

## ***New Zealand Diploma in Engineering [NZDE]***

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

These programme regulations apply to the New Zealand Diploma in Engineering [NZDE] programme, which leads to the award of New Zealand Diploma in Engineering (Level 6) qualification, with strands in Civil Engineering, Electrical Engineering and Electronic Engineering (240 Credits) [NZ2612-3].

These regulations come into effect from Semester 1, 2021.

### **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 (or provide a completed Early Release Exemption form), and meet the following requirements:

NCEA Level 2 (including a minimum of 10 literacy credits at level 1 or higher for those who achieved NCEA Level 2 before 2013); **and**

- A minimum total of 48 credits at level 2 in four subjects including at least 12 credits in mathematics (preferably achievement standards in algebra, calculus or trigonometry); **or**
- equivalent qualifications (e.g. International Baccalaureate or Cambridge); **or**
- equivalent credits from appropriate trades training and/or demonstrated skills and experience.

#### **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 described in <a href="#">NZQA Rules</a> and on the <a href="#">Unitec English Language Requirements for International Students</a> Web-page.																																																																								
<p><b>2. Paearu Kōwhiri Tukanga   Selection Criteria &amp; Process</b></p> <p><i>Selection Criteria and Processes comply with Unitec's Admission Requirements Guidelines.</i></p>	<p><b>2.1 Paearu Kōwhiri   Selection Criteria</b></p> <p>When the number of eligible applicants for admission exceeds the number of places available, the following selection criteria will be applied:</p> <ul style="list-style-type: none"> <li>• Previous academic achievement relevant to the Diploma programme, which may be determined through the use of a diagnostic assessment</li> <li>• Communication skills</li> <li>• Motivation to complete the programme</li> <li>• Life or work experience in, or appropriate to, the programme</li> <li>• Ability to participate in field work aspects of the programme where relevant.</li> </ul> <p>The professional judgment of academic staff involved will be used to determine those applicants who are judged to be the most appropriate for entry to the programmes</p> <p><b>2.2 Tukanga Kōwhiri   Selection Process</b></p> <p>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.</p>																																																																								
<p><b>3. Ngā Ture Hei Whakawhiwhi Tohu Mātauranga   Requirements for the Award of the Programme</b></p> <p><i>Requirements comply with Unitec's Programme Completion and Awards Policy and associated procedure.</i></p>	<p><b>3.1 Whakaemi Tūtukitanga   Credit Accumulation</b></p> <p>To be awarded the New Zealand Diploma in Engineering, a student must successfully complete a minimum of 240 credits in the pattern set out in Table 1a, b or c from the courses set out in Table 2a, b or c depending on the strand.</p> <p><b>Table 1a: Credit Requirements for New Zealand Diploma in Engineering (Civil Engineering Strand)</b></p> <table border="1" data-bbox="347 1039 1187 1272"> <thead> <tr> <th>Level</th> <th>Compulsory Credits</th> <th>Elective Credits</th> <th>Total Credits</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>75</td> <td></td> <td>75</td> </tr> <tr> <td>5</td> <td>75</td> <td></td> <td>75</td> </tr> <tr> <td>6</td> <td>30</td> <td>45</td> <td>75</td> </tr> <tr> <td>5 or 6</td> <td></td> <td>15</td> <td>15</td> </tr> <tr> <td></td> <td></td> <td></td> <td><b>240</b></td> </tr> </tbody> </table> <p><b>Table 1b: Credit Requirements for New Zealand Diploma in Engineering (Electrical Engineering Strand)</b></p> <table border="1" data-bbox="347 1368 1187 1601"> <thead> <tr> <th>Level</th> <th>Compulsory Credits</th> <th>Elective Credits</th> <th>Total Credits</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>75</td> <td></td> <td>75</td> </tr> <tr> <td>5</td> <td>75</td> <td></td> <td>75</td> </tr> <tr> <td>6</td> <td>45</td> <td>30</td> <td>75</td> </tr> <tr> <td>5 or 6</td> <td></td> <td>15</td> <td>15</td> </tr> <tr> <td></td> <td></td> <td></td> <td><b>240</b></td> </tr> </tbody> </table> <p><b>Table 1c: Credit Requirements for New Zealand Diploma in Engineering (Electronic Engineering Strand)</b></p> <table border="1" data-bbox="347 1697 1187 1930"> <thead> <tr> <th>Level</th> <th>Compulsory Credits</th> <th>Elective Credits</th> <th>Total Credits</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>75</td> <td></td> <td>75</td> </tr> <tr> <td>5</td> <td>75</td> <td></td> <td>75</td> </tr> <tr> <td>6</td> <td>45</td> <td>30</td> <td>75</td> </tr> <tr> <td>5 or 6</td> <td></td> <td>15</td> <td>15</td> </tr> <tr> <td></td> <td></td> <td></td> <td><b>240</b></td> </tr> </tbody> </table> <p><b>3.1.1 Selection of electives</b></p>	Level	Compulsory Credits	Elective Credits	Total Credits	4	75		75	5	75		75	6	30	45	75	5 or 6		15	15				<b>240</b>	Level	Compulsory Credits	Elective Credits	Total Credits	4	75		75	5	75		75	6	45	30	75	5 or 6		15	15				<b>240</b>	Level	Compulsory Credits	Elective Credits	Total Credits	4	75		75	5	75		75	6	45	30	75	5 or 6		15	15				<b>240</b>
Level	Compulsory Credits	Elective Credits	Total Credits																																																																						
4	75		75																																																																						
5	75		75																																																																						
6	30	45	75																																																																						
5 or 6		15	15																																																																						
			<b>240</b>																																																																						
Level	Compulsory Credits	Elective Credits	Total Credits																																																																						
4	75		75																																																																						
5	75		75																																																																						
6	45	30	75																																																																						
5 or 6		15	15																																																																						
			<b>240</b>																																																																						
Level	Compulsory Credits	Elective Credits	Total Credits																																																																						
4	75		75																																																																						
5	75		75																																																																						
6	45	30	75																																																																						
5 or 6		15	15																																																																						
			<b>240</b>																																																																						

