# SCHOOL IV

TYLER

TEC-NQ. YOUR SENIOR SCHOOL. YOUR TRADE SCHOOL. YOUR CAREER READY PATHWAY. YOUR STEPPING STONE

TO FURTHER EDUCATION. YOUR TRANSITION TO WORK.



# **TEC-NQIS DIFFEREN**



# WELCOME TO TEC-NQ

Wadda Mooli, Language of the Bindal People, Ahgan Nubal Naybal Language of the Wulgurukaba People

Tec-NQ is different. It's an alternative to traditional school delivering the same outcomes in a work-based training environment.

# Tec-NQ is a Senior School.

- Accredited Senior School and Boarding School for Years 10 to 12
- Queensland Certificate of Education (QCE) Outcome
- Registered Teachers

# Tec-NQ is Different to Traditional School.

- Contextualised and Project-based Curriculum
- Integrated Work Experience
- Vocational Pathways to Tertiary Education (P-TECH)





# **Tec-NQ is also a Registered Training Organisation (RTO).**

- Nationally Recognised Qualifications
- Qualified Facilitators
- Flexible and Career Specific Training

If you want to learn the real skills in demand by industry, Tec-NQ is the best place to complete your senior education.

Tec-NQ pays its respects to the past, present and emerging elders of the Bindal and Wulgurukaba people. They are the traditional custodians of the land on which Tec-NQ was founded.



### **Social Enterprise**

Education is key to individual growth.

Here in North Queensland, access to education and training has a significant influence on community, economic and social development.

We are committed to delivering targeted education and training programs that respond to the changing needs of the students, apprentices, employers and the community. Our trainers and support staff have the industry expertise and commitment to deliver excellence in teaching and learning. Student apprentices deserve the finest instruction, resources and services to enhance their growth and development.

Tec-NQ works closely with corporate and community partners to enrich and extend the educational and career opportunities for students in the region and beyond. Industry in North Queensland is the driving force behind Tec-NQ, and Tec-NQ is ideally structured to develop skilled tradespeople.



# **OPERATIONAL SUCCESS**

Like many organisations, Tec-NQ has a strategic vision that leads Tec-NQ's corporate direction. The Vision is defined by Tec-NQ's industry-led Board of Directors and is reviewed annually to ensure its currency.

Vision:

# CREATING EMPLOYABILITY & SUCCESS THROUGH INDUSTRY SKILLS, EXPERIENCE & SUPPORT

**Philosophy and Aims** 

Promoting excellence and equality by delivering Australian education and trade training to provide employment solutions, workforce capability and prosperity in our communities. Our value proposition is to achieve academic outcomes and to support transition of students from school to the work environment through:

- 1) Promoting excellence and opportunity for all in training and education through:
- Developing strong partnerships with industry and community; and
- Providing quality teaching, mentoring and support that promotes industry skills, resilience and mental health.
- 2) The delivery of an integrated trade/ academic curriculum facilitating:
- Active and successful life-long learners;
- Confident, creative, work ready and employable young men and women; and
- Excellence in trade and academic skills that creates active and informed members of the community.

Tec-NQ Values:

- Innovative Solutions
- Industrious Attitudes
- Delivering Value to Stakeholders
- Safety in the Workplace

Tec-NQ's operational strategy is diversified to guard against fluctuations in government policy and the local economy. This ensures the financial stability of the senior school and continuation of enrolments.

### **Business Segments:**

- Senior School
- Training
- Short Courses
- Boarding



Tec-NQ is a senior non-state school accredited by the Non-State Schools Accreditation Board (NSSAB) to deliver Year 10, 11 and 12 senior subjects at its site at 54 Discovery Drive in Douglas Queensland and at and 44 Bowen Road in Rosslea Queensland.

The senior school is funded as an independent school. Like other independent schools, Tec-NQ relies on an annual tuition paid by its students to support its operations. Tuition supports costs aligned with the industry team who support Tec-NQ's employer networks and enrolments.

### Mission

Tec-NQ is a North Queensland-based vocational education facility that partners with industry and community to deliver trade-based career opportunities through training and education.

# **TEC-NQ'S ORIGIN**

Tec-NQ emerged as a cutting edge solution to address trade skill shortages in 2005 through an environmental scan commissioned by the Townsville City Council. The unified support of community leaders and local industry saw the state-of-the-art facility (then known as the Australian Technical College – North Queensland (ATCNQ)) built in under six months with funding from the federal government under the Australian Technical Colleges Bill 2005.

As a result of a change in Federal Government and a shift in policy, ATCNQ became Tec-NQ through a Deed of Variation signed on 24th December 2009. Today, Tec-NQ continues to operate in alignment with the foundational legislation for the Australian Technical Colleges.

### **Excerpt From the Act:**

"4 Principal object of Act

The principal object of this Act is to provide for the establishment and operation of Australian Technical Colleges in order to provide trade skills training, education and mentoring for young Australians through:

(a) promoting pride and excellence in trade skills training for young people; and

(b) providing skills and education in a flexible learning environment to build a solid basis for secure and rewarding careers; and

(c) adopting a new industry-led approach to providing education and training in partnership with local communities; and

(d) establishing an industry-led governing council for each Australian Technical College that is to set out strategic directions and performance objectives for the College and select the principal of the College; and

(e) providing trade training that is relevant to industry and that leads to nationally recognised qualifications through School-Based New Apprenticeships, and academic and vocational education that is relevant to trade careers and that leads to a Year 12 Certificate; and (f) ensuring the autonomy of the principal of each Australian Technical College to manage the College, to select the best staff and to meet the targets and performance measures set by the governing council of the College; and

(g) encouraging an environment of freedom and reward for effort for the staff of Australian Technical Colleges through flexible employment arrangements which provide rewards linked to excellent performance."

