

### **Graduate Diploma in Computing [GDComp]**

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

These programme regulations apply to the Graduate Diploma in Computing [GDCMP] programme, which leads to the award of the Graduate Diploma in Computing (Level 7) qualification, (120 Credits) [CA2297].

These regulations come into effect from Semester 1, 2022.

#### 1. Ngā Ture Hei Whakaurunga | Admission Requirements

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

Admission Requirements comply with Unitec's Admission Requirements Guidelines.

#### 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 recognised degree;

Or

A professional qualification in a relevant discipline;

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The ability to demonstrate competencies equivalent to a graduate from the above qualifications.

#### 1.2 Whakaurunga Motuhake | Special Admission

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

In exceptional cases an applicant who does not meet the general admission requirements and who has not reached the age of 20 on or before the first day of the semester in which study for the Certificate is to commence may apply for discretionary admission.

In assessing whether to grant discretionary admission in exceptional cases, the primary focus will be on the applicant's level of preparedness for study at the required level.

#### 1.4 Whakaurunga Tautui | Programme Specific Requirements

There are no programme specific requirements.

#### 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 8 credits at NCEA Level 2 in English (4 in Reading, 4 in Writing).

International applicants and any Domestic applicant for whom English, Māori or NZ Sign is not their first language must also provide evidence that they have the necessary English language proficiency required for the Programme as demonstrated by an equivalent as described in NZQA Rules and on the Unitec English Language Requirements for International Students Web-page.

#### 2. Paearu Kōwhiri Tukanga| **Selection Criteria**

# & Process

Selection Criteria and Processes comply with Unitec's Admission Requirements Guidelines.

#### 2.1 Paearu Kōwhiri | Selection Criteria

When the number of eligible applicants for admission exceeds the number of places available, the following selection criteria will be applied:

- professional qualifications which are relevant to the proposed field of study;
- assurance of commitment to undertaking all aspects of the programme and meeting the learning outcomes:
- relevant work experience;
- recommendation from employers;
- academic and technical aptitude.

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** 

#### 3.1 Whakaemi Tūtukitanga | Credit Accumulation

To be awarded the Graduate Diploma in Computing, a student must successfully complete a minimum of 120 credits in the pattern set out in Table 1 from the courses set out in Table 2a and 2b.

Table 1: Credit Requirements for Graduate Diploma in Computing

Level	Elective Credits	Total Credits
7 (or higher)	75	75
5, 6, 7 or 8	45	45
		120

Requirements comply with Unitec's Programme Completion and

**Awards Policy** and associated procedure.

#### 3.1.1 Additional Award requirements

In courses where safety is concerned, an attendance requirement may be stipulated in the relevant course schedule.

#### 3.1.2 Progression through the Programme

All students must have their programme of study approved by the relevant Academic Authority prior to enrolment.

#### Table 2a: Level 7 Course Details - Graduate Diploma in Computing

All courses are elective. Elective courses in italics.

Course No	Course Name	Credits	Pre- requisites	Co-requisites	Restrictions
Level 7 – A m	inimum of 75 credits from the following				
ISCG7142	Information Systems and Analysis	15			ISCG6414
ISCG7400	Computer Systems Security	15	ISCG6402		
ISCG7401	Advanced Data Communications	15	ISCG6401		
ISCG7402	Network Design and Implementation	15	ISCG6402 and ISCG6401		
ISCG7404	Computer Forensic Investigations	15	ISCG6401 and ISCG6402		
ISCG7407	Advanced Cyber Security	15	ISCG6407		
ISCG7408	Malware Analysis	15	ISCG6407		
ISCG7410	Information Systems Management	15	ISCG6411		
ISCG7411*	Project Management Methodologies	15	Academic Authority consent required		
ISCG7412*	Risk Management	15			