The Elective courses within each discipline are to be selected from courses within the qualification with a coherent relationship to that discipline. In exceptional circumstances, an elective from outside the discipline or programme may be selected with approval from the Head of School.

### **NZDE Civil Engineering Strand**

Students must meet the following requirements:

- All common compulsory courses must be passed
- All civil strand compulsory courses must be passed
- The remaining credits are taken from civil elective courses but must include 45 credits at level 6
- Graduate outcomes and attributes have been met and are evidenced.

**Table 2a: Course Details – NZDE Civil Engineering Strand**

Compulsory courses are shown in **bold** and Elective courses in *italics*.

Level	Course No.	Course Name	Credits	Pre-requisites	Co-requisites
<b>Common Compulsory</b>					
4	<b>ENGGDE4101</b>	<b>Engineering Fundamentals</b>	<b>15</b>		
4	<b>ENGGDE4102</b>	<b>Engineering Mathematics 1</b>	<b>15</b>		
4	<b>ENGGDE4103</b>	<b>Technical Literacy</b>	<b>15</b>		
6	<b>ENGGDE6101</b>	<b>Engineering Management</b>	<b>15</b>	<b>Min 105 credits from NZDE</b>	
6	<b>ENGGDE6102</b>	<b>Engineering Project</b>	<b>15</b>	<b>ENGGDE4103 &amp; ENGGDE4201 &amp; ENGGDE5207 &amp; Minimum of 45 NZDE credits at Level 5</b>	
<b>Civil Discipline Compulsory</b>					
4	<b>ENGGDE4201</b>	<b>Materials (Civil)</b>	<b>15</b>		
4	<b>ENGGDE4202</b>	<b>Land Surveying 1</b>	<b>15</b>		
5	<b>ENGGDE5201</b>	<b>Structures 1</b>	<b>15</b>	<b>ENGGDE4101</b>	
5	<b>ENGGDE5202</b>	<b>Civil and Structural Drawing</b>	<b>15</b>	<b>ENGGDE4103</b>	
5	<b>ENGGDE5203</b>	<b>Hydraulics (Civil)</b>	<b>15</b>	<b>ENGGDE4101 &amp; ENGGDE4102</b>	
5	<b>ENGGDE5204</b>	<b>Highway Engineering 1</b>	<b>15</b>	<b>ENGGDE5207 &amp; ENGGDE4102</b>	
5	<b>ENGGDE5207</b>	<b>Geotechnical Engineering 1</b>	<b>15</b>		
<i>Electives (Four to be selected of which <b>three</b> must be at level 6)</i>					
5	<i>ENGGDE5205</i>	<i>Engineering Surveying</i>	<i>15</i>	<i>ENGG DE4202</i>	
5	<i>ENGGDE5206</i>	<i>Structures 2</i>	<i>15</i>	<i>ENGG DE5201</i>	<i>ENGG DE4102</i>
6	<i>ENGGDE6201</i>	<i>Geotechnical Engineering 2</i>	<i>15</i>	<i>ENGG DE5207</i>	
6	<i>ENGGDE6202</i>	<i>Highway Engineering 2</i>	<i>15</i>	<i>ENGG DE5204</i>	
6	<i>ENGGDE6203</i>	<i>Traffic Engineering</i>	<i>15</i>	<i>ENGG DE5204</i>	
6	<i>ENGGDE6204</i>	<i>Structures 3</i>	<i>15</i>	<i>ENGG DE5206</i>	
