Master of Computing [MCOMP]

To be read in conjunction with Unitec's Academic Statute and associated Policies and Procedures.

These programme regulations apply to the Master of Computing [MCOMP] programme, which leads to the award of Master of Computing (Level 9) qualification, (240 Credits) [CA2270].

These regulations come into effect from Semester 1, 2022.

1. Ngā Ture Hei Whakaurunga | Admission Requirements *Admission Requirements comply with Unitec's Admission Requirements Guidelines.*	To be eligible for admission to this programme, all applicants must meet three admission requirements: a. Requirements for either general admission, special admission, or discretionary admission b. Any additional Programme specific requirements c. English language requirements **1.1 Whakaurunga Whānui | General Admission** To be admitted to this programme all applicants must be at least 16 years of age on the date of the programme's commencement for the semester in which they wish to enrol, and meet the following requirements: a. A recognised bachelor degree in the same or similar discipline, with merit achievement, deemed to be an average grade of B- or higher in all Level 7 courses; *Or* b. A professional qualification in a relevant discipline, recognised as being equivalent to merit achievement in a bachelor degree or equivalent **1.2 Whakaurunga Motuhake | Special Admission** Special admission may be granted to applicants who have completed a Graduate Diploma (or equivalent qualification) in the same or similar discipline with a B grade average or better. Applicants must have: a. attained the age of 20 years on or before the first day of the semester in which study for the programme is to commence; and b. provided sufficient evidence of aptitude or appropriate work or other life experience that would indicate a successful outcome in the qualification. **1.3 Whakaurunga Kōwhiringa | Discretionary Admission** There are no provisions for discretionary admission in this programme. **1.4 Whakaurunga Tautui | Programme Specific Requirements** There are no programme specific requirements or this programme. **1.5 Whakaurunga Reo Pākehā | English Language Admission Requirements** All applicants must provide evidence that they have the necessary English language proficiency required for the Programme as demonstrated by the equivalence of a minimum of eight credits at NCEA Level 2 in English (four in reading; four in writing). International applicants and any Domestic applicant for whom English, Māori or NZ Sign is not their first language and who cannot provide evidence of the above, must also provide evidence that they have the necessary English language proficiency required for the Programme as demonstrated by an equivalent described in NZQA Rules and on the Unitec English Language Requirements for International Students Web-page.
2. Paearu Kōwhiri	**2.1 Paearu Kōwhiri | Selection Criteria**

Tukanga| Selection Criteria & Process *Selection Criteria and Processes comply with Unitec's Admission Requirements Guidelines.*	When the number of eligible applicants for admission exceeds the number of places available, the following selection criteria will be applied: • professional qualifications that are relevant to the proposed field of study; • assurance of commitment to undertaking all aspects of the programme and to meeting the learning outcomes; • recommendation from employers; • academic and technical aptitude; • relevant work experience. Applicants who meet the maximum number of listed criteria will be the preferred candidates **2.2 Tukanga Kōwhiri | Selection Process** Selection will be made by Unitec staff members with the delegated authority to offer places to applicants. These staff members will select students on the basis of written information supplied on the enrolment form. At the discretion of the staff members, an interview (face-to-face or electronic) may be required. A list of delegated staff members is maintained by the Programme Academic Quality Committee (PAQC) responsible for the programme.
3. Ngā Ture Hei Whakawhiwhi Tohu Mātauranga | Requirements for the Award of the Programme *Requirements comply with Unitec's Programme Completion and Awards Policy and associated procedure.*	**3.1 Whakaemi Tūtukitanga | Credit Accumulation** To be awarded the Master of Computing, a student must successfully complete a minimum of 240 credits in the pattern set out in Table 1 (Option 1 or 2) from the courses set out in Table 2. *Table 1: Credit Requirements for Master of Computing* 3.1.1 continues below

Course Level	Option 1 – 120 Credit Thesis	Option 2 – 90 Credit Thesis	
Level 8 Compulsory	30 credits	30 credits	
Level 8 Elective courses	90 credits	120 credits	
Level 9 Research Component	120 credits	90 credits	
Total	**240 credits**	**240 credits**	

3.1.1 Whakaaetanga o nga akoranga ako \| Approval of Courses of Study
A student shall obtain approval from the relevant Academic Authority for the selection of courses to be undertaken.
In exceptional circumstances, the relevant Academic Authority may recommend a personal (modified) programme of study that does not conform to that set out in these Programme Regulations (see 3.1.2). Such approval shall be noted in the approvals register of the relevant Academic Authority.

