

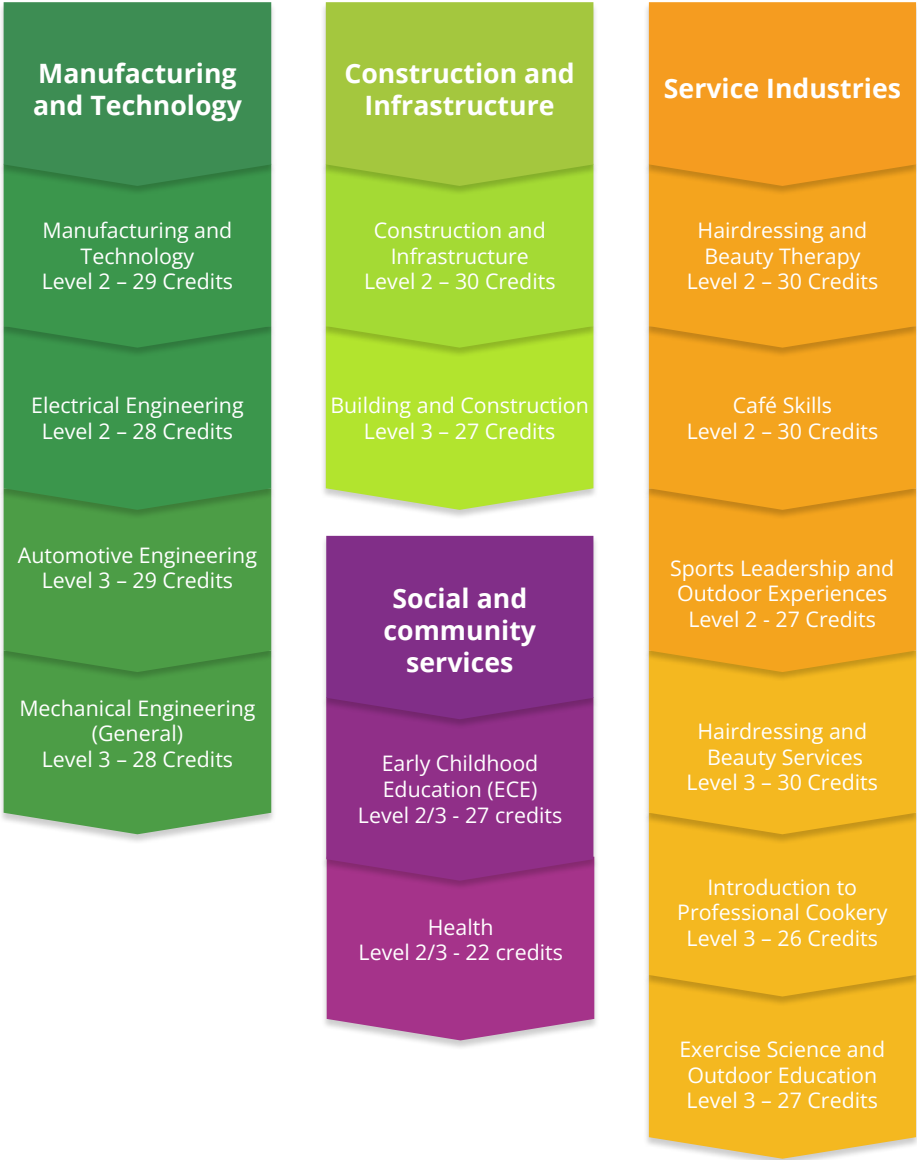
# Waikato Trades Academy

Course Guide 2025



# Waikato Trades Academy

## Vocational Pathways





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## Disclaimer

The information contained in this booklet is correct at the time of publishing (September 2024). Wintec (Waikato Institute of Technology) reserves the right to cancel or postpone any of the programmes and shall not be liable for any claim other than the proportion of programme fees which the cancelled portion bears. Some programmes may be dependent upon formal approval from NZQA, Tertiary Education Commission funding allocation, and the number of enrolments. As part of the New Zealand Qualifications Authority (NZQA) targeted review of all Level 1-6 New Zealand qualifications, there may still be changes to some programmes. Fees, programmes, entry and selection criteria, and dates, are subject to change. Please check the relevant programme pages at [www.wintec.ac.nz](http://www.wintec.ac.nz) for up-to-date information and full entry regulations before applying to enrol.