6	<i>ENGGDE6205</i>	<i>Water and Wastewater Systems</i>	<i>15</i>	<i>ENGG DE5203</i>	
6	<i>ENGGDE6206</i>	<i>Water and Waste Management</i>	<i>15</i>		<i>ENGGDE5203</i>
6	<i>ENGGDE6207</i>	<i>Land Surveying 2</i>	<i>15</i>	<i>ENGG DE4202</i>	
6	<i>ENGGDE6208</i>	<i>Civil Engineering and Construction Practices</i>	<i>15</i>		

### **NZDE Electrical Engineering Strand**

Student must meet the following requirements:

- All common compulsory courses must be passed

- All electrical strand compulsory courses must be passed
- Compulsory courses and electives (where relevant) for **one** specialisation must be passed
- The remaining credits are taken from the electives courses that align with chosen specialisation
- Graduate outcomes and attributes have been met and are evidenced.

**Table 2b: Course Details – NZDE Electrical Engineering Strand**

Compulsory courses are shown in **bold**

Level	Course No.	Course Name	Credits	Pre-requisites	Co-requisites
<b>Common Compulsory</b>					
<b>4</b>	<b>ENGGDE4101</b>	<b>Engineering Fundamentals</b>	<b>15</b>		
<b>4</b>	<b>ENGGDE4102</b>	<b>Engineering Mathematics 1</b>	<b>15</b>		
<b>4</b>	<b>ENGGDE4103</b>	<b>Technical Literacy</b>	<b>15</b>		
<b>6</b>	<b>ENGGDE6101</b>	<b>Engineering Management</b>	<b>15</b>	<b>Min 105 credits from NZDE</b>	
<b>6</b>	<b>ENGGDE6102</b>	<b>Engineering Project</b>	<b>15</b>	<b>ENGGDE4103 &amp; ENGGDE6101 &amp; Min of 45 NZDE credits at Level 5</b>	
<b>Electrical Discipline Compulsory</b>					
<b>4</b>	<b>ENGGDE4401</b>	<b>Electrical Principles</b>	<b>15</b>		
<b>4</b>	<b>ENGGDE4402</b>	<b>Electrical and Electronic Applications</b>	<b>15</b>	<b>ENGG DE4401</b>	<b>ENGGDE5403</b>
<b>5</b>	<b>ENGGDE5403</b>	<b>Electronic Principles</b>	<b>15</b>		
<b>And one of the following</b>					
<b>5</b>	<b>ENGGDE5408</b>	<b>Introduction to Networks</b>	<b>15</b>		
<b>5</b>	<b>ENGGDE5423</b>	<b>CAD Electrical</b>	<b>15</b>	<b>ENGG DE4401, ENGG DE5401</b>	
<b>Specialisation Compulsory</b>					
<b>5</b>	<b>ENGGDE5401</b>	<b>Power Engineering</b>	<b>15</b>	<b>ENGG DE4401</b>	<b>ENGG DE5403</b>
<b>5</b>	<b>ENGGDE5402</b>	<b>PLC Programming 1</b>	<b>15</b>		
<b>5</b>	<b>ENGGDE5404</b>	<b>Electrical Machines</b>	<b>15</b>	<b>ENGG DE4401 &amp; ENGGDE5403 &amp; ENGGDE4102</b>	

Electives for the Electrical Engineering Strand are chosen from either the Power Specialisation electives (Table 2b.i), or the Building Services Specialisation electives (Table 2b.ii) or the Instrumentation and Control Specialisation electives (Table 2b.iii).

