

## Snowmaking/Snowgrooming qualification matrix

New Zealand Certificate in Snowmaking (Level 3) (40 credits)		New Zealand Certificate in Snowgrooming (Level 4) (40 credits)	
<b>Strategic Purpose Statement</b>	<p>This qualification is designed to provide the snowsport industry with individuals who are competent as entry level snowmakers operating snowmaking equipment at a snowsport area or in a mountain environment.</p> <p>Graduates will work as Snowmakers under the supervision of a shift leader or supervisor.</p> <p>Graduates will contribute to the cultural, social and economic wellbeing of Aotearoa New Zealand.</p>		<p>This qualification is designed to provide the snowsport industry with individuals who can be employed as snowgroomers who can prepare and maintain trails and slopes at a snowsport area or in a mountain environment, while operating under indirect supervision.</p> <p>Graduates will contribute to the cultural, social and economic wellbeing of Aotearoa New Zealand.</p>
<b>Graduate profile</b>	<p>Graduates of this qualification will be able to:</p> <ul style="list-style-type: none"> <li>– Operate a range of snowmaking equipment in various weather conditions</li> <li>– Undertake basic maintenance on snowmaking equipment</li> <li>– Apply knowledge of the different components of snowmaking systems in order to operate snowmaking equipment</li> <li>– Apply knowledge of weather and natural terrain to optimise snowmaking production and quality</li> <li>– Apply safe working procedures and practices while operating in a variety of weather and snowsport area conditions.</li> </ul>		<p>Graduates of this qualification will be able to:</p> <ul style="list-style-type: none"> <li>– Identify and apply knowledge of the components of a snowgroomer</li> <li>– Maintain personal safety, identify hazards, and apply safe working practices including operating at night and in adverse weather conditions</li> <li>– Operate a snowgroomer to produce and maintain a consistent quality surface</li> <li>– Apply understanding of weather, terrain, and the nature of the snowpack to establish how it influences the operating envelope of the machine and grooming requirements.</li> </ul>
<b>Education pathway</b>	<p>This qualification may build on the:</p> <ul style="list-style-type: none"> <li>– New Zealand Certificate Alpine Resorts Operations (Level 3)</li> <li>– New Zealand Certificate in Tourism (Visitor Experience) (Level 3).</li> </ul> <p>The qualification provides a pathway to the:</p> <ul style="list-style-type: none"> <li>– New Zealand Certificate in Snowgrooming (Level 4).</li> </ul>		<p>This qualification builds on the:</p> <ul style="list-style-type: none"> <li>– New Zealand Certificate in Snowmaking (Level 3).</li> </ul> <p>Graduates may choose to pathway to the:</p> <ul style="list-style-type: none"> <li>– New Zealand Certificate in Business (First line Management)</li> <li>– New Zealand Diploma in Business (Management and Leadership strand).</li> </ul>
<b>Employment pathway</b>	<p>Holders of this certificate will be able to work as snowmakers within New Zealand ski fields or snowsport areas.</p>		<p>Holders of this qualification will have the skills and knowledge to undertake snowgrooming within New Zealand ski fields or snowsport areas.</p> <p>Note: Employment as a snowgroomer will likely require the graduate to hold a Tracks (T) endorsement on their New Zealand driver's licence for the use of special-type vehicles that run on self-laying tracks.</p>
<b>General conditions</b>	<p>TEOs must have a relationship with a snowsport area to ensure graduates are given opportunities to practice and demonstrate competence within realistic workplace settings. Learners should have exposure and experience at a snowsport area.</p>		<p>TEOs must have a relationship with a snowsport area to ensure graduates are given opportunities to practice and demonstrate competence within realistic workplace settings. Learners should have exposure and experience at a snowsport area.</p>
<b>Replacement info</b>	<p>This qualification and the New Zealand Certificate in Snowgrooming (Level 4) replaced the:</p> <ul style="list-style-type: none"> <li>– National Certificate in Snowsport with strands in Snowgrooming, and Snowmaking (Level 3) [Ref: 0848].</li> </ul>		<p>This qualification and the New Zealand Certificate in Snowmaking (Level 3) replaced the:</p> <ul style="list-style-type: none"> <li>– National Certificate in Snowsport with strands in Snowgrooming, and Snowmaking (Level 3) [Ref: 0848].</li> </ul>
<b>GPO1</b>	Operate a range of snowmaking equipment in various weather conditions <b>(10 credits)</b>		Identify and apply knowledge of components of a snowgroomer <b>(5 credits)</b>
<b>Conditions</b>	<p>Programmes should include the following:</p> <ul style="list-style-type: none"> <li>– Operating parameters of a range of snowmaking equipment</li> <li>– Manufacturers' operating instructions</li> <li>– Starting up, operating and shutting down snowmaking equipment</li> <li>– Positioning and setting up snowmaking equipment on the mountain</li> <li>– Monitoring and optimising snow production and quality</li> <li>– Knowledge of product and production goals in relation to time of season</li> <li>– Active listening and positive communication skills to follow instructions.</li> </ul>		<p>Programmes should include the following:</p> <ul style="list-style-type: none"> <li>– Applying knowledge of manufacturers' safety and operational specifications</li> <li>– Understanding the functions of snowgroomer components</li> <li>– Performing pre and post operational checks including completing log books</li> <li>– Knowledge of lubricant type and points and fluid requirements</li> <li>– Completing regular maintenance checks</li> <li>– Recognising and trouble-shooting faults.</li> </ul>