Source: Australian Technical Colleges Act 2005

Tec-NQ introduced training for full time apprentices in 2009, thus creating the opportunity for schoolbased apprentices to continue their training with Tec-NQ post-graduation. Tec-NQ continues to train both school-based and full time apprentices. In 2015, Tec-NQ introduced Tec-PREP. Commencing mid-year in Year 10, Tec-PREP features "Try Every Trade" and academic skill building to prepare students to undertake industry specific Year 11 and 12. Tec-NQ commenced full Year 10 studies in 2019, introducing contextualized health and physical education, science and history subjects.

In August 2016, a ministerial announcement was made by Federal Minister for Education and Training, Simon Birmingham indicating that Tec-NQ would be one of the 12 new Pathways in Technology (P-TECH) pilots in Australia. The pilots were part of a \$4.6 million commitment to open up new avenues for students by linking schools with businesses in local communities that offer job opportunities.





In his announcement, Minister Birmingham stated, "Tec-NQ is already a national leader in terms of providing apprenticeships and traineeships, but this will allow it to expand in terms of commitment to the STEM disciplines and support in those areas." The P-Tech pathway for engineering and electrical students commenced in 2019.

In 2019, Tec-NQ was recognised as a Gateway to Industry School for the Minerals and Energy and Advanced Manufacturing sectors. I

In 2020, Tec-NQ was recognised as a Gateway to Industry School for Construction and Health.

Tec-NQ remains a community-based, not-forprofit organisation and continues to operate in alignment to the Principal Object of the Australian Technical Colleges Act 2005.

"TEC-NQ IS **ALREADY A NATIONAL LEADER** IN TERMS OF PROVIDING APPRENTICES AND TRAINEESHIPS, BUT THIS WILL ALLOW IT TO EXPAND IN TERMS OF COMMITMENT TO THE STEM DISCIPLINES"

# **A WORK-BASED EDUCATION**

Tec-NQ is designed to engage students in the applied use of problem solving, communication, critical thinking, digital and practical skills in demand for today's 21st century jobs.

To allow students to develop these skills, the curriculum has been designed to support "active" learning, where students are actively involved and learn in the context of how the skills and knowledge are to be used in industry.

# THIS IS A **STEP AWAY FROM THE TRADITIONAL** "PASSIVE" TEACHER-DIRECTED LEARNING.

Tec-NQ aims to deconstruct the "traditional school" mindset of students. They learn to invest in their future by valuing their own development.

Students learn from professional academic and trade qualified facilitators with the capacity to develop projects that mirror work undertaken in industry. This gives students the opportunity to build skills in a "real" rather than a "simulated" environment.

Training with Tec-NQ allows for a supported and guided transition to the workplace, by ensuring that students develop the necessary skills to take responsibility for their own learning once they transition to the workforce.

By combining an authentic trade education with real industry support and experience, Tec-NQ successfully supports students in their transition from school to work.

TEC-NQ IS A GATEWAY TO INDUSTRY SCHOOL FOR ADVANCED MANUFACTURING, MINERALS AND ENERGY, HEALTH, AND CONSTRUCTION...

# Learning Management System (LMS)

Tec-NQ's Learning Management System (LMS) is an internet-based system containing all of the required activities and assessment items for each of the learning areas.

The LMS is accessible via the Tec-NQ website, allowing students the flexibility of completing a proportion of their work from home.

# YOUR SENIOR SCHOOL

# **Three Opportunities to Enrol**

The Senior School features three enrolment points across Year 10 and 11. In Year 10, students undertake employability focused academic studies and immersion programs and can choose whether they commence Year 10 in January or July. Year 11 studies commence in January. Year 11 and 12 studies are career specific offering academic and vocational outcomes upon successful completion of Year 12.

OPTION 1	OPTION 2	OPTION 3
JANUARY START	JULY START	JANUARY START
Year 10	Year 10	Year 11
EMPLOYABILITY FOCUS	TRY-EVERY- TRADE	CAREER SPEC





# **YEAR 10**

Academically speaking, Year 10 is a transitional year where students identify their career aspirations to determine the senior studies options that align with their goals.

Year 10 students participate in practical skill building that relate to pre-apprenticeship pathways offered in Year 11 and 12. These trade immersions are designed to provide valuable life skills to students while preparing them to make informed decisions about the trade or vocational pathway that is right for them.

During trade immersions, students get hands-on experience while building an understanding of each of the trades.

# **Skill Building Subjects**

- Electrotechnology
- Automotive
- Carpentry
- Plumbing
- Engineering Pathways
- Health

Each skill building subject is delivered by a trade qualified facilitator with experience within industry.

### **Certificate II in Hospitality**

The January intake year 10 students travel to our state of the art Bowen Road facility where they undertake training in food and beverage preparation, safe food handling techniques and core skills relating to the food service industry.

### **Core Subjects**

The Australian Curriculum sets the goal for what all students should learn as they progress through their school life regardless of where they live in Australia and whichever school they attend.

At Tec-NQ, core subjects align to Australian Curriculum standards with contextualisation to industrial applications, workplace practices and life skills. **English** focuses on developing confidence and skill in effective language use, understanding and analysing varied text, and exploring aspects of social integrity and personal growth. It also plays a key role in developing basic literacy skills that are fundamental to participating in the workplace and that enable students contribute in modern society.

**Mathematics** focuses on observing and investigating industrial patterns and relationships. The ability to model and understand the practical application of mathematical functions is a sought after skill set in the modern workplace.

Broad topics include:

- Number and Algebra compound interest, factorisation of algebraic expressions, algebraic simplification, using the index laws, algebraic fractions, quadratic expressions and factorisation thereof, use of formulae, linear equations and simultaneous equations.
- Measurement and Geometry surface area and volume of prisms and composite solids, proofs involving congruency, Pythagoras' Theorem and trigonometric problem solving.
- Statistics and Probability two- and-three step experiments with or without replacement, conditional probability, quartiles, interquartile range, boxplots, scatterplots and linear regression

# WHY YEAR 10?

### **Direct Entry into Year 11**

Students who successfully complete Year 10 are not required to complete an aptitude test to enrol in Year 11.

