This learning and assessment plan outlines how this unit or cluster of units will be delivered and assessed. The schedule of learning topics, assessments and the due date for assessments is included.

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| --- | --- |
| Qualification national code and title: | ICT40120 – Certificate IV in Information Technology (Programming) |
| Delivery Period: | Semester 2, 2025 |
| Cluster Name (if applicable) | Intro Programming for Robotics and Internet of Things (IoT) |

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| --- | --- |
| National ID | Name of unit |
| ICTICT449 | Use version control systems in development environments |
| ICTPRG430 | Apply introductory object-oriented language skills |
| **You can access the full unit/s of competency here:**   * <https://training.gov.au/Training/Details/ICTICT449> * <https://training.gov.au/Training/Details/ICTPRG430> | |
| Delivery Location/s (Campus/Room/Online): | Northbridge, 30 Aberdeen St., Library building, room L3-06 Online |

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| Student Learning Resources, text, equipment (Required/Optional) | | | | |
| Student to supply:   * USB thumb drive | | | | |
| **College to supply:**   * PC with necessary software: Python, Python IDE, PyCharm, Microsoft Office (Word, etc.) * Access to internet * Access to Blackboard * Software Requirements for assessments * Organisational Guidelines and coding standard * Additional hardware resources as required | | | | |
| **Lecturer Name:** | **Phone:** | **Email:** | **Contact times** | **Campus / Room** |
| Rafael Avigad | n/a | rafael.avigad@nmtafe.wa.edu.au | By appointment | Northbridge |
| Para O’Kelly | n/a | Para.OKelly@nmtafe.wa.edu.au | By appointment | Northbridge |

## Assessment Summary

| Assessment | Title and brief description | Due Date |
| --- | --- | --- |
| AT1 Portfolio Part 1 | Git Fundamentals. | Session 6 |
| AT2 Knowledge-based Assessment (KBA) Part 1 | Git and DevOps Concepts | Session 10 |
| AT1 Portfolio Part 2 | Fundamentals of OO and Git | Session 14 |
| AT3 Project | **Project Assessment** | Session 18 |

**You will receive more detailed instructions on each assessment from your lecturer.**

The regular learning requirements to develop the skills and knowledge for this unit are outlined below.

Please refer to your timetable for session times.

**Please note:** This plan is to be used as a guide and may be adapted to meet the needs of students.

You will be notified of changes as they occur.

**This course is typically delivered as 2 hours per week in term 1, and 4 hours per week in term 2 to complement work in ICTPRG302.**

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| Your training will include **structured in and out of class activities\*** to be completed for this unit. | |
| *\*Out of class activities* may include(þ): | |
| lectures or tutorials, online tasks and forums  assessments (when integrated with learning)  workplace experience  prescribed reading and research | workshop activities  projects, assignments  prescribed follow-up activities  other (please specify) |