<b>GPO2</b>	Undertake basic maintenance on snowmaking equipment <b>(7 credits)</b>	Maintain personal safety, identify hazards, and apply safe working practices including operating at night and in adverse weather conditions <b>(10 credits)</b>
<b>Conditions</b>	<p>Programmes should include the following:</p> <ul style="list-style-type: none"> <li>– Manufacturers' maintenance specifications</li> <li>– Maintenance checking procedures and undertaking minor repairs</li> <li>– Applying appropriate methods of de-icing</li> <li>– Responding appropriately to basic faults and performing trouble-shooting.</li> </ul>	<p>Programmes should include the following:</p> <ul style="list-style-type: none"> <li>– Understanding employer and personal responsibilities for health and safety including awareness of relevant legislation and organisational safety policies and procedures, and emergency procedures including the identification, reporting and appropriate mitigation of risks and hazards</li> <li>– Role modelling and use of appropriate personal safety equipment and safe behaviours</li> <li>– Procedures for hazardous weather and snow conditions</li> <li>– Being spatially aware.</li> </ul>
<b>GPO3</b>	Apply knowledge of the different components of snowmaking systems in order to operate snowmaking equipment <b>(10 credits)</b>	Operate a snowgroomer to produce and maintain a consistent quality surface <b>(15 credits)</b>
<b>Conditions</b>	<p>Programmes should include the following:</p> <ul style="list-style-type: none"> <li>– Water supply, water pressure, pump system/s, air compressors</li> <li>– Power and communications lines</li> <li>– Range of control systems.</li> </ul>	<p>Programmes should include the following:</p> <ul style="list-style-type: none"> <li>– Grooming in a range of weather and snow conditions</li> <li>– Efficiency of grooming practices in relation to terrain and snowsport area requirements</li> <li>– Competent use of blade and tiller implements</li> <li>– Awareness and application of manufacturer's operating instructions</li> <li>– Knowledge of underlying terrain, snow movement and slope maintenance.</li> </ul>
<b>GPO4</b>	Apply knowledge of weather and natural terrain to optimise snowmaking production and quality <b>(8 credits)</b>	Apply understanding of weather, terrain, and the nature of the snowpack to establish how it influences the operating envelope of the machine and grooming requirements <b>(10 credits)</b>
<b>Conditions</b>	<p>Programmes should include the following:</p> <ul style="list-style-type: none"> <li>– Weather conditions and their influence on snowmaking</li> <li>– Adjusting snowmaking equipment in relation to various weather conditions</li> <li>– Optimal placement of snowmaking equipment in relation to terrain</li> <li>– Monitoring snow qualities and consistency and snowsport area requirements.</li> </ul>	<p>Programmes should include the following:</p> <ul style="list-style-type: none"> <li>– Apply understanding of the impact of weather conditions on snowpack and manage grooming requirements in response</li> <li>– Knowledge of natural and man-made terrain, features, and snow conditions and their differences in relation to grooming practice</li> <li>– Understanding and responding to machine limitations in relation to weather conditions and snowpack</li> <li>– Making appropriate decisions in relation to a range of snow and weather conditions</li> <li>– Knowledge of, and appropriate use of, snowgrooming techniques in relation to conditions.</li> </ul>
<b>GPO5</b>	Apply safe working procedures and practices while operating in a variety of weather and snowsport area conditions <b>(5 credits)</b>	
<b>Conditions</b>	<p>Programmes should include the following:</p> <ul style="list-style-type: none"> <li>– Employer and personal responsibilities for health and safety including awareness of relevant legislation</li> <li>– Weather interpretation</li> <li>– Natural terrain and operations of the snowsport area</li> <li>– Positive communication skills and teamwork skills that support the safety of self and others</li> <li>– Securing snowmaking equipment and installing safety fences, safety pads, and signs</li> <li>– Using appropriate safety equipment, personal protective equipment and safe behaviours for work practices</li> <li>– Using appropriate methods of safe personal movement in relation to conditions and terrain.</li> </ul>	