Other electives are available within the electrical strand. Relevant courses start with DE54XX or DE64XX. An elective from outside the strand may be selected with approval from the Academic Programme Manager.

**Table 2b.i: Power Specialisation Courses for NZDE Electrical Engineering Strand**

Compulsory courses are shown in **bold**. Elective courses are shown in *italics*.

Level	Course No.	Course Name	Credits	Pre-requisites	Co-requisites
<b>Power Specialisation Compulsory</b>					
<b>6</b>	<b>ENGGDE6401</b>	<b>Power Systems 1</b>	<b>15</b>	<b>ENGGDE4401 &amp; ENGGDE4102</b>	
<b>Power Electives – three to be selected, of which <b>two</b> must be at level 6</b>					
<i>5</i>	<i>ENGGDE5418</i>	<i>Engineering Mathematics 2</i>	<i>15</i>	<i>ENGGDE4102</i>	
<i>6</i>	<i>ENGGDE6411</i>	<i>PLC Programming 2</i>	<i>15</i>	<i>ENGGDE5402</i>	
<i>6</i>	<i>ENGGDE6420</i>	<i>Protection</i>	<i>15</i>	<i>ENGGDE4401 &amp; ENGGDE4102</i>	
<i>6</i>	<i>ENGGDE6421</i>	<i>Sustainable Energy and Power Electronics</i>	<i>15</i>	<i>ENGGDE4401 &amp; ENGGDE5403 &amp; ENGGDE4102</i>	

6	ENGGDE6409	<i>Electrical Building Services</i>	15	ENGGDE5401 & ENGGDE5404	
---	------------	-------------------------------------	----	-------------------------	--

**Table 2b.ii: Building Services Courses for NZDE Electrical Engineering Strand**

Compulsory courses are shown in **bold**. Elective courses are shown in *italics*.

Level	Course No.	Course Name	Credits	Pre-requisites	Co-requisites
Building Services Specialisation Compulsory					
<b>6</b>	<b>ENGGDE6419</b>	<b>Maintenance Engineering Management</b>	<b>15</b>		
Building Services Electives – three to be selected, of which <b>two</b> must be at level 6					
5	<i>ENGGDE5415</i>	<i>Illumination Engineering</i>	15	<i>ENGGDE4401 &amp; ENGGDE5403</i>	
5	<i>ENGGDE5418</i>	<i>Engineering Mathematics 2</i>	15	<i>ENGGDE4102</i>	
6	<i>ENGGDE6411</i>	<i>PLC Programming 2</i>	15	<i>ENGGDE5402</i>	
6	<i>ENGGDE6409</i>	<i>Electrical Building Services</i>	15	<i>ENGGDE5401 &amp; ENGGDE5404</i>	

**Table 2b.iii: Instrumentation and Control Specialisation Courses for NZDE Electrical Engineering Strand**

Compulsory courses are shown in **bold**. Elective courses are shown in *italics*.

Level	Course No.	Course Name	Credits	Pre-requisites	Co-requisites
Instrumentation and Control Specialisation Compulsory					
<b>6</b>	<b>ENGGDE6419</b>	<b>Maintenance Engineering Management</b>	<b>15</b>		
Instrumentation and Control Electives – three to be selected, of which <b>two</b> must be at level 6					
5	<i>ENGGDE5417</i>	<i>Instrumentation / Controls 1</i>	15	<i>ENGGDE4101 &amp; ENGGDE4401 &amp; ENGGDE5403 &amp; ENGGDE4102</i>	
5	<i>ENGGDE5418</i>	<i>Engineering Mathematics 2</i>	15	<i>ENGGDE4102</i>	
6	<i>ENGGDE6409</i>	<i>Electrical Building Services</i>	15	<i>ENGGDE5401 &amp; ENGGDE5404</i>	
6	<i>ENGGDE6411</i>	<i>PLC Programming 2</i>	15	<i>ENGGDE5402</i>	
6	<i>ENGGDE6414</i>	<i>Instrumentation &amp; Controls 2</i>	15	<i>ENGGDE5415 &amp; ENGGDE4101 &amp; ENGGDE4401 &amp; ENGGDE5403 &amp; ENGGDE4102</i>	<i>ENGGDE6411 &amp; ENGGDE5417</i>