### **First in Line for Trade**

Year 10 students have priority in selecting their chosen trade for Year 11 and 12 studies.

### An Informed Decision

On average, one third of students who complete Year 10 change their original trade preference upon completion.



# Queensland Curriculum Assessment Authority (QCAA) Accredited Short Courses

Short Courses are one-unit courses of study that are suited to students who are interested in pathways beyond school that lead to vocational education and training or work.

Short Courses may contribute one credit towards a QCE.

Science develops students' curiosity and sense of wonder as they acquire the practices and dispositions of working in an analytic way and use them to explain, predict and reconstruct their understandings of the physical and biological worlds. Students come to understand how science informs industrial practices and technological advancements.

Topics covered:

- Biological Sciences genetics and evolution
- Chemical Sciences periodic table and rates of reactions
- Earth and Space Sciences origin of the universe and global systems
- Physical Sciences energy conservation and describing motion using the laws of physics
- Preparation unit for Senior Science subjects.

**History** involves the study of human societies, their environments, their cultures and their everyday lives, fostering valuable and practical skills for life beyond the classroom.

Health and Physical Education focuses on developing the knowledge, processes, skills and attitude necessary to make informed decisions related to fitness for work. Learning activities are focused on social, physical and mental wellbeing.

**Career Education** In Career Education, students analyse skills and capacities needed for 21st century industrial workplaces including appropriate communication skills, collaboration and teamwork.

**Literacy** In Literacy, students experiment with different modes, mediums and forms to create new texts and understand the power of language to represent ideas, events and people.

**Numeracy** Students select and use mathematical and problem-solving strategies, investigate industrial situations using various mathematical methods to find solutions and evaluate outcomes.

**Work Experience** Work Experience is a key element of workplace preparation. Year 10 students participate in one week of work experience in semester two to gain valuable exposure to the workplace and put employability skills into practice.

# YEAR 11 & 12 SENIOR STUDIES

Tec-NQ is the best place for students to complete a trade-based senior school education. Students learn what it means to be work ready and demonstrate skills in demand by industry. The education program is defined by industry and supported by registered teachers and qualified trades people who have worked within it. Students who successfully complete their Year 11 and 12 senior studies will attain the following outcomes.

- Queensland Certificate of Education
- Pre-Apprenticeship Qualification or
- Apprenticeship Progression (if employed)
- Construction Industry White Card (where applicable)
- Core Skills For Work Qualifications

# HOW TO ACHIEVE YOUR GCE (SET PLAN)

The Queensland Certificate of Education (QCE) is Queensland's senior schooling qualification, which is awarded to eligible students usually at the end of Year 12. A wide range of learning can contribute towards the QCE including:

- Senior School Subjects
- Vocational Education and Training (VET)
- Workplace Learning Recognised by the QCAA
- University Subjects Undertaken While at School

To be eligible for a QCE, students must achieve a minimum of 20 credit points. At Tec-NQ, units are offered in configurations to suit each of the vocational pathways.

Points are awarded for a minimum Sound Achievement.



# **ACADEMIC CURRICULUM**

# **Queensland Curriculum & Assessment Authority (QCAA) Subjects**

Tec-NQ's academic subjects have been selected based on their relevance towards the career specific pathways offered by Tec-NQ. Subjects are contextualised towards each of the career pathways and personal growth. Contextualisation ensures that students understand the application of subject matter within their industry and adult life.

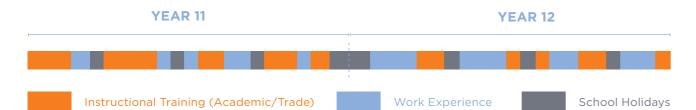
Tec-NQ's team of registered teachers deliver QCAA approved academic subjects that contribute towards the Queensland Certificate of Education (QCE). Teachers work directly with trade facilitators in contextualising the content.

# QSMART (Senior Maths/Science)

Tec-NQ is an approved provider of QSMART, a maths and science program designed by the Queensland Minerals and Energy Academy (QMEA).

The Maths Facilitators at Tec-NQ have used the subjects defined by the QSMART program to develop learning experiences specific to each of the trades offered by Tec-NQ. This content has been established in consultation with our qualified trade trainers.

QSMART Course 1 - Unit	Learning Experiences
Applications in Occupational Health and Safety	Safe Exposure Limits (SEL), Air-borne Contaminant 'ceiling levels'
Measurement and Calculation in the Workplace	Units of Measure, Area and Volume, and Pythagoras Theorem
Financial Applications 1	Wages, Salaries, Timesheets and Award Rates
Science in the Workplace 1 (Mechanical Advantage)	Forces, Levers, Pulleys, Gears, and Simple Machines
Measurement and Calculation in the Workplace 2	Scale, Ration and Trigonometry
Science in the Workplace 2 (Structure of Materials)	Atomic and Molecular Structure
QSMART Course 2 - Unit	Learning Experiences
Science in the Workplace 3 (Properties of Materials)	Ferrous/Non-Ferrous Metals - Malleability, Ductility and Conductivity
Science in the Workplace 4 (Electrical Fundamentals)	Energy, Work and Power, and Circuits (DC/AC)
Financial Applications 2	Taxation (PAYG, GST and Medicare Levy)
Measurement and Calculation in the Workplace 3	Similarity, Sine / Cosine / Tan Ratios
Science in the Workplace 5	Electrolysis and Corrosive Environments
Financial Applications 3	Sources of Credit, Loans, and Simple/Compound Interest



# **Essential English**

Essential Communications uses the Essential English subject defined by the QCAA to develop and refine students' understanding of language, literature and literacy enabling them to interact confidently and effectively with others in everyday, community and social contexts.