3.1.2 Hōtaka Whakarerekē O Ngā Āhuatanga Ako \| Modified Programmes of Study
Modified programmes of study allow students to achieve the award of this qualification by undertaking a modified set of courses which may differ from those specified in Table 2. Any approved modified programmes of study will be documented described in the Schedule below.

Table 2: Course Details – Master of Computing
Compulsory courses are shown in **bold** and Elective courses in *italics*.

Course No	Course Name	Credits	Pre- requisites	Co-requisites	Restrictions
Level 8					
ISCG8024	**Research Methods in Computer Science**	**30**	**Academic Leader Approval**		
ISCG8022	*Managing IT Projects*	*15*			
ISCG8026	*Introduction to Data Science*	*15*			
ISCG8028	*Negotiated Study*	*15*			
ISCG8029	*Special Topic*	*15*			
ISCG8030	*Enterprise Network Design and Management*	*15*			
ISCG8038	*Advanced Web Development*	*15*			

ISCG8040	Enterprise Network Information Security Management	15			
ISCG8041	Mobile and Wireless Communications	15			
ISCG8043	Adaptive Business Intelligence	15			
ISCG8044	Health Informatics	15			
ISCG8045	Network Programming	15			
ISCG8046	Cloud Computing	15			
ISCG8047	Cyber Security and Cloud Computing	15			
ISCG8048	Mobile Security	15			
ISCG8049	Data Warehouse Architecture	15			
ISCG8050	Machine Learning	15			
ISCG8051	Software Defined Networks	15			
ISCG8052	The Internet of Things	15			
Or an approved Level 8 course from another Programme					
Level 9 – and ONE of the following					
ISCG9026	Thesis	120	ISCG8024		
ISCG9027	Thesis	90	ISCG8024		

3.2 Mahi Waehanga Pāhekoheko | Integrated and Work-based components
There are no specific integrated or work-based components in this programme

3.3 Mahi Akoranga I A Wāhanga | Course Load per Semester
The normal full-time course load is 60 credits per semester, or 75 credits with the approval of the relevant academic authority.

3.4 Whakaurunga Takiwā | Registration Periods
a. The maximum period for completion of a master's degree will not normally be exceeding 60 months from the date of commencement of study.
   In exceptional circumstances, the relevant Academic Authority may agree to an extension of enrolment for a specified period normally not exceeding 12 months.
b. Where a candidate is enrolled full-time throughout the period of their registration, the maximum period of registration for the award of the degree with honours is 36 months.
c. Where a candidate is undertaking the degree by part-time study, the maximum period of registration for the award of the degree with honours is 60 months; this period being reduced to account for periods of full-time study.
d. The maximum period of registration to be eligible for the award of the degree with honours, as outlined herein, shall be reduced in proportion to the number of cross-credits gained.
e. Enrolment for a Masters degree will normally be continuous. The relevant Academic Authority may, on the receipt of an application from a candidate, approve a suspension of enrolment for up to a maximum of 12 months.
   In such cases the period of suspension will not count towards the registration period of the degree.
f. On the recommendation of the relevant Academic Authority, and with the approval of the Director Research and Enterprise/Tuapapa Rangahau, a student may be permitted to enrol for 15 credits in dissertation, thesis, or research project.
   This approval will apply in cases where the student already has paid for the full number of research credits required for their degree, and the supervisors state the dissertation, thesis or research project will be submitted no later than two months after the semester begins. Should that deadline not be met, the student will be required to enrol for a further 15 credits.