### **NZDE Electronic Engineering Strand**

Student must successfully complete the following requirements:

- All common compulsory courses must be passed
- All electronics strand compulsory courses must be passed
- Compulsory courses and electives (where relevant) for **one** specialisation must be passed
- The remaining credits are taken from the electives courses that align with chosen specialisation
- Graduate outcomes and attributes have been met and are evidenced.

**Table 2c: Course Details – NZDE Electronic Engineering Strand**

Compulsory courses are shown in **bold** and Elective courses in *italics*.

Level	Course No.	Course Name	Credits	Pre-requisites	Co-requisites
Common Compulsory					
<b>4</b>	<b>ENGGDE4101</b>	<b>Engineering Fundamentals</b>	<b>15</b>		
<b>4</b>	<b>ENGGDE4102</b>	<b>Engineering Mathematics 1</b>	<b>15</b>		
<b>4</b>	<b>ENGGDE4103</b>	<b>Technical Literacy</b>	<b>15</b>		
<b>6</b>	<b>ENGGDE6101</b>	<b>Engineering Management</b>	<b>15</b>	<b>Min 105 credits from NZDE</b>	

6	ENGGDE6102	Engineering Project	15	ENGG DE4103 & ENGG DE6101 & Min of 45 NZDE credits at Level 5	
Electronics Discipline Compulsory					
4	ENGGDE4401	Electrical Principles	15		
4	ENGGDE4402	Electrical and Electronic Applications	15	ENGG DE4401	ENGG DE5403
5	ENGGDE5403	Electronic Principles	15		
And one of the following					
5	ENGGDE5408	Introduction to Networks	15		
5	ENGGDE5423	CAD Electrical	15	ENGG DE4401, ENGG DE5401	
Electronics Specialisation Compulsory					
5	ENGGDE5405	Computer Programming 1	15		
5	ENGGDE5414	Electronic Manufacturing 1	15	ENGGDE5403	
5	ENGGDE6412	Computer Programming 2	15	ENGGDE5405	

Electives for the Electronic Engineering Strand are chosen from either the Electronics Specialisation electives (Table 2c.i), or the Computer Networking Specialisation electives (Table 2c.ii) or the Data Communications Specialisation electives (Table 2c.iii).

Other electives are available within the electrical strand. Relevant courses start with DE54XX or DE64XX. An elective from outside the strand may be selected with approval from the Academic Programme Manager.

**Table 2c.i: Electronics Specialisation Electives for NZDE Electronic Engineering Strand**

Elective courses are shown in *italics*.

Level	Course No.	Course Name	Credits	Pre-requisites	Co-requisites
Electronics Electives – 4 to be selected, of which <b>two</b> must be at level 6					
5	<i>ENGGDE5406</i>	<i>Microcontrollers 1</i>	15	<i>ENGGDE4103</i>	
5	<i>ENGGDE5407</i>	<i>Electronics 1</i>	15	<i>ENGGDE5403</i>	
5	<i>ENGGDE5418</i>	<i>Mathematics 2</i>	15	<i>ENGGDE4102</i>	
6	<i>ENGGDE6402</i>	<i>Electronics 2</i>	15	<i>ENGGDE5407</i>	
6	<i>ENGGDE6408</i>	<i>Electronic Manufacturing 2</i>	15	<i>ENGGDE5414</i>	
6	<i>ENGGDE6417</i>	<i>Microcontrollers 2</i>	15	<i>ENGGDE5406</i>	

**Table 2c.ii: Computer Networking Specialisation Electives for NZDE Electronic Engineering Strand**

Elective courses are shown in *italics*.