At Tec-NQ, the focus on career readiness includes an investigation and reporting on career pathways. This is followed by the development of individual work-ready portfolios that students can continuously update and use to pursue employment. Remaining units explore the values and attitudes represented in texts encouraging students to understand, accept or challenge the situations presented. These units aim to develop personal growth and social integrity both in the workplace and in life.

Year	Unit		
	U1IA1	Career Pathways	
11	U1IA2	Work Ready	
11	U2IA3	Bystander Effect	
	U2IA4	Making a Change	
	U3IA1 Public Service Announcements		
12	U3IA2	Responding to Texts	
12	U4IA3	Youth and Road Trauma	
	U4IA4	The Story of Tom Brennan	

### **Work Placement**

Work placement is an important part of Tec-NQ's approach to training and career development. Being involved in work experience activities gives students new opportunities to build on their existing job skills, learn new skills, network with employers and improve their chances of finding a job.

Students who meet the standards outlined in Tec-NQ's Earn the Right to Work framework benefit from work placement support.

Tec-NQ's team of industry liaison officers work closely with industry networks to support work placements and apprenticeships for students.

Work placement is integrated into the senior school timetable as part of senior studies. Work placement blocks increase in duration as students progress, encouraging a progressive transition from school to work.

\*Tec-NQ does not guarantee that students will be employed. Employment is at the discretion of the employers. Tec-NQ does enlist the support of an engaged network of hundreds of employers to support work placement and, when possible, employ apprentices within their workplace.

# **Pre-apprenticeship Qualification**

At Tec-NQ, students undertake a pre-apprenticeship qualification as part of their trade pathway and Senior Education and Training (SET) Plan.

If a student is employed\* as an apprentice, eligible units of competency from the pre-apprenticeship qualification are credit transferred to the Certificate III qualification specified by their employer. Students who attain an apprenticeship progress towards an Apprenticeship Qualification (Certificate III).

# **Core Skills for Work**

Core Skills for Work consists of a combination of vocational qualifications that prepare students for the workplace and / or further study.

Core Skills for Work pathways contribute to Queensland Certificate of Education (QCE) attainment.





# **AUTOMOTIVE** PATHWAY

Pre-Apprenticeship Qualification: **Certificate II in Automotive Vocational Preparation** 

This qualification reflects the role of individuals who perform a range of servicing tasks in the automotive retail, service and repair industry.

Potential Apprenticeship Pathways		
AUR30620 Certificate III in Light Vehicle Mechanical Technology*	This qualification reflects the role of individuals who perform a broad range of tasks on a variety of light vehicles in the automotive retail, service and repair industry.	
AUR31120 Certificate III in Heavy Commercial Vehicle Mechanical Technology*	This qualification reflects the role of individuals who perform a broad range of tasks on a variety of light vehicles in the automotive retail, service and repair industry.	
AUR31220 Certificate III in Mobile Plant Technology*	This qualification reflects the role of individuals who perform a broad range of tasks on a variety of mobile plant machinery in the automotive retail, service and repair industry.	

\*NOTE: Certificate III apprenticeship outcomes are only available to students who have attained a school-based or full time apprenticeship. Tec-NQ does not guarantee that students will be employed in an apprenticeship.



## **Educational and Vocational Outcomes**

	Automotive Pathway	
Academic		Essential English
	Academic	Q-SMART (Cours
		Q-SMART (Cours
Trade Skills Extension Pre-Apprenticeship Quali	Trada Chilla Extension	Certificate II in W
	ITAGE SKIIIS EXTENSION	Certificate III in Ir
	Pre-Apprenticeship Qualification	Certificate II in A

# **Core Skills for Work - Trade Skill Extensions**

Information Technology is a valuable program for trade students seeking to enhance their skill set. With a focus on practical knowledge, it equips them with essential IT competencies, enabling them to troubleshoot, maintain, and optimise technology systems—an indispensable asset in today's digitalised and interconnected work environments.

Workplace Skills equips trade students with essential skills for success in their chosen industry. Covering areas such as communication, teamwork, problemsolving, and occupational health and safety, this qualification enhances their employability and ensures a seamless transition into the workplace.

Transitional Timetable		Transitional Timetable		Transitional Tim	Transitional Timetable	
Work Experience		Academic		<b>Trade</b>	<b>Trade</b>	
Year 11	Year 12	Year 11	Year 12	Year 11	Year 12	
Up to	Up to	Up to	Up to	Up to	Up to	
12 weeks	23 weeks	12 weeks	7 weeks	14 weeks	7 weeks	



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utomotive Vocational Preparation

# **Work Placement**

Students who meet the standards outlined in Tec-NQ's Earn the Right to Work framework benefit from work placement support. Tec-NQ's team of industry liaison officers work closely with industry networks to support work placements and apprenticeships for students.

Work placement is timetabled throughout the school terms in regular intervals. Work placement blocks increase in duration as students progress, encouraging a progressive transition from school to work.



# Pre-Apprenticeship Qualification: **Certificate I in Construction**

This qualification provides an introduction to the construction industry, its culture, occupations, job roles and workplace expectations. The units of competency cover essential work health and safety requirements, the industrial and work organisation

structure, communication skills, work planning, and basic use of tools and materials. The qualification is built around a basic construction project unit that integrates the skills and embeds the facets of employability skills in context.

Potential Apprenticeship Pathways	
CPC30220 Certificate III in Carpentry*	<ul> <li>This is a trade qualification for carpenters in residential and commercial workplaces. It includes setting out, manufacturing, constructing, assembling, installing and repairing products made using timber and non-timber materials.</li> <li>Occupational titles may include:</li> <li>Carpenter - Commercial</li> <li>Carpenter - Formwork</li> <li>Carpenter - Residential</li> </ul>

\*NOTE: Certificate III apprenticeship outcomes are only available to students who have attained a school-based or full time apprenticeship. Tec-NQ does not guarantee that students will be employed in an apprenticeship.



