

<https://courseoutline.auckland.ac.nz/dco/course/INFOSYS/221/1213>



Business and Economics

INFOSYS 221 : Programming for Business (15 POINTS)

2021 Semester One

Course Prescription

Explores the challenges Business/IT professionals face with emerging technologies such as designing IS in the cloud, artificial intelligence, machine learning, augmented reality and, others which, require a basic understanding of programming to use effectively. Develops and applies problem-solving and algorithmic skills in the area of computational thinking in the form of fundamental computer programming.

Course Overview

This course is intended as an introduction to computer programming for learners who have not taken a previous programming course.

This course does not prescribe a specific coding language as what is important are the skills involved, problem solving, analytical thinking, abstract thinking, inquiry and self-motivation. The goal is to provide the learner with an exciting and modern environment to develop, explore and extend these capabilities

Course Requirements

Prerequisite: 15 points from COMPSCI 101, 107, INFOSYS 110 Restriction: COMPSCI 130

Capabilities Developed in this Course

- Capability 1: Disciplinary Knowledge and Practice
- Capability 3: Solution Seeking
- Capability 4: Communication and Engagement
- Capability 5: Independence and Integrity

Graduate Profile: [Bachelor of Commerce](#)

Learning Outcomes

By the end of this course, students will be able to:

1. Develop analytical skills in problem solving through the use of computer instruction based solutions (Capability 1 and 3)

2. Develop and demonstrate the skills needed to debug problems that can occur in the development of computer based solutions (Capability 1, 3, 4.3 and 5.1)
3. Use application programming interfaces (API's) and external libraries for solving programming problems. (Capability 1, 3, 4.3 and 5.1)
4. Understand and use documentation and examples available in online sources commonly used by practitioners. (Capability 1 and 5.1)
5. Apply concepts of software development to create and extend applications for business (Capability 1, 3, 4.1, 4.2, 5.1 and 5.2)

Assessments

Assessment Type	Percentage	Classification
Assignments	30%	Individual Coursework
Project	30%	Group & Individual Coursework
Test	40%	Individual Test
3 types	100%	

Assessment Type	Learning Outcome Addressed				
	1	2	3	4	5
Assignments	✓	✓	✓	✓	✓
Project	✓	✓	✓	✓	✓
Test	✓	✓	✓	✓	

Workload Expectations

This course is a standard 15 point course and students are expected to spend 10 hours per week involved in each 15 point course that they are enrolled in.

During a typical teaching week there will be 3 hours of lectures, and 2 hours of lab workshops. For the 12 teaching weeks, this totals to 60 hours. Since the course as a whole represents approximately 150 hours of study, that leaves a total of 90 hours across the entire semester for independent study, e.g. reading, reflection, preparing for assessments/exams, etc.

Delivery Mode

Campus Experience

Attendance is required at scheduled activities including labs and project work to receive credit for components of the course.

Lectures will be available as recordings. Other learning activities including seminars/tutorials will be available

as recordings.

The course will include live online events including group discussions/tutorials.

Attendance on campus is required for the test and exam.

The activities for the course are scheduled as a standard weekly timetable.

Student Feedback

At the end of every semester students will be invited to give feedback on the course and teaching through a tool called SET or Qualtrics. The lecturers and course co-ordinators will consider all feedback and respond with summaries and actions.

Your feedback helps teachers to improve the course and its delivery for future students.

Class Representatives in each class can take feedback to the department and faculty staff-student consultative committees.

Digital Resources

Course materials are made available in a learning and collaboration tool called Canvas which also includes reading lists and lecture recordings (where available).

Please remember that the recording of any class on a personal device requires the permission of the instructor.

Academic Integrity

The University of Auckland will not tolerate cheating, or assisting others to cheat, and views cheating in coursework as a serious academic offence. The work that a student submits for grading must be the student's own work, reflecting their learning. Where work from other sources is used, it must be properly acknowledged and referenced. This requirement also applies to sources on the internet. A student's assessed work may be reviewed against online source material using computerised detection mechanisms.

Inclusive Learning

All students are asked to discuss any impairment related requirements privately, face to face and/or in written form with the course coordinator, lecturer or tutor.

Student Disability Services also provides support for students with a wide range of impairments, both visible and invisible, to succeed and excel at the University. For more information and contact details, please visit the [Student Disability Services' website](http://disability.auckland.ac.nz) <http://disability.auckland.ac.nz>

Special Circumstances

If your ability to complete assessed coursework is affected by illness or other personal circumstances outside of your control, contact a member of teaching staff as soon as possible before the assessment is due.

If your personal circumstances significantly affect your performance, or preparation, for an exam or eligible written test, refer to the University's [aegrotat or compassionate consideration page](https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html) <https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html>.

This should be done as soon as possible and no later than seven days after the affected test or exam date.

Learning Continuity

In the event of an unexpected disruption we undertake to maintain the continuity and standard of teaching and learning in all your courses throughout the year. If there are unexpected disruptions the University has contingency plans to ensure that access to your course continues and your assessment is fair, and not compromised. Some adjustments may need to be made in emergencies. You will be kept fully informed by your course co-ordinator, and if disruption occurs you should refer to the University Website for information about how to proceed.

Student Charter and Responsibilities

The Student Charter assumes and acknowledges that students are active participants in the learning process and that they have responsibilities to the institution and the international community of scholars. The University expects that students will act at all times in a way that demonstrates respect for the rights of other students and staff so that the learning environment is both safe and productive. For further information visit [Student Charter](https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html) <https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html>.

Disclaimer

Elements of this outline may be subject to change. The latest information about the course will be available for enrolled students in Canvas.

In this course you may be asked to submit your coursework assessments digitally. The University reserves the right to conduct scheduled tests and examinations for this course online or through the use of computers or other electronic devices. Where tests or examinations are conducted online remote invigilation arrangements may be used. The final decision on the completion mode for a test or examination, and remote invigilation arrangements where applicable, will be advised to students at least 10 days prior to the scheduled date of the assessment, or in the case of an examination when the examination timetable is published.