3.5 Whakawhiwhi Tāpiripiri| Additional Awards
3.5.1 Master's Degree with Honours

	To be awarded the Master of Computing with Honours, a student must successfully complete a minimum of 180 credits which includes the completion of a thesis, dissertation or research project of at least 45 credits at level 9 with the following conditions: a. The master's degree shall be awarded with First Class Honours if the following criteria are satisfied, within the time limits as defined in section 3.4. b, c, d and e of these regulations: achieved a cumulative Grade Point Average of 7.0 or better in all necessary courses, with no less than a B+ in any one course, and with no less than an A- for the thesis, dissertation or research project and completion of the requirements within the time limits. b. The master's degree shall be awarded with Second Class Honours if the following criteria are satisfied, within the time limits as defined in section 3.4. b, c, d and e of these regulations: achieved a cumulative Grade Point Average of 5.0 or better in all necessary courses, with no less than a B- in any one course and with no less than a B in the thesis, dissertation or research project and completion of the requirements within the time limits. c. The master's degree with honours shall be awarded if all courses and the thesis, dissertation or research project achieve a passing grade, and all requirements are completed within the time limits. d. A student may repeat a course that he/she has successfully completed in order to achieve a higher grade to be used in the calculation of honours. e. A candidate who has failed any course shall not be eligible for honours.

4. Tūtukitanga Whakamihi | Credit Recognition
 	
Credit Recognition complies with Unitec's Assessment, Moderation and Grades Policy and associated procedure.
	4.1 Whakawhiti Tūtukitanga | Cross Credit
	Credits will not be awarded for successful study that took place more than 5 years prior to the date of first enrolment in the programme.
	a. A student may be awarded credits or exemptions in recognition of successful equivalent study, at the same or a higher level in the context of another programme.
	b. The credit recognition may be:
	    i. specified, where there is direct equivalence of the learning outcomes of a completed course and a course in the programme; or
	    ii. unspecified, where the previous study has taken place in a programme with a similar philosophy but there is no exact match in the programme's courses.
	c. Cross credits will not be given for a Research Project in a postgraduate programme.
	
	4.2 Aromatawai Tōmua | Assessment of Prior Learning (APL)
	Assessment of Prior Learning is available for all level 8 courses in this programme. There are no provisions for APL of a Level 9 course. APL decisions will be made on a case-by-case basis under the Unitec Assessment of Prior Learning Procedure.
	
	4.3 Ngā whakawhitinga | Credit Transfer
	Credit transfer arrangements apply to the Unitec Postgraduate Diploma in Computing (Level 8, 120 credits).
	a. Graduates of the Postgraduate Diploma in Computing may apply (as required) to the relevant Academic Authority for a transfer of credit of up to a maximum of 120 credits towards the Master of Computing provided that the period between completing the award of the postgraduate diploma and applying for admission to the master's programme does not exceed three years.
	b. Credits gained from Level 7 courses in a postgraduate diploma cannot be cross-credited to a Master's programme.
	c. Candidates who have not completed ISCG8024 Research Methods in Computer Science as part of the postgraduate diploma shall be required to complete this course, in addition to the thesis or dissertation, to be awarded the Master of Computing.
	d. In exceptional circumstances, the relevant Academic Authority may approve the transfer of credit from a postgraduate diploma completed more than three years before applying for admission to the master's degree.
	e. For postgraduate diploma graduates who are subsequently awarded the degree, Unitec's academic record shall show only the qualification of the Master of Computing, and the award of the postgraduate diplomas shall be revoked.
	f. Credit transfer of full credits from the Postgraduate Diploma to the Masters will be deemed to be equivalent to 1 year of study full-time, or 2 years of study part-time for the purposes of Masters Degree registration periods. Other credit transfer totals will be treated on a pro-rata basis.

5. Waeture Aromatawai | Assessment Regulations *Assessment Regulations comply with Unitec's Assessment, Moderation and Grades Policy and associated procedure.*	**5.1 Paparahi Aromatawai | Assessment Basis** Assessment in this programme is achievement based using an 11-point grading scale for courses. Students must obtain at least 50% overall score in any achievement-based course in order to pass that course. **5.2 Ākoranga Taumata | Course grades** Course grades will be determined by the mathematical aggregation of weighted assessment marks and reported according to the following scales. Participants must obtain at least 50% overall score in order to pass achievement-based assessment. *Table 3: Achievement based 11-point assessment system*

Table 3: Achievement based 11-point assessment system

Grade	Meaning	Result	Percentage
A+	Distinction	Credits Earned	90 – 100
A	Distinction	Credits Earned	85 – 89
A-	Distinction	Credits Earned	80 – 84
B+	Merit	Credits Earned	75 – 79
B	Merit	Credits Earned	70 – 74
B-	Merit	Credits Earned	65 – 69
C+	Pass	Credits Earned	60 – 64
C	Pass	Credits Earned	55 – 59
C-	Pass	Credits Earned	50 – 54
D	Fail	No Credits Earned	40 – 49
E	Fail	No Credits Earned	0 – 39