### **Educational and Vocational Outcomes**

	Carpentry Pathway	
Academic		Essential English
	Academic	Q-SMART (Cours
		Q-SMART (Cours
	Trade Skills Extension	Certificate II in W
	Trade Skills Extension	Certificate III in Ir
	Pre-Apprenticeship Qualification	Certificate I in Co

# **Core Skills for Work - Trade Skill Extensions**

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Transitional Time Work Experie		Transitional Time Academic	etable	Transitiona <b>Trade</b>	al Timetable
Year 11	Year 12	Year 11	Year 12	Year	11 Year 12
Up to 12 weeks	Up to 23 weeks	Up to 12 weeks	Up to 7 weeks	Up to 14 wee	

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# P-TECH PATHWAY

Students who successfully complete P-Tech pathways keep their options open for a trade apprenticeship or university. It's a great pathway for students who aren't 100% decided on what they want to do when the finish school.

# Certificate II in Electrotechnology (Career Start)

This qualification covers competencies for work entry program providing grounding in safety and basic skills and knowledge for work in any electrotechnology discipline.

# **Certificate III in Engineering Technical**

The Certificate III in Engineering Technical equips students for systems thinking and industrial planning. Students learn foundational engineering skills, electrical principles and industrial applications of technology. Skills include principles of design and drafting, inspection, quality control, supplier evaluation, non destructive testing, and design and development work (prototypes) in both product and process areas.

### Potential Apprenticeship Pathways This qualification provides individuals with the skills and knowledge to select, install, set up, test, fault find, repair **UEE30820** Certificate III in and maintain electrical systems and equipment in buildings Electrotechnology and premises. It includes Electrical Regulatory Authority Council (ERAC), or their successor's, Essential Performance Capabilities for an 'Unrestricted Electrician's license'. This qualification provides competencies to manufacture, fit, assemble, erect, operate, test, fault find, alter and repair electrical UEE33020 Certificate III in equipment and includes electrical wiring work only if that work is **Electrical Fitting** associated with assembling, maintaining, terminating or altering the wiring between electrical components within a plant or machinery. Trainees undertaking this role will be engaged in MEM30522 Certificate III in production planning, including scheduling, work study, and **Engineering - Technical** estimating materials, handling systems and like work. The skills associated with this qualification are intended to apply MEM30219 Certificate to a wide range of mechanical trade work, including undertaking III in Engineering fitting, assembly, manufacture, installation, modification, Mechanical Trade testing, fault finding, maintenance and service of mechanical equipment, machinery and the use of machine tools. The skills associated with this qualification are intended to MEM31419 Certificate III in apply to a wide range of trade work including manufacturing, Engineering - Fixed and assembly and commissioning of mobile and stationary Mobile Plant and Equipment plant, servicing, diagnosis and rectification of faults, condition monitoring, and preventative maintenance. The skills associated with this qualification are intended to apply MEM31922 Certificate to a wide range of fabrication work, including undertaking III in Engineering metal fabrication, structural steel erection, sheetmetal **Fabrication Trade** work, welding, blacksmithing and surface finishing.

\*NOTE: Certificate III apprenticeship outcomes are only available to students who have attained a school-based or full time apprenticeship. Tec-NQ does not guarantee that students will be employed in an apprenticeship.

# **Potential Further Study Pathways**

Diploma of Higher Education (Engineering Stream) To directly enrol into the Bachelor of Engineering (Honours)	Advanced Stand (4 out of 8 units) Directly enrol int (Honours) at Jan completion of th
Bachelor of Technology	Directly enrol int
and Innovation	and Innovation a

# **Educational and Vocational Outcomes**

P-Tech Pathway	
Academic	Essential English
	Q-SMART (Cours
	Q-SMART (Cours
Trade Skills Extension	Certificate III in Ir
Pre-Apprenticeship Qualification	Certificate III in E
	Certificate II in El

# **Core Skills for Work - Trade Skill Extensions**

Information Technology is a valuable program for trade students seeking to enhance their skill set. With a focus on practical knowledge, it equips them with essential IT competencies, enabling them to troubleshoot, maintain, and optimise technology systems—an indispensable asset in today's digitalised and interconnected work environments.

Transitional Timetable Work Experience		Transitional Timet Academic
Year 1	Year 12	Year 11
Up to	Up to	Up to

21 weeks

9 weeks

ding for the Diploma of Higher Education at James Cook University.

to the Bachelor of Engineering mes Cook University upon successful ne Diploma of Higher Learning.

to the Bachelor of Technology at James Cook University.

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# **Work Placement**

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### etable

12 weeks

Year 12	Year 11	Year 12
Up to	Up to	Up to
8 weeks	17 weeks	8 weeks

# **ELECTRICAL PATHWAY**

# Pre-Apprenticeship Qualification: **Certificate II in Electrotechnology** (Career Start)

This qualification covers competencies for work entry program providing grounding in safety

Potential Apprenticeship Pathways	
UEE30820 Certificate III in Electrotechnology	This qualification provides individuals with the skills and knowledge to select, install, set up, test, fault find, repair and maintain electrical systems and equipment in buildings and premises. It includes Electrical Regulatory Authority Council (ERAC), or their successor's, Essential Performance Capabilities for an 'Unrestricted Electrician's license'.
UEE33020 Certificate III in Electrical Fitting	This qualification provides competencies to manufacture, fit, assemble, erect, operate, test, fault find, alter and repair electrical equipment and includes electrical wiring work only if that work is associated with assembling, maintaining, terminating or altering the wiring between electrical components within a plant or machinery.

and basic skills and knowledge for work in any

electrotechnology discipline.

\*NOTE: Certificate III apprenticeship outcomes are only available to students who have attained a school-based or full time apprenticeship. Tec-NQ does not guarantee that students will be employed in an apprenticeship.