# Welcome to Wintec

Mā te mātauranga, te rangahau, me te whai mahi e ora ai te iwi.

Our mission is to build stronger communities through education, research, and career development.

Here at Wintec, we offer free industry-related youth programmes and experiences as a great way to earn NCEA credits. You will get to experience a feel for tertiary study, while you are still at school.





# Our campuses

Depending on what you study, you will be based at one of our three main campuses in Hamilton, or at one of our two smaller campuses around the Waikato region.

## Hamilton City Campus

The Hamilton City Campus is located in the heart of the CBD. There are a variety of food outlets throughout the campus, with eateries, shops, the Waikato River, Hamilton's Lake Rotoroa, and public transport just a short walk away. There is also student accommodation on-site.

## Hamilton Rotokauri Campus

The majority of our programmes are based at the Rotokauri Campus. Located in the north part of the city, students learn in some of the best purpose-built facilities in New Zealand, and have the chance to meet at the student hub with access to a library, computers, and great food and coffee.

## Hamilton Gardens Campus

The award-winning Hamilton Gardens are home to our third Hamilton campus. Here students have the unique opportunity to study programmes such as arboriculture, horticulture, and landscape design/construction in a hands-on, inspiring garden setting.





# Still at high school?

## **Waikato Trades Academy**

The Waikato Trades Academy (WTA) is a secondary-tertiary partnership, which allows high school students in Year 11, 12 or 13 to study at Wintec while still at school, providing students with the benefits of both worlds. The academy provides the sector-related credits required to earn a Pathway Award on NCEA Level 2 and NCEA Level 3 qualifications. More information about this can be found at [www.wintec.ac.nz/wta](http://www.wintec.ac.nz/wta).

## **Secondary-tertiary alignment resource (STAR)**

If you are a secondary student considering your post-school options, a STAR taster course may be right for you. STAR courses are available to Year 10 to Year 13 students. They aim to showcase a particular career or qualification. STAR experiences are typically one-day-long but may be up to five in some instances. Some STAR courses also have unit standards attached.

There is a range of STAR courses available. Talk to your school's careers advisor to book your place, or visit the STAR webpage for more information at [www.wintec.ac.nz/star](http://www.wintec.ac.nz/star).

Career advisors - please email [star@wintec.ac.nz](mailto:star@wintec.ac.nz) to book on behalf of your students.

## **Open Day**

Each year, we host potential students for the Wintec Open Day. This is your chance to speak with tutors, take a tour, and get involved in hands-on activities.

# Create your future

When considering your future, it is a good idea to think about what truly makes you tick. Do you enjoy communicating with people? Do you love creating new things? Or perhaps you like helping people in their time of need.

The six pathways help you understand the type of job and career path that may suit you.

These pathways provide ways to achieve NCEA Levels 1, 2, and 3, and develop ways to progress to further study, training, and employment.

They provide a framework for students to show how their learning and achievement is valued in the workplace by aligning them to the relevant skills needed for industry.

Visit [youthguarantee.education.govt.nz](http://youthguarantee.education.govt.nz) for more information.

## Introducing the six pathways



### Social & Community Services

Ratonga Pāpori,  
Ratonga Hapori



### Construction & Infrastructure

Te Mohi Hanga me  
te Pūtoi Hanga



### Manufacturing & Technology

Te Whakanao me te  
Hangarau



### Primary Industries (Food & Fibre)

Ahumahi  
Matua



### Service Industries

Ahumahi  
Rotonga



### Creative Industries

Ahumahi  
Auzha



# How Waikato Trades Academy (WTA) works

## **Year 11 or 12**

You can start studying at Wintec with WTA. In discussion with your career advisor, you will choose one of the available pathways.

In year one, we will provide you with a broad introduction to your chosen pathway. You will attend Wintec between 30 to 33 days during the year depending on your programme of choice. While studying at WTA, you can achieve credits towards NCEA Level 2. The hours are from 8:30am–3pm.

## **Year 12 or 13**

In discussion with your career advisor, you will continue your secondary school studies and your second year of WTA.

