What are Viticulture and Oenology?

Viticulture refers to the practice and study of vine growing and grape cultivation and is a branch of horticultural science. It encompasses grape production (including biology, chemistry and soils), technical aspects of grape production and processing, and vineyard management and systems. Oenology is the general study of wine and winemaking.

The wine industry is broad and multifaceted, encompassing many different roles. Many graduates aspire to make wine, or simply have a career in which they can connect with the land. Understanding the processes involved from the vineyard, through the production process to sales and commercial aspects, equips practitioners with a broad perspective and a range of practical and technical skills that are highly valued in both the domestic and international markets.
Viticulture and oenology in New Zealand and the world

New Zealand has a thriving wine industry and wine represents a significant export sector. The diverse soil types and relatively cool New Zealand climate produces a range of wine styles lauded for both taste and technically proficient production. New Zealand wines and winemakers are sought after both domestically and internationally. Viticulturists and other specialist positions are frequently on the skill shortage list for New Zealand (in the Canterbury, upper South Island and Otago/Southland regions).

Graduates who wish to work in specialist positions often require experience, which can be gained by working in one of the many wine-related industries in New Zealand and around the world. Associated industries include brewing, distilling, and the production of niche products, such as organic wines, all of which are growth industries in New Zealand. Wine tourism is another growth industry where graduates can make their mark.

Skills and knowledge developed by studying viticulture and oenology

The types of skills gained by studying viticulture and oenology are highly valued by employers. Lincoln University qualifications in viticulture and oenology integrate the technical aspects of grape growing and winemaking with practical skills so that graduates have a working knowledge of the process from grape to the bottle and beyond. Wherever graduates end up in the wine industry, their scientific knowledge across the spectrum of grape growing (and vine management) to the end product (wine production), is what differentiates them. This, coupled with the experience that graduates gain from working in a commercial situation, places Lincoln graduates in a good position to make their mark in the industry.

Many of the skills gained during study – while specific to wine and the wine production industry – are applicable in other primary production sectors (such as, for example, horticulture and forestry).

Employers seek well-rounded, engaged graduates with a strong work ethic. As in any sector, employers value those with a professional attitude. This includes good communication (including the ability to communicate to groups, as well as effective interpersonal and written communication), honesty, self-motivation, initiative, time management, and flexibility. The importance of these basic skills cannot be underestimated, even in voluntary or internship roles, as future job opportunities often arise from a good reputation and a varied network of contacts.

Skills and knowledge valued in viticulture and oenology roles

- Data collection, analysis and communication
- Use of biometric techniques
- Practical aspects of pest and disease management
- Good grasp of basic sciences and research
- Scientific assessment of crops and conditions (including soil testing)
- Collaborative approaches to problem solving
- Systematic thinking/decision making
- Critical/analytical thinking skills
- Knowledge of wine propagation
- Principles of wine science (including all steps in grape-to-wine processing)
- Knowledge of grape varieties and properties
- Knowledge of cellar techniques
- Wine processing/making/storing
- Industry-specific certification (e.g., Growsafe, first aid, and/or chemical handler certificate, forklift and/or heavy vehicle licence, as required)
Where can viticulture and oenology graduates find work?

The pool of available employment on both large and small wineries in New Zealand is large, diverse and spread New-Zealand wide. Internationally, New Zealand winemakers are highly sought after.

The wine industry works closely with allied industries (e.g., tech industries, rural support, mechanical and engineering firms, transport, bottling, commercial and business support) that support and enable growth in this sector. Allied industries offer positions where viticulture and oenology skills can be used alongside other skills such as commerce or management, research and development, or as entry level positions for exposure to the industry. Finding work in these allied industries can be the gateway to a long-term career in wine. Graduates who consider starting roles in allied industries as part of career development are often well placed for their dream job further down the line.

Places of employment for viticulture and oenology graduates include:
- Vineyards/ wineries (e.g., Pegasus Bay, Black Estate)
- Cellar door retail and hospitality (e.g., Wither Hills, Kim Crawford)
- Industry organisations (e.g., Horticulture New Zealand)
- Government departments (e.g., Ministry for Primary Industries (MPI), NZ Trade and Enterprise (NZTE), NZ Winegrowers)
- Research organisations (e.g., Plant and Food Research, Bragato Research Institute)
- Tertiary education sector (e.g., Lincoln University)
- Vineyard consultancies (e.g., Vine Managers)
- Vineyard contracting (e.g., Irrigation Services)
- Vineyard management (e.g., Berakah Vineyard Management)
- Wine tourism (e.g., New Zealand Wine Tours)
- HR consultancies and recruitment (e.g., Wine Jobs Online)
- Wine publications/ wine writing (e.g., WineNZ, NZ Winegrower, or columnist for a regional newspaper)