5.3 Paearu Taumata \| Grade Criteria
Students may be awarded one of the following grades for a course:
Table 4: Grade Criteria

Grade	Meaning	Criteria
CR	Credit Recognition	The student has applied for and been awarded a credit recognition from another qualification
CTG	Continuing	The Course runs for more than one semester and the final Summative Assessment has not yet occurred. No Credits earned
DEF	Deferred	The student has approval to complete a Course Assessment beyond the schedule date. Unless an exception has been approved, any Deferred Grade remaining on a student's record beyond a duration equal to that of the original course will be changed to the grade to which the Student would otherwise be entitled. No Credits earned.
DNC	Did not Complete	The grade DNC (Did Not Complete) is recorded if a student has either withdrawn after 75% of the scheduled Course duration; or not attempted a compulsory item of Assessment within a Course. No Credits earned.
ES	Student Exchange	The Student has completed an approved inter-institutional exchange and it is not appropriate for another grade to be awarded. No Credits earned.
NGA	No Grade Associated	Course assessment and reporting of results are not required for this course or are carried out by an external agency. No Credits earned
R	Restricted Pass	The student has been awarded a restricted pass subject to Relevant clause in this schedule. Credits earned.

W	Withdrawn	The student withdraws from a Course after 10% of the scheduled Course duration and up to, or at, the date at which 75% of the scheduled Course has passed. No credits earned.
#	Estimated Grade	If any portion of Summative Assessment has been estimated, the final grade will be an estimated grade, and annotated "#" on the Student's Academic Record.

| **6. Aromatawai Mahinga \| Assessment Procedures**

Assessment Procedures comply with Unitec's Assessment Moderation and Grades Policy and associated procedure. | **6.1 Ākoranga Aromatawai \| Course Assessment**
Courses employ both formative and summative assessment activities. Formative assessments do not contribute to the final grade for a given course. All summative assessment elements are compulsory unless otherwise approved and noted in course information.

Students must attempt all compulsory assessment activities in order to pass and receive credit for any course. Students who do not attempt a compulsory item of assessment may be awarded a 'Did Not Complete' (DNC) for the whole course and may not earn any credits.

6.2 Aromatawai I Roto I Te Reo \| Assessment in Te Reo
All students have the right to submit any summative assessment task in Te reo Māori. The process for submission of summative assessment work in Te reo Māori is governed by the Unitec Assessment in Te Reo Māori procedure and detailed in course material.

6.3 Tāpaetanga Tōmuri \| Submission and late submission of work
Unless an extension has been granted by the relevant Academic Authority and except in exceptional circumstances beyond the control of the candidate, no late work will be accepted for marking.

6.4 Whakamātautau Anō \| Resubmission or Reassessment
a. A student may be granted permission to undertake a resubmission/reassessment for a failed assessment item within a level 8 course with the following conditions:
  i. an application for a resubmission/reassessment must be made within 5 days of receiving their marked assessment;
  ii. only one reassessment or resubmission per course;
  iii. no more than 30 per cent of the course value of assessment may be submitted for re-assessment;
  iv. any approved resubmission/reassessment will be carried out within a specified time period as agreed with the relevant academic authority;
  v. in all cases for resubmission, the original marked assessment will accompany resubmitted assessment. If resubmitted work is not accompanied by the original marked assignment, the resubmitted work will not be marked, and the original grade will stand;
  vi. the maximum grade for any resubmission/reassessment of an assessment is the lowest pass grade;
  vii. assessments that are handed in late are not eligible for resubmission or reassessment.
b. Any candidate who is required to re-submit or significantly revise a Masters research thesis, dissertation, or research project must do so within three months from the date of notification of the result.
  i. In exceptional circumstances, this period may be extended by the relevant Academic Authority.
  ii. If submission is not completed by the end of the period for which fees have been paid, the student must re-enrol and pay for 15 credits.

6.5 Āhuatanga Aromatawai Motuhake \| Affected Performance Consideration
A student may apply for Affected Performance Consideration (APC) if:
a. The student is unable to attend an examination, compulsory assessment or fixed time and place assessment activity due to illness, injury, bereavement or other critical circumstances
b. The student's preparation for, or performance in an examination or any summative assessment has been seriously impaired due to circumstances beyond their control |

Applications for APC are made by a student within 5 working days of the affected assessment event. Decisions to approve an APC and to apply any remedy are made according to the Assessment and Grading Procedures and Regulations.