ISCG7413	Testing and Quality Assurance Management	15	Relevant Academic Authority consent required		
ISCG7414	Business Systems Analysis	15	ISCG7142		
ISCG7420	Web Application Development		ISCG7142 and ISCG6421 and ISCG6420		
ISCG7421	Advanced Program Development	15	ISCG6421 and ISCG7142		
ISCG7424	Mobile Software Development	15	ISCG7142 and ISCG6421	ISCG6426	
ISCG7425	Java Enterprise Programming	15	ISCG6423 and ISCG6421	ISCG6426	
ISCG7426	Data Mining	15	ISCG6421 & ISCG6425 or as approved by the	ISCG6426	
ISCG7427	Agile and Lean Software Delivery	15	ISCG7142		
ISCG7435	Special Topic 1	15			
ISCG7441	Advance Game Programming	15	ISCG6442 or as approved by the PL		
ISCG7444	Cloud Application Design & Development	15	ISCG6420 or as approved by the PL		
ISCG7488	Negotiated Study	15	Relevant Academic Authority Approval & completion of 60 credits towards Graduate Diploma Computing		

#### And an additional 45 elective credits chosen as described below:

#### All course choices are approved as per 3.1.2 above and may include:

- Any level 7 course from Table 2a;
- Any level 6 course from Table 2b;
- A maximum of 30 credits at level 5 from Table 2b;

#### Or any of the following:

- A maximum of 30 credits at level 6 from the NZ Diploma in Cybersecurity;
- A maximum of 15 credits at level 7 from another Unitec Degree Programme;
- A maximum of 30 credits at level 8 from the Postgraduate Diploma in Computing.

#### Table 2b: Level 5 & 6 Elective Course Details – Graduate Diploma in Computing

All courses are elective. Elective courses in italics.

Course No	Course Name	Credits	Pre- requisites	Co-requisites	Restrictions
Level 5 (max. 3	0 credits)				
ISCG5400	Hardware Fundamentals	15			
ISCG5401	Operating System Fundamentals	15			
ISCG5403	Networking Fundamentals	15			

<sup>\*</sup>ISCG7411 and ISCG7412 - One re-sit allowed for the final exam

ISCG5420	Programming Fundamentals	15			
ISCG5421	Programming Principles and Practice	15			
ISCG5423	Introduction to Databases	15			
ISCG5424	Information Systems Concepts	15			ISCG5410
Level 6					
ISCG6401	Data Communications and Networks	15			
ISCG6402	Network Administration and Support	15			
ISCG6403	Network Operating Systems Management	15			
ISCG6404	Web Server Management	15			
ISCG6407	Fundamental Concepts in Cyber Security	15			
ISCG6411	Project Planning and Control	15	ISCG5424		
ISCG6420	Internet and Website Development	15			
ISCG6421	GUI Programming	15			
ISCG6422	Multimedia Programming	15			
ISCG6423	SCG6423 Database Design and Development		As approved by the relevant Academic Authority		
ISCG6424	User Interface Design	15			
ISCG6425	Data Warehousing	15			
ISCG6426	Data Structures and Algorithms	15	As approved by the relevant Academic Authority		
ISCG6435	Special Topic	15			
ISCG6441	Visual Game Design	15			
ISCG6442	Game Programming		As approved by the relevant Academic Authority	ISCG6426	

#### 3.2 Mahi Waehanga Pāhekoheko | Integrated and Work-based components

There are no 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 | Enrolment Periods

The normal enrolment period is one year (full-time study) or two years (part-time study). Students who are prevented by ill health, or other cause, from completing the programme requirements within the maximum period of enrolment, the relevant academic authority may approve suspension of enrolment for up to a maximum of one semester.

The maximum period to complete this Programme is six years.

#### 4. Tūtukitanga Whakamihi | Credit Recognition

#### 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

#### Credit Recognition complies with Unitec's

#### Assessment, Moderation and Grades Policy and associated procedure.

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.

#### 4.2 Aromatawai Tōmua | Assessment of Prior Learning (APL)

Assessment of Prior Learning is available for all courses in this programme. APL decisions will be made on a case-by-case basis under the United Assessment of Prior Learning Procedure.

#### 4.3 Ngā whakawhitinga | Credit Transfer

There are no credit transfer arrangements for this programme.

#### 5. Waeture Aromatawai | Assessment Regulations

#### 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.

# Assessment Regulations comply with Unitec's Assessment, Moderation and Grades Policy and associated procedure.

#### 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 3a: 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
В	Merit	Credits Earned	70 – 74
B-	Merit	Credits Earned	65 – 69
C+	Pass	Credits Earned	60 – 64
С	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

## **6.1** Ākoranga Aromatawai | Course Assessment Courses employ both formative and summative a

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.