### **Educational and Vocational Outcomes**

	Electrical Pathway	
		Essential English
	Academic	Q-SMART (Cours
		Q-SMART (Cours
Trade Skills Extension	Trade Skills Extension	Certificate II in W
		Certificate III in I
	Pre-Apprenticeship Qualification	Certificate II Elec

# **Core Skills for Work - Trade Skill Extensions**

Information Technology is a valuable program for trade students seeking to enhance their skill set. With a focus on practical knowledge, it equips them with essential IT competencies, enabling them to troubleshoot, maintain, and optimise technology systems—an indispensable asset in today's digitalised and interconnected work environments.

Workplace Skills equips trade students with essential skills for success in their chosen industry. Covering areas such as communication, teamwork, problemsolving, and occupational health and safety, this qualification enhances their employability and ensures a seamless transition into the workplace.

Transitional Timetable Work Experience				Transitional Timetable <b>Trade</b>	
Year 11	Year 12	Year 11	Year 12	Year 11	Year 12
Up to 12 weeks	Up to 23 weeks	Up to 12 weeks	Up to 7 weeks	Up to 14 weeks	Up to 7 weeks



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nformation Technology
strotechnology (Career Start)

# **Work Placement**

Students who meet the standards outlined in Tec-NQ's Earn the Right to Work framework benefit from work placement support. Tec-NQ's team of industry liaison officers work closely with industry networks to support work placements and apprenticeships for students.

Work placement is timetabled throughout the school terms in regular intervals. Work placement blocks increase in duration as students progress, encouraging a progressive transition from school to work.

# ENGINEERING PATHWAY

# Pre-Apprenticeship Qualification: Certificate II in Engineering Pathways

The Certificate II in Engineering Pathways qualification is intended for people interested in exposure to an engineering or related working environment with a view to entering into employment in that area. This qualification will equip graduates with knowledge and skills which will enhance their prospects of employment in an engineering or related working environment

Potential Apprenticeship Pathways		
MEM30219 Certificate III in Engineering – Mechanical Trade	The skills associated with this qualification are intended to apply to a wide range of mechanical trade work, including undertaking fitting, assembly, manufacture, installation, modification, testing, fault finding, maintenance and service of mechanical equipment, machinery and the use of machine tools.	
MEM31419 Certificate III in Engineering – Fixed and Mobile Plant and Equipment	The skills associated with this qualification are intended to apply to a wide range of trade work including manufacturing, assembly and commissioning of mobile and stationary plant, servicing, diagnosis and rectification of faults, condition monitoring, and preventative maintenance.	
MEM31922 Certificate III in Engineering – Fabrication Trade	The skills associated with this qualification are intended to apply to a wide range of fabrication work, including undertaking metal fabrication, structural steel erection, sheetmetal work, welding, blacksmithing and surface finishing.	

\*NOTE: Certificate III apprenticeship outcomes are only available to students who have attained a school-based or full time apprenticeship. Tec-NQ does not guarantee that students will be employed in an apprenticeship.

### **Educational and Vocational Outcomes**

	Engineering Pathway	
		Essential English
	Academic	Q-SMART (Cours
		Q-SMART (Cours
	Trade Skills Extension	Certificate II in W
		Certificate III in Ir
	Pre-Apprenticeship Qualification	Certificate II Engi

# **Core Skills for Work - Trade Skill Extensions**

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Transitional Time	Transitional T	
Work Experie	Academic	
Year 11	Year 12	Year 11

Up to

12 weeks

Year 12	Year 11	Year 12	Year 11	Year 12
Up to 23 weeks	Up to 12 weeks	Up to 7 weeks	Up to 14 weeks	Up to 7 weeks



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nformation Technology
ineering Pathways

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# HEALTH PATHWAY

# Pre-Apprenticeship Qualification: Certificate II in Health Support Services and Certificate III Qualification in a Health related field

The Certificate II in Health Support Services qualification reflects the role of workers who provide support for the effective functioning of health services.

Potential Traineeship Pathways			
	The trainee undertaking this role will be working in a team environment providing services to clients in a health care setting. The trainee will acquire and develop skills in the following:		
	<ul> <li>knowing the roles and responsibilities of all staff in the operating theatre</li> </ul>		
	<ul> <li>having a basic understanding of the theatre environment</li> </ul>		
Certificate III Qualification in a Health Related Field	<ul> <li>carrying out activities within the operating theatre whilst abiding by principles of workplace health and safety and infection control</li> </ul>		
	<ul> <li>carrying out safe procedures for theatre equipment use</li> </ul>		
	<ul> <li>carrying out theatre set-ups to appropriate standards, and</li> </ul>		
	<ul> <li>carrying out manual handling and knowing how to correctly move equipment and transport patients/clients.</li> </ul>		
Potential Occupational Outcome			
Assistant in Nursing (AIN)	AIN's comply with infection prevention and workplace health and safety (WHS), interpret and apply medical terminology, and recognise healthy body systems. They transport clients and carry out nursing assistant duties in a range of settings.		
Potential Further Study Pathways			
Diploma of Higher Education (Health Stream)	The Diploma consists of a combination of introductory and first-year degree subjects, designed to help students develop the necessary skills to be successful university students.		

At this level workers complete tasks under

procedures or complete routine but variable tasks in

collaboration with others in a team environment.

supervision involving known routines and

\*NOTE: Certificate III apprenticeship outcomes are only available to students who have attained a school-based or full time apprenticeship. Tec-NQ does not guarantee that students will be employed in an apprenticeship.

### **Educational and Vocational Outcomes**

	Health Pathway	
		Essential English
	Academic	Q-SMART (Course
		Q-SMART (Course
	Trade Skills Extension	Certificate II in Wo
		Certificate III in a I
	Pre-Apprenticeship Qualification	Certificate II Healt

# **Core Skills for Work - Trade Skill Extensions**

Workplace Skills equips trade students with essential skills for success in their chosen industry. Covering areas such as communication, teamwork, problemsolving, and occupational health and safety, this qualification enhances their employability and ensures a seamless transition into the workplace.