Viticulture and oenology job titles

- Academic Lecturer
- Buyer/ Exporter
- Bottling Line Worker
- Cellar Hand/ Cellar Door Sales
- Harvest/ Vintage Crew Member
- Horticultural/ Winery Tour Guide
- Laboratory Technician/ Manager
- Marketing Manager
- Mechanical Harvester/ Operator
- Packaging Operator
- Promotions/ Publicity Coordinator
- Quality Control Technician
- Retail Merchandiser
- Researcher
- Sales Representative
- Sanitation Operator
- Sommelier/ Wine Educator
- Sustainability Development Specialist
- Vineyard Hand/ Leading Hand
- Vineyard Manager
- Vineyard Owner/ Operator
- Viticultural Contractor
- Viticultural Technician
- Viticulturist (grape grower)
- Wine Club Representative
- Wine or Brewing Manager
- Wine Representative/ Ambassador
- Wine Writer/ Taster
- Winemaker/ Assistant Winemaker
Pay rate indications: full time equivalent (FTE) $NZ per annum\(^1\)

Most starting salaries for graduates of bachelor degrees fall between 50,000 - 70,000. Entry level jobs are stepping stones to roles with increased responsibilities and remuneration. Your employability is enhanced by all of your life experiences, be they employment related, or the transferable skills and competencies gained from community involvement, volunteer work, or previous work or study - all of which can grow competency, expand networks, and demonstrate enthusiasm to future employers.

<table>
<thead>
<tr>
<th>Job title</th>
<th>Indicative rate</th>
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</thead>
<tbody>
<tr>
<td>Cellar Hand/ Cellar Door Sales</td>
<td>45,000 - 70,000</td>
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<tr>
<td>Quality Control Technician</td>
<td>45,000 - 80,000</td>
</tr>
<tr>
<td>Viticulturist</td>
<td>45,000 - 130,000</td>
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<tr>
<td>Retail Merchandiser</td>
<td>45,000 - 115,000</td>
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<tr>
<td>Vineyard Supervisor/ Manager</td>
<td>55,000 - 180,000</td>
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<tr>
<td>Viticultural Technician</td>
<td>45,000 - 85,000</td>
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<tr>
<td>Viticulture/ Horticulture Field Representative</td>
<td>55,000 - 120,000</td>
</tr>
<tr>
<td>Sustainability Development Specialist</td>
<td>50,000 - 150,000</td>
</tr>
<tr>
<td>Laboratory Technician</td>
<td>45,000 - 70,000</td>
</tr>
<tr>
<td>Marketing Specialist</td>
<td>55,000 - 170,000</td>
</tr>
<tr>
<td>Winemaker</td>
<td>45,000 - 210,000</td>
</tr>
</tbody>
</table>

\(^1\) Rates sourced from SEEK, MBIE, Careers NZ, Universities NZ, PayScale, PQOS survey data

Starting salaries for graduates are typically at the low end of the scale but can move quickly if employees show commitment and capability in their roles. Seasonal work demands flexibility and sometimes very long hours (up to 100 hours per week during the harvest in some roles). The following pay rates reflect this situation.

### Viticulture and oenology tasks

The following lists outline tasks associated with viticulture and winemaking roles.

#### a) Viticulture tasks

- Pest and disease monitoring
- Yield prediction
- Grape maturity sampling
- Tractor/ harvester operation
- Fungicide application
- Data collection and reporting
- Harvest logistics
- Canopy management
- Grower/ winery liaison
- Pruning/ trellising
- Staff management

#### b) Winemaking tasks

- Date of harvest
- Grape crushing/ pressing
- Monitoring pumps and equipment
- Monitoring ferments
- Cap management
- Barrel topping
- Quality control
- Tasting
- Blending
- Management of staff
- Logistics

Job tasks are role-specific, so the above is an indication only. For more information on roles, registered Lincoln University students can search LU Career Centre (online) for job titles similar to those they are interested in. Job descriptions, including tasks and skills required, are often available.
Industry bodies

Membership of an industry specific body enhances the professional status of graduates. By joining a professional body, members can research career options, access training and events, and network and collaborate with industry colleagues at all levels.

In some roles, registration with, or membership of, a professional body is compulsory.

Examples of viticulture and oenology industry bodies include:

New Zealand Society for Viticulture and Oenology
www.nzsvo.org.nz

Horticulture New Zealand
www.hortnz.org.nz

Royal New Zealand Institute of Horticulture
www.rnzih.org.nz

New Zealand Institute of Agricultural and Horticultural Science
www.agscience.org.nz

Irrigation New Zealand
www.irigationnz.co.nz

New Zealand Society of Soil Sciences
www.nzsss.science.org.nz

New Zealand Winegrowers
www.nzwine.com

Fruit Wine and Cider Makers of New Zealand
www.nzfruitwines.org.nz

NZ Sommeliers Professional Association
www.sommelier.co.nz

Find out more:

Career Centre
Learning, Teaching and Library
E: lucareercentre@lincoln.ac.nz