You will specialise in one career pathway and attend Wintec between 30 and 33 days during the year. You will study at Level 2 or 3 and gain credits towards your chosen career pathway. This year will include some self-directed learning. Some programmes may include work experience in the industry.

You must be aged 15 or over at the start of the calendar year, be enrolled in a secondary school, and be in Year 11, 12 or 13.

Adult students and school leavers are not eligible for the Waikato Trades Academy. If you are turning 15 between January and March, contact WTA to discuss possible options.

Programmes are subject to minimum numbers. Some programmes are restricted to maximum numbers of students due to teaching space restrictions.

## **Graduating from WTA**

After completing the two-year WTA programme you may:

- Achieve NCEA Level 2 or 3 at school, with a Pathway Award.
- Follow previous WTA students into higher level study at Wintec, or have the skills to move into an apprenticeship or employment.

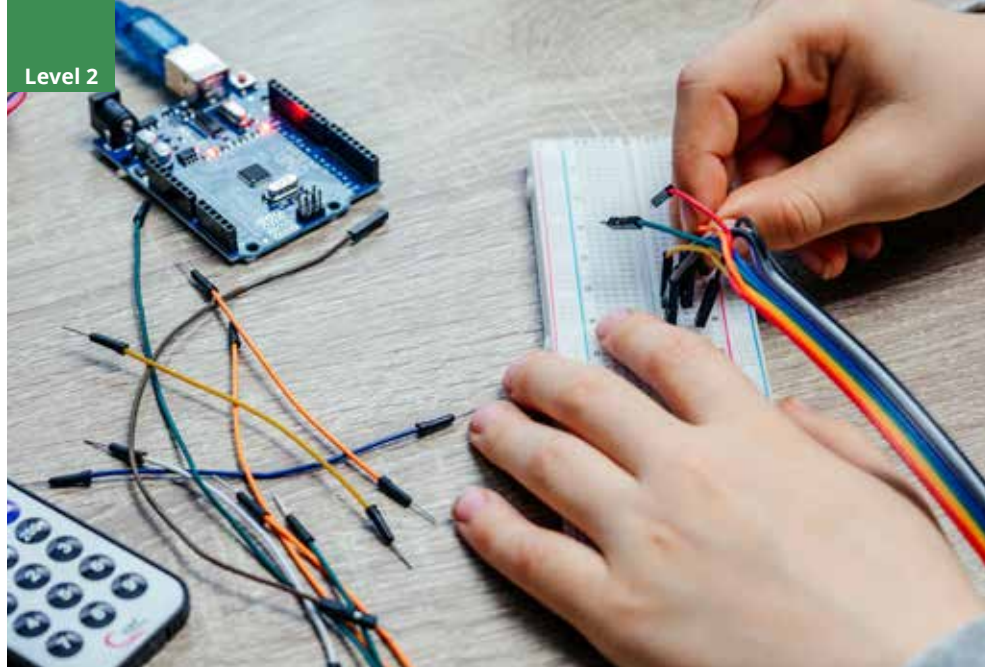
# Manufacturing and Technology

Do you have an interest in making things work? Are you able to think outside the square? If so, this may be the pathway for you.

In this Level 2 course, you will build a project gaining knowledge in a variety of skills relating to automotive, electrical, and mechanical engineering. Personal protective gear will be provided.

**Location: Hamilton Rotokauri Campus, Kopu Campus, Ōtorohanga Campus**

Level 2	31 Weeks	Credits
<b>Automotive</b>		
229	Identify the general locations and functions of motor vehicle systems and main components	4
21688	Demonstrate knowledge of disassembling and reassembling a four stroke multi-cylinder engine	3
21718	Demonstrate knowledge of hazardous materials used in the motor and related industries	2
21671	Carry out general engineering tasks in the automotive industry	4
<b>Electrical</b>		
15849	Perform manual soldering and de-soldering procedures for electrotechnology work	2
5922	Use cutting tools and machines in the performance of electrical installation and maintenance	2
<b>Engineering</b>		
29730	Apply good work practices when performing basic fabrication operations under supervision	6
02395	Select, use, and care for, engineering hand tools	4
21911	Demonstrate knowledge of safety on engineering worksites	2
<b>Total NZQA Credits</b>		<b>29</b>



# Electrical Engineering

In this Level 2 course, our tutors will lead you through a range of entry-level electrical and electronic projects.

