2023 STUDENTS' HANDBOOK

Faculty of Education, Arts and Humanities
Faculty of Science and Technology
Faculty of Nursing and Health Science
Faculty of Business and Public Administration
National Centre for Climate Change and Energy

A Word of Welcome

As the Interim Pro-Chancellor of the Tonga National University (TNU), it is indeed my pleasure to welcome you to the inaugural assembly of the TNU. Today, we are gathered to witness the coming to fruition of a national dream that was envisaged for many decades.

His Majesty the King of Tonga, Tupou VI, has honoured the TNU with his sanction and dedication, by graciously acting as the Chancellor of the University and has envisioned the University with the tripartite motto of: Truth, Justice, Freedom – Ko e Mo'oni, Ko e Totonu mo e Tau'ataina.

Established by legal mandate of the The Tonga National University Act, Government is obliged by law to ensure the establishment and prudent management and administration of the TNU. As such, 6 government-owned higher education institutions have merged to form the TNU – a hybrid university – offering both academic and vocational study programs. As we address the financial challenges of the post-covid period, a cost-effective option for tertiary studies is a significant commitment by the Government to support the upskilling and professional development of our young generation.

TNU comprises of 5 Faculties, delivering more than 50 programs ranging from Certificates to Diplomas and to Degrees. The programs cater for skills and knowledge-based demands of not only the Tongan employment market, but to also harness the opportunities from overseas skills demands.

TNU is your national university, a place to study while staying close to your family and social networks and support, whilst contributing to your community and sustaining our local economy and workforce.

I extend my best wishes to you as 'pioneer' students of the Tonga National University and strongly encourage you to maximize your potential while studying at TNU.

I do hope your journey in learning will be guided by Truth, in the pursuit of Justice, and in the spirit of Freedom.

Hon Hu'akavameiliku

The Interim Pro-Chancellor
Tonga National University

TONGA NATIONAL UNIVERSITY
2023 STUDENTS' HANDBOOK

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TNU's Brief Background

The Ministry of Education and Training undertook a Scoping Study in 2020 to gauge the general public's views on establishing a national university. The study reviews literature through desktop research, and extensive consultations through focus groups and interviews. The outcomes were documented in the Scoping Study Final Report which was submitted to the Government of Tonga's Cabinet for consideration. The Report was approved – see CD#1046 2nd Oct 2020, with 23 recommendations, one of which was a very strong show of public support to establish a national university.

The Ministry then proceeds to develop a University Act, this was passed by the Parliament of Tonga in August 2021, with the Royal Assent being obtained in May 2022. The University Act (2021) provides the name of the University as the Tonga National University (TNU). The Chancellor and Head of the University is His Majesty the King of Tonga, Tupou VI.

All of the government's 6 higher educational institutions are to be merged into the Tonga National University for the purposes of this Act. These institutions are the: Tonga Institute of Education (TIOE); Tonga Institute for Higher Education (TIHE); Tonga Institute of Science and Technology (TIST); Tonga Maritime Polytechnic Institute (TMPI); Queen Salote Institute of Nursing and Allied Health (QSINAH) and the Tonga Police College (TPC).

TNU's Objectives

The objectives of the Tonga National University are to:

- preserve, extend and disseminate knowledge in Tonga through teaching, research, scholarship, consultancy or any other means;
- provide academic, technical and vocational training and continuing education that is responsive and appropriate to the needs of the people of Tonga;
- foster and facilitate the study of the Tongan language and culture and all matters pertaining to this, as well as foster research into subjects of relevance or significance to Tonga;
- facilitate the economic and social development of Tonga through educational pathways that foster innovation and sustainable use of resources;
- achieve the vision, mission and goals of the University, as set out in its Annual Corporate Plan…

At all times, the University shall:

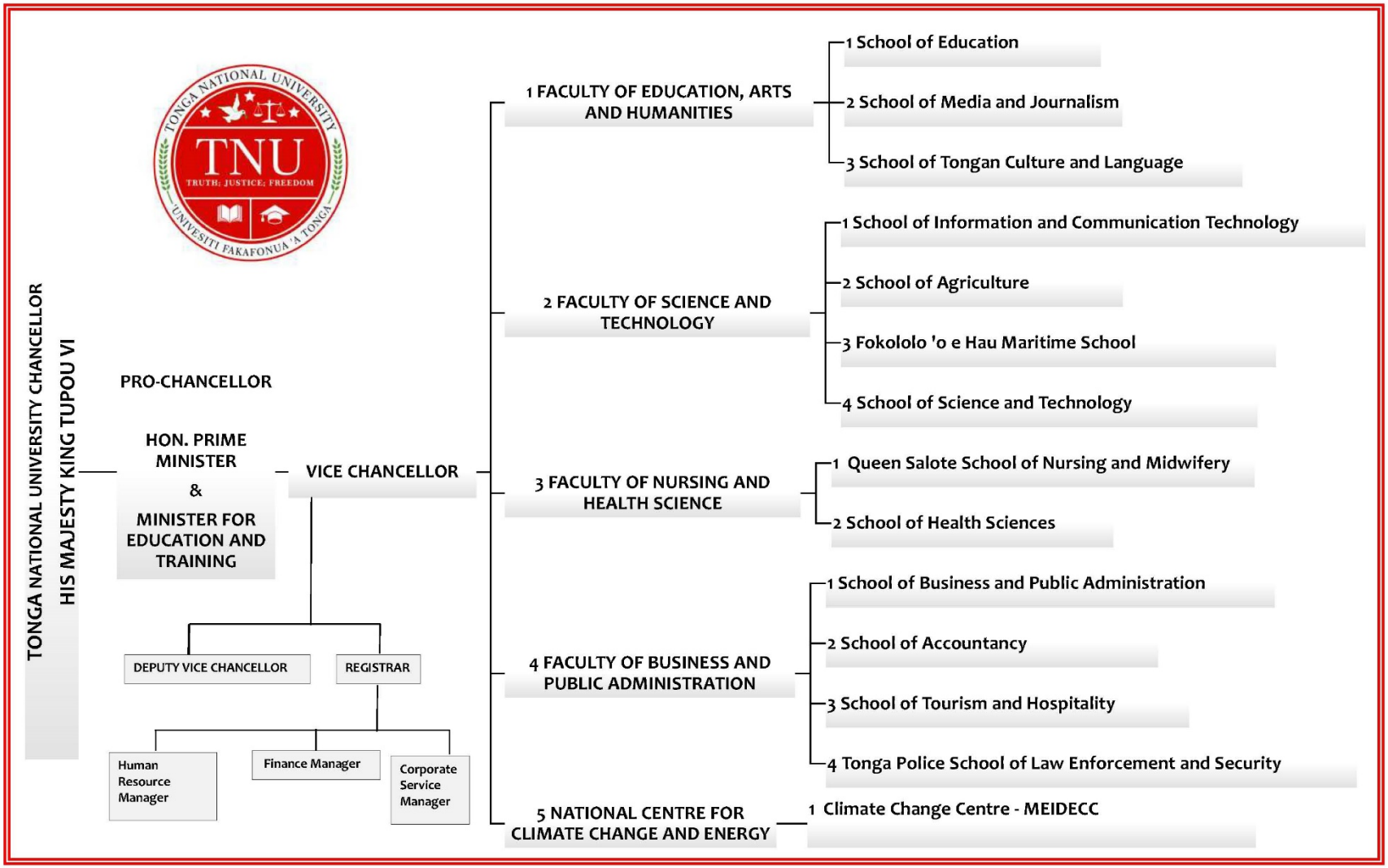
- operate in accordance with and be based on Tongan values and principles;
- strive for excellence in teaching and research and the attainment of the highest standards in education;
- promote intellectual independence and autonomy as foundation principles of the University;
- establish an educational system that is accessible, inclusive, relevant and sustainable for Tonga.

The Academic and Vocational Programs of the University shall promote:

- knowledge of the Tongan language and culture through focussed research, teaching and publications;
- respect for the environment through initiatives that strengthen climate resilience and ensure sustainable use of resources;
- dual use of the Tongan and English languages.