Level	Course No.	Course Name	Credits	Pre-requisites	Co-requisites
Computer Networking Electives – 4 to be selected, of which <b>two</b> must be at level 6					
5	<i>ENGGDE5409</i>	<i>PC Engineering *</i>	15		
5	<i>ENGGDE5410</i>	<i>Routing and Switching Essentials *</i>	15	<i>ENGGDE5408</i>	
5	<i>ENGGDE5418</i>	<i>Engineering Mathematics 2</i>	15	<i>ENGGDE4102</i>	
6	<i>ENGGDE6415</i>	<i>Scaling Networks *</i>	15	<i>ENGGDE5410</i>	
6	<i>ENGGDE6416</i>	<i>Connecting Networks *</i>	15	<i>ENGGDE6415</i>	
6	<i>ENGGDE6403</i>	<i>Network Operating Systems</i>	15	<i>ENGGDE5409</i>	
6	<i>ENGGDE6408</i>	<i>Electronic Manufacturing 2</i>	15	<i>ENGGDE5414</i>	

**\*Note:** for CCNA Certification students are required to have all courses marked with \* from Computer Networking

**Table 2c.iii: Data Communication Specialisation Electives for NZDE Electronic Engineering Strand**

Elective courses are shown in *italics*.

Level	Course No.	Course Name	Credits	Pre-requisites	Co-requisites
Data Communication Electives – 4 to be selected, of which <b>two</b> must be at level 6					
5	<i>ENGGDE5410</i>	<i>Routing and Switching Essentials</i>	15	<i>ENGGDE5408</i>	
5	<i>ENGGDE5420</i>	<i>Data Telecommunications Intermediate</i>	15	<i>ENGG DE5403 &amp; ENGG DE5408</i>	

6	ENGGDE6408	Electronic Manufacturing 2	15	ENGGDE5414	
6	ENGGDE6415	Scaling Networks	15	ENGGDE5410	
6	ENGGDE6416	Connecting Networks	15	ENGGDE6415	
5	ENGGDE5418	Engineering Mathematics 2	15	ENGGDE4102	

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

There are no integrated and 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 2 years (full-time study) or 4 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 six months. The maximum period to complete this Programme is 10 years.

### 3.5 Whakawhiwhi O Wānanga | Awarding institution

A student may enrol in courses at any institution with approval and accreditation to deliver the qualification. The student shall be awarded the diploma by the accredited institution at which they have been awarded the majority of the level 5 and level 6 credits.

The certificate will display the logos of the New Zealand Board for Engineering Diplomas (NZBED) and the accredited Tertiary Education Organisation (TEO) and be annotated as **New Zealand Diploma in Engineering (Strand)**. Each accredited provider will report annually to the NZBED the names of all graduates awarded the NZDE (Strand).

## 4. Tūtukitanga Whakamihhi | Credit Recognition

Credit Recognition in the NZDE includes credit transfer, cross credits, recognition of prior experiential learning, recognition of current competency, and assessment of prior learning. Each of these terms relates to previous qualifications and relevant experience. Credit Recognition will be used for new enrolments and for students who wish to transition from related qualifications.

*Credit Recognition complies with Unitec's Assessment, Moderation and Grades Policy and associated procedure.*

Up to 50% of the qualification may be awarded through Credit Recognition. A Tertiary Education Organisation (provider) may apply to NZBED for approval to award Credit Recognition for more than 50% of the qualification as it applies to students transitioning from existing qualifications. Applications for exemptions shall be considered by the NZBED Quality Assurance Committee.

For the capstone courses, DE6101 Engineering Management and DE6102 Engineering Project, Credit Recognition can only be granted by the Quality Assurance Committee (QAC) after considering a recommendation by a provider. In making its decision, the QAC will have regard to the type of evidence considered and the processes adopted by the provider in making the recommendation

### 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.

### 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 Unitec Assessment of Prior Learning Procedure.

**5. Waeture Aromatawai | Assessment Regulations**

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

The NZDE is a practical based qualification that aligns with the Dublin Accord. As such there is a requirement for assessment to be focused on the practical application of theoretical knowledge. The Assessment Schedules and weightings in the Course Descriptors are recommendations only and approved providers can vary from the assessment schedule providing the following rules apply:

- All courses will contain practical-based or applied assessment to a **minimum** weighting of 20% of the summative mark.
- Courses assessed by final examination will have **no more than 50% and no less than 40% of the final** summative mark assessed by examination (DE4103, DE4301 and DE5202 do not have final examinations).