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| **Sessions**  **(Hours)** | | **Element**  **number** | **Topic** | **Learning**  **Resources\*** | **Structured out of class activities\*** | |
| **Session** | **Hrs** |  |  |  | **Activity** | **Hrs** |
| 1 | 2 | ICTICT449 E1-3 | Introduction to Text Files | Lecture Notes, Textbook | Lecture, Demonstration | 2 |
| 2 | 2 | ICTICT449 E1-3 | Command Line Fundamentals | Online Tutorials | Practical Exercise | 2 |
| 3 | 2 | ICTICT449 E1-3 | VCS and Git Introduction | Blackboard | Interactive Workshop | 2 |
| 4 | 2 | ICTICT449 E1-3 | Branching and Merging | Blackboard | Group Activities | 2 |
| 5 | 2 | ICTICT449 E1-3 | VCS Best Practices | Blackboard | Hands-on Lab | 2 |
| 6 | 2 | ICTICT449 E1-3 | GitHub and remote VCS **AT1P1 Due** | Blackboard | Discussion & Review | 2 |
| 7 | 2 | ICTICT449 E1-3 | Catch Up and Validation | Review Materials | Q&A Session, Practice Tasks | 2 |
| 8 | 2 | ICTICT449 E1-3 | Push/Pull and Fundamentals of development workflows  **Feedback on AT1P1 Due: Contact lecturer if no feedback received** | Blackboard | Review learning resources for first session | 2 |
| 9 | 2 | ICTICT449 E2-4 | DevOps Concepts and Fundamentals | Blackboard | Review the session’s materials.  Practice working with local repositories. | 2 |
| 10 | 2 | ICTICT449 E1-4 | Work on Assessment.  **AT2 KBA Due** |  | Review the session’s material.  Work on Assessment. | 6 |
|  | 0 |  | **# BREAK** |  |  | 0 |
| 11 | 4 | ICTPRG430 | Introduction into object-oriented (OO) programming | Blackboard | Review material on Blackboard | 4 |
| 12 | 4 |  | IoT devices and applied OOP  **Feedback on AT2 KBA Due**  **Work on Assessment(s).** | Blackboard | Review material on Blackboard | 4 |
| 13 | 4 | **PRG430 E2/3** | **Agile documentation, test, and project management** | Blackboard | Review material on Blackboard | 5 |
| 14 | 4 |  | Work on Assessment – In Class Validation | Blackboard | Work on Assessment | 3 |
| 15 | 4 |  | Introduction to the Final project and review of the code base | Blackboard | Review material on Blackboard | 4 |
| 16 | 4 | **PRG430 E3** | Debugging techniques **AT2P2 Feedback Due** | Blackboard | Review material on Blackboard | 3 |
| 17 | 4 |  | Work on Assessment/Validation |  | Work on Assessment | 3 |
| 18 | 4 |  | Work on Assessment/Project Validation **PRJ Due**  **All Assessments due.** |  | Complete self-reflection report | 2 |
| 19 | 4 |  | Reassessments. |  |  | 0 |
| 20 | 4 |  | Final submissions and resulting |  |  | 0 |
| **Total Hours** | **52** |  | |  | **Total hours out of class activities** | **38** |
| **Total amount of training for this unit:** (sum of Session Hours + Out of Class Hours) | | | | | **90** | |

\*Learning Resources - to enable learners to meet the requirements of this unit of competency or cluster.

**Recognition of Prior Learning (RPL) / Credit**

You may be eligible for Recognition of Prior Learning (RPL) / Credit towards your studies If you have relevant existing skills, knowledge, or formal qualifications. Please discuss available options with your lecturer.

**Reasonable Adjustment**

We recognise that every student has different learning styles and needs. Please let your lecturer know if there is anything that may have an effect on your learning so they may be able to adjust your plan.

**Results and Appeals**

Students may lodge an appeal against an academic result. Appeals must be lodged within four weeks from notification of the assessment result. Please see details under Academic Appeals on the NMT website.

**Absences**

If you are unable to attend any class or assessment session you must inform your lecturer as soon as possible.

If you miss an assessment due to illness, please provide your lecturer with a medical certificate in order to negotiate an alternate time for the assessment.

**Plagiarism**

Plagiarism is using another person's ideas and words without clearly acknowledging the source of the information. It is not acceptable to submit an assessment that is based on another person's work and claim it as your own. If you submit an assessment that is significantly or recognizably the same or similar in content as submitted by another student (current or past) you may have to submit another assessment.

**Assessment Resit/Resubmission**

You shall be permitted to have at least two attempts to demonstrate competency against a unit of competency or cluster of units of competency.

To qualify for re-assessment:

* you must have made a reasonable attempt to complete the assessment satisfactorily

AND

* you must have submitted the original assessment by the due date

OR

* you must have attended and participated in the original assessment event

In the case of a re-assessment opportunity, your lecturer will give you a due date for your second attempt. Should you not achieve a Satisfactory result on the second attempt, you will need to re-enrol (R) in the unit.

Be aware, in certain situations there are limited reassessment options (such as one-off Performances and Exhibitions).