You will design basic electrical circuits; experience soldering (binding electrical parts together); and create usable electronic products from a supplied circuit schematic. You will be taught how to operate carefully within a safe working environment. Personal protective gear will be provided.

## Location: Hamilton Rotokauri Campus

Level 2	31 Weeks	Credits
5911	Basic magnetism and electromagnetism	1
5922	Cutting tools and machines	2
6626	Electrical and electronic components	3
18239	Circuit concepts and measurements	5
18241	Basic electronic systems	5
18243	Construct simple electronic products	6
23751	Electrical calculations and theory	6
Total NZQA Credits		28



# Construction and Infrastructure

## Do you enjoy working with others in a team?

Gain an insight into the areas of trade construction and infrastructure with this Level 2 course. Hands-on and practical, you will gain knowledge and a variety of skills relating to construction such as building, plumbing, and electrical engineering. This course provides you with entry-level skills that you can take with you into the next level of study or work within the fields of construction and infrastructure. Personal protective gear will be provided.

**Location: Hamilton Rotokauri Campus, Kopu Campus, Ōtorohanga Campus**

Level 2	31 Weeks	Credits
<b>Electrical</b>		
5907	Work safely with electrical equipment	1
15849	Perform manual soldering and de-soldering procedures for electrotechnology work	2
15852	Isolate and test low-voltage electrical subcircuits	2
<b>Plumbing</b>		
30557	Select, describe, use, and maintain tools for plumbing or drainlaying jobs	4
17593	Apply safe work practices in the workplace	4
25414	Cut and join sheet metal for plumbing and gasfitting components	2
<b>Building</b>		
24354	Demonstrate knowledge of and apply safe working practices in a BCATS environment	4
24361	Apply mathematical processes to BCATS projects	3
12936	Construct a non-consent timber framed utility building as a BCATS project	8
<b>Total NZQA Credits</b>		<b>30</b>

# Service Industries (Level 2)

Are you a people person? Do you have an interest in beauty therapy, hairdressing, or cafés and restaurants? If so, this could be the pathway for you.

Whilst on these courses you will not only gain entry level skills that align with NCEA level 2, but skills employers are looking for that are required by industry.

## Hairdressing and Beauty Therapy

Enjoy hands-on and practical learning while you develop key hairdressing and beauty therapy competencies throughout this 31-week programme.

You will cover topics including preparing hair for hairdressing; basic principles in workplace requirements in the salon; protecting the client for hairdressing; assisting an operator; sustainability concepts for the salon; maintaining and ordering supplies; providing client service and care, maintaining personal presentation; current fashion trends; and anatomy and physiology knowledge for beauty therapy.

**Location: Hamilton Rotokauri Campus, Kopu Campus**

Level 2	31 Weeks	Credits
<b>Hairdressing</b>		
21940	Workplace requirements in a salon	5
21941	Prepare hair for hairdressing	2
21936	Protect the client for hairdressing and prepare hair for hairdressing	1
21937	Assist an operator	4
25439	Sustainability concepts for a salon	2
<b>Beauty Therapy</b>		
27637	Maintain order and supplies	4
27638	Provide client service and care	3
27639	Key concepts and maintain personal presentation	3
27640	Current fashion trends and history	3
27641	Anatomy and physiology knowledge	3
<b>Total NZQA Credits</b>		<b>30</b>



# Café Skills

Gain a variety of hands-on skills and an NCEA Level 2 qualification that will allow you to progress in your chosen food, beverage, or hospitality career.

You will learn to work in commercial kitchens and in restaurant-service settings at Windows, the Wintec restaurant. Our tutors will lead you through preparing and applying icing and glazing to bakery products, practising food safety methods, and preparing and baking basic breads.

As part of the food and beverage training, you will learn to provide table-service, and prepare and serve hot and cold non-alcoholic drinks, and use espresso equipment. Personal protective gear will be provided.

## Location: Hamilton Rotokauri Campus

Level 2	31 Weeks	Credits
14721	Prepare and apply icings and glazes to bakery products	6
167	Practise food safety methods	4
23083	Prepare and bake basic breads	4
14436	Provide table service	4
14425	Prepare and serve hot and cold non-alcoholic drinks	5
14434	Prepare and clear areas for table service	3
17285	Espresso coffee equipment and preparation	4
Total NZQA Credits		30





# Sports Leadership and Outdoor Experiences

This level 2 course is a great opportunity to gain first-hand industry experience to get a taste of what a sports and outdoor recreation career is like.