6.6 Pāhi Rāhui | Restricted Pass
No restricted passes shall be awarded for courses in this programme.

6.7 Tuaruatanga | Repeating Courses
Any Student enrolled in a level 8 course that comprises part of a postgraduate programme does not have an automatic right to re-enrol. Students must apply for permission to re-enrol to the relevant Academic Authority (see 6.8c below). There is no provision for third time enrolment for a course that comprises part of a Postgraduate Programme. A Master's research thesis, dissertation, or research project at Level 9 may not be repeated (see 6.8 below).

Students who are given permission to repeat a Level 8 course would normally be required to submit all assessment items. In some cases, with the prior approval of the relevant academic authority, students may not be required to repeat an equivalent assessment item that they had previously passed. This should be negotiated within the first two weeks of the commencement of the course and will specify any course grade that will be carried over.

6.8 Whakakorenga | Exclusions
No student will be allowed to enrol in any course more than twice unless there are exceptional circumstances approved by the relevant academic authority.
a. Any Student who fails to achieve at least 50 per cent of the credits that he or she is enrolled in in any 12-month period may be excluded by the relevant Academic Authority from re-enrolling in any further courses. The decision whether students can re-enrol in further courses will be based on a student's likelihood of succeeding in further study and will be made by the relevant Head of School.
b. When calculating the 12-month period in a. above, Unitec reserves the right to include any relevant time spent by the Student studying at another tertiary institution.
c. A Student who has not achieved a Pass Grade for a level 8 Course shall not be enrolled again for that Course except with the permission of the relevant Academic Authority.
d. The relevant Academic Authority will advise the Student in writing of their decision, and the reasons for such decision, and any orders made.
e. There are no provisions for repeating a Level 9 Course.

6.9 Research Projects and Examination Regulations
The supervision and examination of Theses, Dissertations, and Research Projects are governed by the Master's Degree Generic Regulations.

6.10 Tono Pīra | Appeals
Appeals against Decisions for Thesis, Dissertation, or Research Project are governed by the Master's Degree Generic Regulations. Students may appeal other decisions made under these regulations in accordance with the Student Appeal Procedure.

7. Whakaritenga Whānui | General Provisions	**7.1 Whakamāramatanga ā-kaupapa | Definition of Terms** In these regulations, unless the context otherwise requires, the following definitions shall apply: • 'Relevant academic authority' refers to an individual or role holder, or in some cases a committee, who have been delegated the authority to make a decision within a specific circumstance. A schedule of the various relevant academic authority delegations is maintained by the Programme Academic Quality Committee responsible for the Programme. • 'External Examiner' means a person external to Unitec appointed to assess student work. • 'Research Project' means a record of a course of study in which a candidate undertakes a practice-based, applied scholarly investigation of an appropriate topic, deemed equivalent to at least 45 credits, level 9. • 'Supervisor' means a person who fulfils the role of adviser, mentor and motivator, thereby guiding the academic progress of the candidate to reach his or her research potential. • 'Thesis' means a record of sustained independent research in which the candidate's own work

| | | | | forms, as a point of origin or reference, a significant part of the intellectual enquiry of an appropriate topic. It is normally 90 credits or more at Level 9. |

8 Āhuatanga Tauwhirowhiro Ritenga | Transitional Arrangements

Any students who failed a course prior to the current year of offering and which is no longer offered may apply to complete an alternative course under a modified programme of study.

9. Regulation Version Control

Ver No.	Approved by	Date of Change	Effective from	Description of change
1.1	Various	Various	Various	As noted in previous versions of Ragulations.
1.2	AACSC	10/08/2021	2022-Sem1	• Reformatted to new template • Deletion of inactive elective courses that are no longer taught: ISCG8025, ISCG8031, ISCG8032, ISCG8033, ISCG8035, ISCG8036, ISCG8042. • Remove all unnecessary requisites affecting enrolment from ISCG8029, ISCG8045, ISCG8049. • Deletion of ISCG9025 Dissertation as this was a transition option which has now expired. • Remove milestone award provision as it does not meet the definition of Milestone and is not required for a student to exit the programme with the PGDip.