# VICTORIA UNIVERSITY COLLEGE

## Unit of Study Guide

**Unit Name:** Introduction to Programming
**Unit Code:** VIT1102

Year 2021
Semester/Date 2
Location Henan University

Prepared by: Oshadi Alahakoon

## Welcome

Welcome to this unit of study. This unit guide provides important information and should be kept as a reference to assist with your studies. This guide includes information about your reading and resources, independent learning, class activities and assessment tasks. We recommend that you read this guide carefully: you will be expected to manage your learning as you work towards successful study.

Detailed information and learning resources for this unit have also been provided on the unit website on VU Collaborate, which can be reached via the Student Portal at vu.edu.au/student-tools/myvu-student-portal. It is important that you access your unit website regularly for messages and updates, as well as tasks related to your unit.

*Please note that the University will only send emails, including those from the VU Collaborate space, to your VU email account. Information about how to manage your VU email can be found under 'Support and Resources' in your unit site.*

## Acknowledgement of Country

We respectfully acknowledge and recognise the traditional owners, their Elders past and present, their descendants and kin as the custodians of this land.

## Contents

## 1. About this unit

| Unit title: Introduction to Programming | | | |
|---|---|---|---|
| Unit code: | VIT1102 | Credit points: | 12 |
| Campus: | Footscray Nicholson | Year and semester: | 2021 Semester 2 |

**Key staff**

| Unit co-ordinator | Name: | Oshadi Alahakoon |
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**Prerequisites**
N/A

**Co-requisites**
N/A

**Mode of delivery**
Face to Face combined with online presentation and assessment submission.

**Unit description**
This unit introduces students to modern computer programming language, problem solving and algorithm development. Students will be exposed to multiple design strategies, including top-down design and recursive design with functions, object-based programming, and object-oriented design.

Content includes: Data Types and Expressions, Control Statements, Strings and Text Files, Design with Functions, Design with Classes, Graphical User Interfaces, Simple Graphics and Image Processing.

**Learning outcomes**
At the completion of this unit, students should be able to:

1.  Demonstrate skills in using a programming language;

2.  Apply suitable design strategies to develop a solution;

3.  Develop algorithms using basic programming language; and

4.  Apply basic object-oriented software principles in problem solving.

**Learning and teaching strategies**

This unit is delivered in a blended delivery model. This model allows the students to take responsibility for their learning by accessing resources and completing activities in an online environment prior to attending a facilitated face-to-face session that progresses and applies the learning. Teaching and learning strategies used include: practical computer-based labs delivery; individual and group work using problem-driven exercises designed to develop and apply their knowledge and skills to solve programming problems; accessing help available on on-line industry-lead forums such as www.stackoverflow.com.

Delivery strategies will address the learning outcomes and meet the needs of the learner. The unit is designed for the majority of learners to achieve the learning outcomes within the time specified.

**Graduate capabilities**

In addition to discipline knowledge, skills and their application, the student experience within this unit contributes to students developing the capabilities needed to be:

GC1: Adaptable and capable 21st century citizens who can communicate effectively, work collaboratively, think critically and solve complex problems.

a) Identifying, anticipating and solving problems ranging from simple to important, complex and unpredictable problems.

b) Accessing, evaluating and analysing information.

c) Effective communication using known and yet to be developed tools in many contexts.

d) Using effective interpersonal skills, collaborate with, and influence, their personal, work and community networks locally and globally.


GC2: Confident, creative lifelong learners who can use their understanding of themselves and others to achieve their goals in work and learning.

a) Understanding of the role of culture, values and dispositions in affecting achievement of goals.

b) Understanding how to initiate and develop new ideas.

c) Planning and organising self and others.

d) Decision making.


Students will receive structured feedback on their experience of the above VU Graduate Capabilities.

**Required readings**

Sweigart A. (2015) Invent Your Own Computer Games with Python. 3rd Edition, CreateSpace Independent Publishing Platform

Walters G. (2013), The Python Quick Syntax Reference. APress Publishing.

**Recommended readings**

Kenneth A. Lambert. (2012) Fundamentals of Python: First Programs. 1st Edition. Cengage Learning.

## 2. Assessment

| Assessment | Assessment Tasks | Learning outcomes (LO's) and Graduate Capabilities (GC's) | Assessment Criteria | Weighting (%) | Due date |
|---|---|---|---|---|---|
| 1. **Laboratory Work** | Fortnightly assessed laboratory work – 4 parts each worth 7.5% (open book) | 1,2,3,4 | *Programing Exercises to complete and submit on a deadline date* | 30% | Refer to Indicative schedule |
| 2. **Practical Task 1** | Practical Task 1 – in class open book | 1,2 | *Programing Task* | 20% | TBA |
| 3. **Practical Task 2** | Practical Task 2 – in class open book | 1,2 | *Programing Task* | 20% | TBA |
| 4. **Written Test** | Final Written Test – closed book | 1,2,3,4 | Knowledge Assessment | 30% | TBA |

*Full details about assessment are provided in the VU Collaborate space for this unit.*

Please note: This unit is eligible for supplementary assessment. For more details, please see the information provided in the University Supplementary Assessment and Conceded Pass Procedure.