Delivered at our Rotokauri Campus and in the field, explore a variety of activities such as personal training, sports coaching, umpiring, industry site visits, canoeing, mountain biking, tramping, rock climbing, adventure tourism, and first aid. You will also learn effective communication, team building and interpersonal skills, kaitiakitanga, and about risk management.

## Location: Hamilton Rotokauri Campus

Level 2	31 Weeks	Credits
21649	Demonstrate knowledge of basic anatomy to the performance of a complex sport skill	3
27629	Demonstrate pre-competition preparations for umpiring or officiating at a beginner level	2
22768	Conduct and review a beginner level coaching session	4
27299	Describe benefits of participation in recreation in the local community	2
9677	Communicate in a team or group which has an objective	3
32843	Demonstrate knowledge of how personal contribution influences group functioning in the outdoors	3
24727	Describe and compare impacts of tourism on the environment	3
457	Demonstrate mountain biking skills on a grade 2 terrain	2
4573	Communicate in the outdoors using two-way radio	2
32840	Demonstrate knowledge for preparation of an outdoor activity	3
Total NZQA Credits		27



# Automotive Engineering

Increase your employment opportunities by learning about the New Zealand motor industry. This course will give you fast-track access to a range of ever-changing and exciting automotive-related careers.

The Automotive Engineering NCEA Level 3 programme includes an introduction to a basic light vehicle servicing, protecting and diagnosing vehicle electronic system faults (using up-to-date testing equipment) with modern vehicles, braking system componentry diagnosis and service, faults and the repairing of modern vehicle wiring systems, battery testing and charging procedures, headlight adjustment, and repairs. Personal protective gear will be provided.

## Location: Hamilton Rotokauri Campus

Level 3	31 Weeks	Credits
3856	Demonstrate knowledge of carrying out emergency procedures in the automotive and related industries	2
30434	Service a vehicle or machine	3
30568	Demonstrate knowledge of brake systems	4
30517	Service a brake system on a vehicle or machine	4
30518	Bleed a hydraulic brake system	2
30566	Demonstrate knowledge of steering and suspension systems	2
30519	Service steering and suspension systems on a vehicle or machine	4
30479	Service an automotive cooling system	3
30480	Demonstrate knowledge of automotive cooling systems and engine coolant	2
30516	Replace driveline components	3
Total NZQA Credits		29



# Mechanical Engineering (General)

This NCEA Level 3 programme applies fundamental principles of engineering, physics, and materials science for the design, analysis, manufacturing, and maintenance of mechanical systems.

It is the branch of engineering that includes the design, production, and operation of machinery; including hand tools and portable power tools, dimensional measuring, engineering marking out equipment, various steel cutting and welding procedures, assembly, and most importantly, safe work practises and procedures. This take-home, project-based course will introduce you to the exciting world of engineering. It will provide you with the ability to consider an engineering apprenticeship or start a higher-level mechanical engineering qualification at Wintec. Personal protective gear will be provided.

## Location: Hamilton Rotokauri Campus

Level 3	31 Weeks	Credits
29652	Demonstrate knowledge of safety, health, risk assessment, and hazard ID and control on an engineering worksite	3
30263	Perform fabrication operations	10
30438	Dismantle, inspect and assemble components within assemblies	6
30280	Cut metals using the manual plasma cutting process	2
2680	Join metals using the resistance welding process	4
33135	Demonstrate knowledge of safety and health while welding and thermal cutting	3
Total NZQA Credits		28



# Building and Construction

This Level 3 NCEA course has an emphasis on practical content and project-based learning.

Theory is directly related to the practical projects at each stage of construction, so your learning has real industry relevance. This course will offer you transferable skills in the exciting trade of building that employers are looking for. Personal protective gear will be provided

Location: Hamilton Rotokauri Campus, Kopu Campus, Ōtorohanga Campus

Level 3	31 Weeks	Credits
29684	Undertake a Stage 3 BCATS Project	12
29677	Safe working practices in a BCATS environment	2
29680	Work collaboratively in a Stage 3 BCATS project	5
29678	DKO, select and use materials for a Stage 3 BCATS project	4
29682	Select, use, and maintain tools, equipment and machinery for a Stage 3 BCATS Project	4
Total NZQA Credits		27



## Service Industries (Level 3)

All unit standards included are Level 3 and count towards Level 3 qualifications.