Exemptions from this rule are:

- Courses assessed by **National Examination** – ALL providers must comply with the assessment schedule weightings as they are written in the Course Descriptors
- Capstone compulsory courses DE6101 Engineering Management and DE6102 Engineering Project.

Providers who wish to vary from the recommended assessment schedule are required to inform the NZBED by sending the Executive Officer outlines of how they will assess each course and these must be communicated to students in advance of delivery so that they are aware of how they will be assessed. Courses that are assessed by the National Exam will align with the recommended assessment schedule weighting.

In the two Level 6 compulsory courses DE6101 and DE6102, evidence of graduate attributes will also need to be assessed as per Course Descriptor.

**5.1 Paparahi Aromatawai | Assessment Basis**

Assessment in this programme is achievement based using an 11-point grading scale. Students must obtain at least 50% overall score in any achievement-based course in order to pass that course.

Students must achieve a minimum of 40% in both aggregated coursework marks and in any final examination, with an overall grade of C- (50%) or better to pass each course. Any deviation to this will be advised on the Course Descriptor.

**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.

**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
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 <sup>1</sup>	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.
<p><b>6. Aromatawai Mahinga   Assessment Procedures</b></p> <p><i>Assessment Procedures comply with Unitec's Assessment Moderation and Grades Policy and associated procedure.</i></p>	<p><b>6.1 Ākoranga Aromatawai   Course Assessment</b> 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.</p> <p>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.</p> <p><b>6.2 Aromatawai I Roto I Te Reo   Assessment in Te Reo</b> 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.</p> <p><b>6.3 Tāpaetanga Tōmuri   Submission and late submission of work</b></p> <ol style="list-style-type: none"> <li>The due dates for all summative assessment work will be notified at the commencement of each course.</li> <li>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.</li> </ol>		

- 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 assessment 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 assessment. If the assessment 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 be granted permission to undertake:

- a. a resubmission/reassessment for a failed assessment item within a 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. resubmission/reassessment is not available for any controlled assessments (i.e. tests, and examinations);
  - 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.

**Or**

- b. a reassessment for a failed course if they gained a mark of 40% or more in that course with the following conditions:
  - i. permission is granted on the recommendation of the relevant academic committee;
  - ii. any reassessment will be developed to reflect the learning outcomes of the course and their respective weightings;
  - iii. only one opportunity to undertake a reassessment of a course;
  - iv. reassessment is not available for any controlled assessments (i.e. tests, and examinations);
  - v. the reassessment must be taken within one month of the course end date;
  - vi. a student passing the reassessment will gain the minimum grade available as a pass in the course.

#### **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**

A restricted pass may be awarded in a course which was narrowly failed (which scored a minimum of 45%) and where there is ample evidence that marginal failure is compensated by good overall performance.

- a. A restricted pass is awarded at the discretion of the relevant academic authority and may not be applied for directly by a student.
- b. Restricted pass may not be awarded for the compulsory Level 6 courses ENGGDE6101 Engineering Management and ENGGDE6102 Engineering Project.

- c. The relevant academic authority may, at their discretion, use a restricted pass to set conditions for future performance in other courses prevent a student from using a restricted pass to meet the prerequisite requirements of another course.
- d. A student can graduate with one restricted pass only.
- e. A student may decline the award of a restricted pass by notifying the relevant academic authority in writing not later than 20 working days from notification of the results.

**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.

The coursework mark may only be carried through once. All coursework marks carried through must be reported to the NZBED Quality Assurance Committee annually.

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 Pira | 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 is maintained by the Programme Academic Quality Committee responsible for the Programme.

**7.2 Āhuatanga Tauwhirowhiro Ritenga | Transitional Arrangements**

Accredited providers will ensure that transition arrangements from previous Engineering Diplomas comply with the provider’s Quality Management System.