### 3. Indicative schedule

(***Note:*** *Times and locations of classes are provided at enrolment. Any changes during the study period will be notified via the unit website.)*

*Please find in VUC – Unit Overview section*

## 4. Scholarly writing, plagiarism and copyright

Part of what it means to be a 'scholar' is to engage with the work of others, for example, to extend or refine one's own ideas, critique the work of others, or test and extend theories. Learning and assessment activities therefore often require you to gather information from a number of sources. This may include factual information, data or calculations, visual artefacts and written texts. Whenever you use the work of another person, you must acknowledge that source using the correct referencing system. Failure to acknowledge other people's work appropriately may be regarded as plagiarism or academic misconduct. Use of one's own previous work in satisfaction of a new assessment requirement is also not be allowed unless it is an explicit requirement for the unit.

VU deals with plagiarism according to the [Academic Integrity and Preventing Plagiarism Policy](#).

VU uses *Turnitin* for the review of written assessments. *Turnitin* checks submitted work against sources from across the world, and provides a report detailing the use of third party text and references. Written assessments are automatically submitted via *Turnitin* in the unit site. You may be provided access to submit assessments early and review the reports, to help you understand where referencing should occur.

All students and staff of Victoria University are also bound by the requirements of the Copyright Act (1968) and the University's [Copyright Material (the Use of) Policy](#) when using third party copyright material in the course of their research and study. Please ensure that you familiarize yourself with this policy and the rules around use of materials produced or owned by others. For information on copyright entitlements and responsibilities for study and research please see [vu.edu.au/library/referencing-copyright/copyright.](#)

**Referencing requirements within this unit**
N/A

**Academic writing and referencing guidelines**
VU provides tools to assist you in understanding appropriate referencing, including those linked below. More can be found on the library website and under 'Support and Resources' on your unit site.

- [vu.edu.au/library/referencing-copyright/referencing-guides](#)

- [vu.edu.au/campuses-services/student-support/language-learning/academic-writing](#)

## 5. Important information about assessment

Your unit of study assessment conforms to the *Student Assessment for Learning Policy* and procedures, which are available in the University policy library: [https://policy.vu.edu.au/](#).

**Submission procedure**
All paper-based assessments must be submitted with the completed assessment cover sheets.

All on-line assessments must have the Student Disclaimer accepted at the point of submission.

**Adjustment to assessment arrangements**
If you are unable to undertake or complete an assessment due to adverse circumstances the following arrangements may apply:

*Late submission of assessments - Short extension of time*
If you are unable to submit an assessment item on time, due to circumstances outside your control, you may apply for a short extension of time of less than five (5) working days. The standard penalty for late submission

without an approved short extension will be 5% of the total possible mark per working day. If submission is overdue by more than ten (10) working days the work will not be assessed. Full details of the procedure for applying for a short extension are available here. You can download the form from the policy library or use the quick link here.

*Special Consideration and Alternative Examinations*

Special consideration is available for unexpected short-term physical or mental ill-health or other unexpected circumstances outside your control.

Alternative examinations are available for exceptional circumstances for students who apply at least five (5) working days prior to the commencement of the examination period.

You can find information and forms for special consideration and alternative examinations at http://www.vu.edu.au/student-life/exams-results/special-consideration-supplementary-exams.

*Ongoing modified assessment*

Ongoing modified assessment arrangements are available if you have a disability or medical condition that may impact upon your studies. See Disability Support at https://www.vu.edu.au/campuses-services/student-support/disability-support.

You may need to contact a student counsellor to assist you with this process. For further information please see vu.edu.au/student-life/getting-help/counselling.

If you wish to be considered or apply for one of the above adjustment to assessment arrangements you should refer to the relevant procedure associated with the Student Assessment for Learning Policy.

**Supplementary assessment and conceded pass**
Supplementary assessments and conceded passes are available in some circumstances. If you wish to be considered for a supplementary assessment you should refer to the Student Assessment for Learning - Supplementary Assessment and Conceded Pass Procedure.

**Review of assessment outcome**
The Student Assessment for Learning - Review of Individual Assessment Outcomes Procedure provides a process by which you may request a review of an assessment outcome.

## 6. Getting help and providing feedback

**Support resources**
Victoria University is committed to providing all students with the opportunity and support required to succeed in their studies. If you require any support regarding academic progress in your unit during the semester you are advised to speak to your unit co-ordinator.

We also offer a range of support, development and guidance services for all students. The portal (vu.edu.au/student-tools/myvu-student-portal) provides detailed information on a range of student services that you may find helpful. More information is also available in your unit site under 'Support and Resources'.

**Providing feedback: Student Evaluation System (SES)**
Your feedback on your experiences within this unit is important, because it assists VU to improve the learning experience of units and courses for future students.

We encourage you to provide informal feedback directly to your unit and course co-ordinators. The University also collects your anonymous feedback systematically through the Student Evaluation Survey (SES), which is comprised of two student evaluation instruments: the Student Evaluation of Unit (SEU) and the Student Evaluation of Teaching (SET). Students are asked to complete the SEU and SET near the end of each unit. SEU and SET results are anonymous, and are not made available to the teaching staff in the unit until after the University has released your final grades.

Examples of actions taken recently to improve this unit, that were based on or influenced by student or other feedback

Continuous improvements to material and assessments.

**Student complaints resolution**
Victoria University has a Student Complaints Resolution Policy to guide you through the steps you can take to resolve issues related to your time at the University. You can find more information on this process at: vu.edu.au/student-life/getting-help/student-complaints-resolution.

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