### Hairdressing and Beauty Services

Hairdressing is a creative and rewarding job for people with strong communication skills. In this course, you will master the art of hairstyling and many more of the necessary technical skills involved in this industry. You will learn consulting techniques to help you provide a shampoo service and dress long hair for events.

Beauty therapists help people look and feel their best. Applying makeup and spa services contribute to making clients feel pampered. These are just a few treatments and procedures you will learn. This Level 3 course includes anatomy and physiology when dealing with nails and micro-organisms in a beauty salon.

**Location: Hamilton Rotokauri Campus**

Level 3	31 Weeks	Credits
<b>Hairdressing</b>		
25792	Dress long hair into elementary styles	8
33199	Demonstrate knowledge of and apply shampoo and treatments to the hair and scalp	6
<b>Beauty Therapy</b>		
27647	Perform make-up services	10
27176	Describe micro-organisms in a beauty salon or clinic	2
27164	Demonstrate knowledge of the structure and functions of a nail, and anatomy and physiology relevant to nail services	4
<b>Total NZQA Credits</b>		<b>30</b>



# Introduction to Professional Cookery

This Year 3 programme will give you the opportunity to further develop your cooking skills in a commercial environment. You will learn how to blend ingredients and flavours together and master mouth-watering local and international dishes.

**Location: Hamilton Rotokauri Campus**

Level 3	31 Weeks	Credits
30818	Prepare dishes using basic methods of Asian cookery in a commercial kitchen	10
13343	Demonstrate knowledge of nutrition in commercial catering	5
13310	Prepare and produce basic hot and cold dessert items in a commercial kitchen	5
13293	Prepare and cook basic vegetable dishes in a commercial kitchen	6
Total NZQA Credits		26





# Exercise Science and Outdoor Education

**Are you interested in sport science, exercise, and outdoor education?**

Develop industry-relevant skills and knowledge across a variety of sports, recreation, coaching, and outdoor recreation topics. You will learn about effective communication, team building, interpersonal skills, kaitiakitanga, and risk management.

Delivered both onsite at Rotokauri Campus and in the field, this course includes activities such as personal training, sports coaching, umpiring, industry site visits, mountain biking, tramping, caving, and rock climbing.

**Location: Hamilton Rotokauri Campus**

Level 3	31 Weeks	Credits
21414	Plan and run a recreation activity	4
30935	Develop and implement an exercise plan for personal physical fitness	5
30636	Demonstrate knowledge of the human body and its movement during exercise and stretching	7
20817	Demonstrate mountain biking skills on grade 3 terrain (practical)	2
28510	Demonstrate knowledge of and operate under a framework of kaitiakitanga in outdoor recreation (practical and theory)	5
20150	Demonstrate top rope rock climbing and belaying skills on Ewbank Grade 14 and above (practical)	2
427	Demonstrate crossing rivers (practical)	2
<b>Total NZQA Credits</b>		<b>27</b>



# Early Childhood Education (ECE)

Get a taste of what a future career in early childhood education could look like. This course will introduce you to the practical and theoretical skills needed in the ECE industry.

Explore the value of play, the importance of relationships, safe practices, development and learning, and Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa Early childhood curriculum.

## Location: Hamilton Rotokauri Campus

Level 2	31 Weeks	Credits
29857	Describe patterns of development and learning for young mokopuna/children	5
<b>Level 3</b>		
10013	Explain the relevance of the New Zealand Early Childhood Curriculum Te Whaariki as a framework for programme development	2
26708	Develop respectful, reciprocal, and responsive relationships with children in an ECE service	4
26707	Describe the value of play and create resources for children's learning and development in an early childhood setting	4
10019	Describe and contribute to safe practices and a safe environment for children in an ECE service	4
29867	Demonstrate knowledge of diverse whanau/families and use a range of effective communication strategies in an ECE service	5
29869	Demonstrate knowledge of ethical responsibility to guide practice in an early childhood setting	3
<b>Total NZQA Credits</b>		<b>27</b>



# Health

This programme will give you a broad introduction to health and wellbeing, giving you foundational knowledge for further study.