Transitional Timetak Work Experience	Tra	ľ	
Year 11	Year 12		

Up to 12 weeks

# Academic

Year 12	Year 11
Up to 23 weeks	Up to 12 weeks



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/orkplace Skills
Health related field
Ith Support Services

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ansitional Timetable

Year 12	Year 11	Year 12
Up to	Up to	Up to
7 weeks	14 weeks	7 weeks

# PLUMBING PATHWAY

# Pre-Apprenticeship Qualification: Certificate II in Plumbing

In this course you will be given the practical skills and knowledge to use hand and power tools, carry out welding, read and interpret plans, and calculate quantities and other measurements. You will learn about working safely and effectively in the workplace and how to adhere to the industry's regulations and standards.

Potential	Apprenticesh	ip Pathways
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	This is a trade qualification for plumbers in residential, industrial and commercial workplaces who are responsible for assembling, installing and maintaining water services, sanitary plumbing and sanitary drainage, gas, roofing and mechanical services in both existing and new constructions.	
CDC70400 Cartificate III in Diversionst	Occupational titles could include:	
CPC32420 - Certificate III in Plumbing*	• Plumber	
	• Plumber and drainer	
	• Plumber and gasfitter	
	• Gasfitter	
	• Roof plumber	
	Mechanical services plumber	

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# **Educational and Vocational Outcomes**

	Plumbing Pathway	
		Essential English
	Academic	Q-SMART (Cours
		Q-SMART (Cours
	Trade Skills Extension	Certificate II in W
		Certificate III in Ir
	Pre-Apprenticeship Qualification	Certificate II Plum

# **Core Skills for Work - Trade Skill Extensions**

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Transitional Timetable	Т
Work Experience	A

# Academic

ear 11	Year 12	Year 11	Year 12	Year 11	Year 12
Up to	Up to	Up to	Up to	Up to	Up to
12 weeks	23 weeks	12 weeks	7 weeks	14 weeks	7 weeks



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/orkplace Skills					
nformation Technology					
nbing					

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Fransitional Timetable



# **STUDENT SUPPORT**

### **Trade Education Teams**

The key facilitators involved with the students on a daily basis have a direct responsibility for the curriculum, welfare and communication of the student. Tec-NQ facilitators offer free tutoring in all areas outside of regular college hours by arrangement.

### Counselling

Tec-NQ offers free, external counselling services for any students and apprentices who wish to speak to someone confidentially. Appointments can be made through reception and will be treated with strict privacy. Please note: Students under 16 must get parental approval prior to attending this counselling service.

### **Student Support**

At Tec-NQ, the Student Support Team helps students to develop social and emotional skills by providing strategies that build resilience, coping skills and positive relationships. They work directly with students to offer advice and a solutions-based approach.

Student support plays a pivotal role in working collaboratively with external and other government agencies in their support of students and their families.

The team plans and develops activities for boarding students.

# EARN THE RIGHT TO WORK

The Earn the Right to Work program measures employability skills that have been identified in consultation with industry as the benchmark requirements for release to industry.

The employability skills are the basic standards that all school-based students will be assessed against to ensure readiness for the workplace. Student performance is evaluated against these standards to determine their eligibility for participation in the work experience program.

# **TRANSITION TO WORK**

For students who meet the standards outlined in the Earn the Right to Work framework, Tec-NQ's Industry Team provides support in securing work placement within industry. This work placement is integrated into the senior school timetable as part of their senior studies.

Work placement is an important part of Tec-NQ's approach to training, employment and career services. Being involved in work experience activities gives students new opportunities to build on their existing job skills, learn new skills, network with employers and improve their chances of finding a job.

The Industry Team works directly with employers to source work placement and apprenticeship opportunities. They keep in contact with employers throughout the placement to monitor student performance and gain feedback used to mentor and improve the student's employability. Employment is at the discretion of the employers. Tec-NQ does enlist the support of an engaged network of hundreds of employers to support work placement and, when possible, employ apprentices within their workplace.

### **Apprenticeship Support**

Apprenticeships offer many benefits to employers and apprentices. Apprentices have the chance to gain valuable on-the-job experience, develop skills and acquire a nationally recognised qualification.

Apprenticeships operate on the basis of a formal training agreement between an employer and the apprentice.

Training Contracts are registered with the state training authority and administered by Australian Apprenticeship Support Networks (AASN). Tec-NQ's Industry Team will work with the employer and the AASN to indentify the qualification appropriate to the employer's business and coordinate completion of the Training Contract.



# Attendance

Students attend all instructional training and approved work placements. This skill demonstrates their reliability for work.



Students attend every class and work placement on time. This skill demonstrates their ability to attend scheduled meetings and jobs in a reliable and punctual manner.



Students abide by all college uniform standards at all times. This skill demonstrates their ability to abide with site specific and employer specific uniform standards.



Students comply with college and workplace safety standards and processes. This skill demonstrates students understanding and willingness to comply with Australian workplace health and safety standards.

