professional report is required. The use of a word processor is mandatory. You will be required to use:

- Times New Roman or Arial 11-12-point font
- · All four margins 20mm
- A4 page size
- Single or 1.1-1.15 line spacing
- Correct page orientation in a 3-4 ring binder

Reports that do not comply with this format will not be accepted. The report will not be marked and will attract the specified late penalty until a correctly formatted report is submitted.

The Project is partitioned into 3 phases for assessment purposes including: Project Concept Planning (due Week 4), Draft Individual Alternate Designs and Project Management Planning (due Week 7) and the final Project File which includes: Project Plan, Design File and all customer deliverables (due week 12). The sections will be submitted both as a softcopy and as a hardcopy at the beginning of the project tutorial class in the week due.

This is both individual and group submission. Contribution to the teamwork assessed through peer assessment and individual project workbooks will affect final individual marks.

## 5.3 Late Submission

An evidence of learning (assessment) item submitted after the due date, without an approved extension from the Course Coordinator, will be penalised. The standard penalty is the reduction of the mark allocated to the assessment item by 5% of the maximum mark applicable for the assessment item, for each working day or part working day that the item is late. Evidence of learning items submitted more than five working days after the due date are awarded zero marks.

Please refer to the Griffith College website - Policy Library > <u>Assessment Policy</u> for guidelines and penalties for late submission.

Griffith College assessment-related policies can be found in the Griffith College Policy Library which include the following policies:

Assessment Policy, Special Consideration, Deferred Assessment, Alternate Exam Sittings, Medical Certificates, Academic Integrity, Finalisation of Results, Review of Marks, Moderation of Assessment, Turn-it-in Software Use. These policies can be accessed within the Policy Library

**Academic Integrity** Griffith College is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual's and the College's reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, premeditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, Griffith College also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at Griffith College, your lecturers, tutors and academic advisors will provide you with guidance to understand and maintain academic integrity; however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

In the case of an allegation of a breach of academic integrity being made against a student he or she may request the guidance and support of a Griffith College Student Learning Advisor or Student Counsellor.

Please ensure that you are familiar with the Griffith College Academic Integrity Policy; this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information please refer to the Griffith College website - Policy Library > Academic Integrity Policy

## Reasonable Adjustments for Assessment – The Disability Services policy

The <u>Disability Services policy</u> (accessed within the <u>Policy Library</u>) outlines the principles and processes that guide the College in making reasonable adjustments to assessment for students with disabilities while maintaining academic robustness of its programs.

#### **Risk Assessment Statement**

There are no out of the ordinary risks associated with this course.

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