Assessment
Procedures
comply with
Unitec's
Assessment
Moderation and
Grades Policy and
associated
procedure.

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 United Assessment in Te Reo Māori procedure and detailed in course material.

#### 6.3 Tāpaetanga Tōmuri | Submission and late submission of work

- a. The due dates for all summative assessment work will be notified at the commencement of each
- b. Any assessment that is submitted late (and does not have a prior approved extension) will be penalised by a deduction of 10% per day of the participants assignment mark, up to five (5) days, inclusive of weekends.
- c. Applications for extensions must be made by according to procedure noted in Student Handbooks and course documentation.
- d. Any extension will be carried out within a specified time period as agreed with the relevant academic authority and no further extensions will be granted.
- e. No assignment will be accepted five (5) days (inclusive of weekends) after the due date. If the assessment is not compulsory, the participants will receive a 'zero' grade for that assignment. If the assignment is compulsory, then the participants will receive a Did Not Complete (DNC) grade for the entire course.

#### 6.4 Whakamātautau Anō | Resubmission or Reassessment

A student may apply to undertake a resubmission/reassessment for a failed assessment which scored a 'D' grade, or between 45-49.9% within 5 days of receiving their marked assessment.

The following conditions apply:

- a. only one reassessment or resubmission per course.
- b. resubmission/reassessment is not available for any controlled assessments (i.e. tests, and examinations) with the exception of ISCG7411 and ISCG7412 where one reassessment is allowed for the final exam.
- c. Any approved resubmission/reassessment will be carried out within a specified time period as agreed with the relevant academic authority.

- d. In all cases for resubmission, the original marked assignment will accompany resubmitted assignments. If resubmitted work is not accompanied by the original marked assignment, the resubmitted work will not be marked and the original grade will stand.
- e. The maximum grade for any resubmission/reassessment of an assessment is the lowest pass grade.
- f. Assignments that are handed in late are not eligible for resubmission or reassessment.

#### 6.5 Āhuatanga Aromatawai Motuhake | Affected Performance Consideration

A student may apply for Affected Performance Consideration (APC) if:

- 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
- 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

There are no provisions for the award of a restricted pass in this programme.

#### **6.7 Tuaruatanga | Repeating Courses**

Students who are repeating a Level 1–8 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.

Students may enrol and repeat a course that they have failed only once. Permission to enrol for a third time is governed by Exclusion provisions below.

#### 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 in the same Course on two occasions 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.

#### **6.9 Examination Regulations**

All formal examinations in this programme are governed by the Unitec Examinations Regulations;

#### 6.10 Tono Pīra | Appeals

Students may appeal the 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 are maintained by the Programme Academic Quality Committee responsible for the Programme.

#### 8 Āhuatanga Tauwhirowhiro Ritenga | Transitional Arrangements

Any student who has failed a course that is no longer offered will complete an alternative course as negotiated with the Academic Programme Manager. No student will be adversely affected by these changes.

#### 9. Regulation Version Control

Ver No.	Approved by	Date of Change	Effective from	Description of change	
1.1				Various as described in previous iterations of Regulations.	
1.2	AACSC	09/08/2021	2022-Sem1	<ul> <li>Reformat regulations to remove reference to discontinued Bachelors Generic Regulations.</li> <li>Inactivate electives that are no longer offered and delete them from the programme - ISCG5422, HTCS5700, ISCG6400, ISCG6412, ISCG6413, ISCG7140, ISCG7141, ISCG7144, ISCG7145, ISCG7422, ISCG7436, ISCG7445, ISCG7446.</li> <li>Modify requisites to accommodate above changes, to remove obsolete inactive course references, and to simplify re-enrolment for students. Courses: ISCG7400, ISCG7401, ISCG7402, ISCG7407, ISCG7413.</li> <li>Remove obsolete restrictions from the following: ISCG5420, ISCG5421, ISCG6401, ISCG6402, ISCG6403, ISCG6404, ISCG6420, ISCG6421, ISCG6422, ISCG6423, ISCG6424, ISCG7142, ISCG7400, ISCG7401, ISCG7402, ISCG7410, ISCG7413, ISCG7414, ISCG7420, ISCG7421</li> </ul>	