# Active Learning

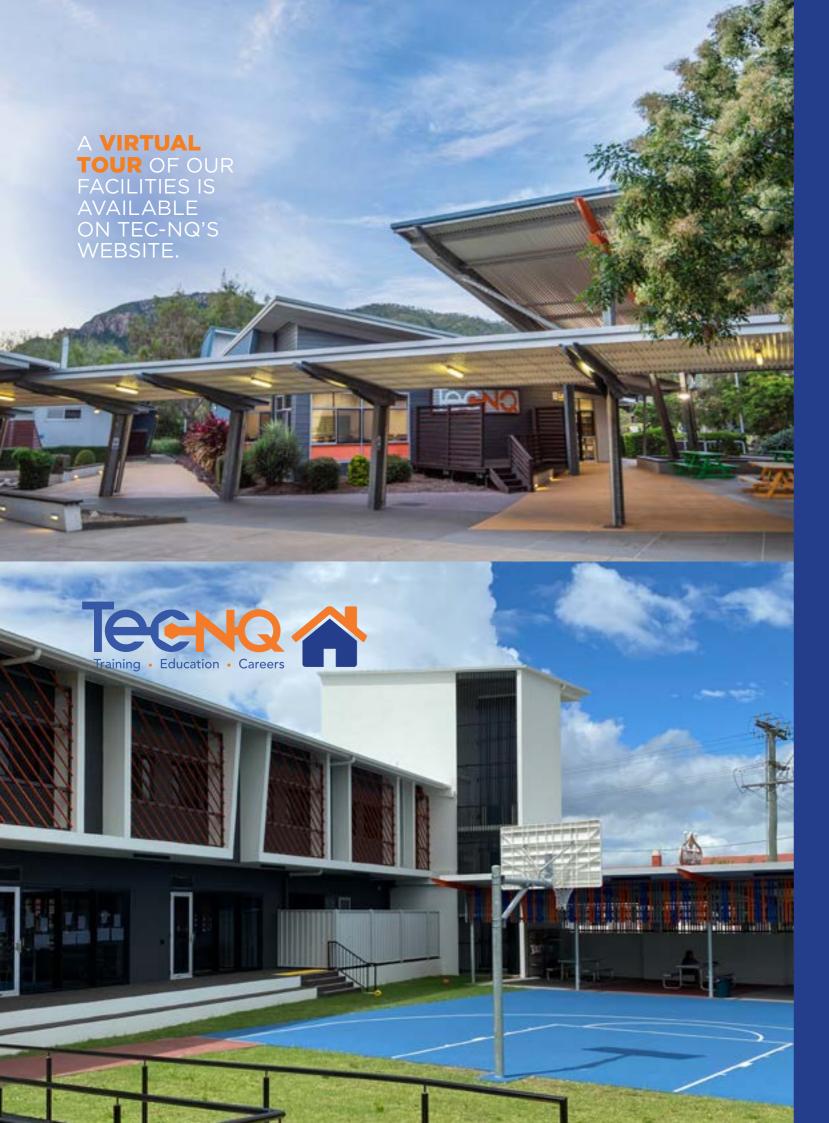
Students are responsibile for their own learning by being willing and active participants. This skill demonstrates the students maturity in taking responsibility for their learning and genuine interest in the chosen career.

# 🚹 Behaviour

Students behave in a manner that meets all college and workplace rules. This skill demonstrates a student's ability to behave in a mature and respectful manner.

College Standards

Students meet all college standards. This standard demonstrates the student's ability to meet the desired standards of the workplace.



# **FACILITIES**

The Senior School operates from Tec-NQ's Douglas campus in Townsville. This facility features dedicated workshops for each of the trades.

- Fitting & Turning
- Metal Fabrication
- Automotive
- Information Technology
- Diesel Fitting
- Carpentry
- Electro Technology
- Plumbing

# **TEC-NQ HOUSE BOARDING**

Accredited Senior Boarding School

Tec-NQ House, located in Rosslea, Townsville, is a purpose-built boarding facility for senior school students originating from locations across regional and remote Queensland, attending Tec-NQ's unique trade focused senior school program.

- Located in sunny Townsville, North Queensland, Tec-NQ offers a complete boarding program for students including:
- 24 hour supervised care for your student(s) 7 days per week
- Comfortable, safe and secure facility
- Dedicated staff who provide wellbeing support and independence skills
- Air-conditioned, double occupancy rooms
- Nutritious meals
- Access to sport, driver's instruction and social activities
- Access to Townsville-based work placements

Boarding students at Tec-NQ House are transported daily to and from the training facility and Townsville-based work experience.

As a Registered Training Organisation (RTO) Tec-NQ delivers training to an industry standard. Each workshop is professionally equipped with dedicated tooling and resources.

# **Public Transport**

Sunbus has regular buses that stop at various points throughout the James Cook University campus and Townsville Hospital. Both are within walking distance of Tec-NQ. Reference Google Maps for route information.

The area is well serviced with bicycle/foot paths.

Townsville is a vibrant cultural hub. Boarders are able to access festivals, art and sporting facilities. The combination of a warm climate, natural attractions and tropical lifestyle make Townsville a desirable place to study, live and play.

Current Fee Schedule available on our website. Contact Tec-NQ for reduced rates for students undertaking partial boarding arrangements."

\* Applicants may be eligible for ABSTUDY, Living Away From Home Allowance Scheme and Assistance for Isolated Children funding. Contact Tec-NQ for information.



# ENROLMENT

Entry into Tec-NQ's school-based program is highly competitive and prospective students advance through a number of stages before being accepted. This is to ensure the high quality of Tec-NQ's apprentices.

### Step 1

Submit an online Student Application form and attend an information session

### Step 2

Invitation to attend aptitude testing and practical/technical testing (Y11 only)

Step 3

Parent and student interview

Step 4

First round offers/second interview

**Step 5** Second round offers

# TUITION

Current Fee Schedule available on our website.

Please contact enrolments@tecnq.com. au for more infomation.

# **BUALITY TRADE TRANING**



54 Discovery Drive Douglas Townsville QLD 4814

PO Box 105 JCU QLD 4811

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# tecnq.com.au



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PO BOX 4812 TOWNSVILLE QLD 4810

P. 0447 296 533 E. boarding@tecnq.com.au



Acknowledgement to Tec-NQ's Board of Directors

Tec-NQ's Board of Directors voluntarily diverts their payments into a scholarship fund for students demonstrating exceptional commitment to the senior school.

The Tec-NQ community acknowledges this commitment by its Board Directors and thanks them for their leadership and contributions.