You will explore a range of health topics, including the anatomy and physiology of the human body, the principles of infection control, how infection is caused and spread, influences that contribute to mental health challenges, and factors to establish good mental health and wellbeing. You will learn about lifespan stages, wellness indicators, and appropriate interventions and support for people at different stages of life as well as contributing to a community project.

## Location: Hamilton Rotokauri Campus

Level 2	31 Weeks	Credits
20826	Demonstrate knowledge of infection control requirements in a health or wellbeing setting	3
27299	Describe benefits of participation in recreation in the local community	2
<b>Level 3</b>		
27457	Describe the anatomy and physiology of systems and associated organs of the human body	6
27461	Describe indicators of wellness, interventions, care, and support for people at different lifespan stages	5
26971	Describe factors that contribute to mental health wellbeing and mental health challenges	3
22257	Profile a Youth Culture in Aotearoa New Zealand	3
<b>Total NZQA Credits</b>		<b>22</b>



# How do I enrol?

Talk to your school's careers advisor to enrol. They will discuss your options with you, and work on the pathway that best suits your interests. They will also help you plan WTA around the subjects you are undertaking at school. Some schools may contact your family to explain your commitment to one-day-per-week at Wintec for WTA. We will work together with your school to support you in your chosen career pathway.

**[wintec.ac.nz/wta-enrolment-resources](https://wintec.ac.nz/wta-enrolment-resources)**

# FAQs

## How do I apply? How do I get selected?

Make an appointment to talk to your careers advisor at school about applying for one of our courses.

## Is there an age restriction for WTA?

You must be aged 15 or over at the start of the calendar year, be enrolled in a secondary school, and be in Year 11, 12 or 13.

Adult students and school leavers are not eligible for the Waikato Trades Academy. If you are turning 15 between January and March, contact WTA to discuss possible options.

Additionally, you will need to have:

- A genuine interest in the programme of choice
- A record of regular school attendance
- A record of consistent and responsible behaviour at school
- A demonstration of maturity to be able to study within a tertiary environment and ability to manage the associated workload

Your careers advisor will process your enrolment at Wintec. Please note: spaces are limited.

## What happens next?

If successful, you will receive acceptance and course information via their school careers advisor.

## How will I get to Wintec?

Depending on your location, you may be eligible for travel assistance. Please talk to your careers advisor if this applies to you.

## What should I wear?

Students are expected to wear suitable clothing and footwear for their course. Please note: Personal Protective Clothing

(PPE) will be provided for selected programmes.

## What behaviour is expected of me at Wintec?

- Respectful, responsible and mature behaviour is always expected.
- Students are expected to maintain 100% attendance so they can get the most out of their Wintec experience.
- Normal school rules apply with respect to alcohol, smoking, vaping, drug use – these are forbidden.
- Students are to remain on the Wintec campus during the hours of course. Students are to notify Wintec tutor if they need to leave early by providing a letter signed by parent/caregiver or school leave form.
- Any serious attendance or behaviour concerns will be addressed in a timely manner and communicated to affected parties. Please note: Serious misconduct may result in a discontinuation of enrolment.
- Personal Protective Equipment (PPE) is compulsory for specific programmes due to health and safety policies. Unfortunately, you will not be able to enter restricted areas without the correct PPE gear.

## What can I expect?

- Hands-on learning experience
- Theory, practical, and self-directed learning
- Exposure to literacy and numeracy competencies
- Experience at state-of-the-art facilities and commercial spaces
- Relevant industry skills and experience

# Contact us

**0800 2 Wintec (0800 294 6832)**

**info@wintec.ac.nz**

**wintec.ac.nz**

**Hamilton City Campus**

A Block, Gate 3, Tristram Street, Hamilton

**Hamilton Rotokauri Campus**

Student Hub, 51 Akoranga Road, Hamilton

**Hamilton Gardens Campus**

Gate 2, Cobham Drive, Hamilton

**Kopu Campus**

25 Kopu Road, Thames

**Otorohanga Trades Centre**

38 Phillips Avenue

Ōtorohanga