The University shall offer academic, technical and vocational programs and qualifications from Certificate to Post-Doctorate level. In this prospectus, the TNU's academic and vocational programs are listed by Faculties and Schools as shown below in the organisational structure.

Organisational Structure



Glossary of Terms

Terms	Meaning
Campus	The university grounds, including laboratories, lecture theatres, administration buildings and recreational areas etc.
Contact Hours	Hours a student is expected to attend classes such as tutorials, practicals and lectures at university.
Course	A component of study of an academic program assigned a unit value. Courses are identified by a subject area and catalogue number, for example, ED101 is a Level I Education course. Terms such as unit and module are normally used, but TNU will use the term Course.
Course Code	Each course is identified by a code, consisting of two letters and followed by 3 digits. e.g. ED101 indicating it's an **ED**ucation course offered in the **first year 1**01.
Course Description	A short description of the content of the course being offered.
Course Name	The name given to a unit of study, the name must reflect the content of the course.
Course Outline	Each course has an outline of the curriculum/contents, objectives, learning activities and assessments, as well as required teaching and learning resources.
Course Work	The assessed work which is to be completed throughout a course and contributing to a student's final grade e.g. essays, presentations, etc.
Degree	A degree is any of a wide range of university programs, including Bachelor, Honours, Masters and PhD awards.
Diploma	Diplomas are typically of a lower academic status than an undergraduate award such as a Bachelor's degree. However, most diploma awards offered at the University are higher diplomas and require an undergraduate qualification as a prerequisite for admission
Discipline	Discipline is a term used interchangeably with the area or field of study. E.g. Education, Mathematics, Geography etc
Elective	A course that forms part of a program of study at the university and is one of a limited number of courses from which a student must choose.
Elective	An optional course which you can do within a program. Electives allow more detailed study of a particular topic or subject.
Enrolment	Enrolment is the completion of formal processes so that a student can register for their program of study and able to attend classes.
Entry Criteria	These refer to the minimum requirements for a student to be considered for the program of study.
Faculties	TNU is organised into principal academic and vocational divisions in which teaching, and research are conducted. These are called 'faculties'. There are 4 academic and vocational faculties and one National Centre that make up the TNU.
Lecture	A lecture is an oral and audio-visual presentation, usually given by a content expert. Lectures run from 50 minutes up to two hours and can contain anywhere from 2-200 people.
Major	A course which has been identified as adding extra value to the major area of study
Orientation week (O'week)	University-wide orientation program for all students, involving lectures, tours and social activities and usually held in the week before semester commencement.
Part-Time Study	Part-time study is when you enrol in fewer courses than a full-time study load in a given intake.
Practicum, Field or Work Placement	Refers to scheduled hours of learning activities intended to give student hands-on experience and assessments in the workplace.
Pre-requisite Course	A course which must be successfully completed prior to enrolling in a course(s) which names it as a prerequisite.
Program	A plan of study consisting of courses taught per year level. Normally a program can be as short as a one semester program to 3 years for a Bachelor's degree program.
Program Statement	A broad statement of the program of study including its objectives, contents, assessments and expectations upon completion.

Recognition of Prior Learning (RPL)	Refers to the assessment process through which non-formal and informal learning are measured to determine whether an individual's competency level meets that is required in a course of study/ or training package.
Scholarship	Refers to a financial grant given to students who are in financial difficulty or who excel at a subject, usually to complete a program of study.
Selection	The process for checking that the minimum entry requirements are met. In addition, the selection criteria provides a process to be followed to select the students who are most likely to be successful in the program.
Semester	A calendar year is normally divided into semesters or duration a university course is offered. Normally a semester is about 13 weeks long, but they may be longer. Semester 1 is in the first half of the year, Semester 2 in the second half for example.
Seminar	Unlike a lecture, a seminar is traditionally when students and tutors participate together in class with discussions and various task-based activities.
Withdrawal	The process of withdrawing from a course/s after enrolment has been completed.
Word Count	The amount of words allowed in an academic assessment and the record of that number at the end of an essay or assessment, often within a range of +/–10%.

Vital Program Statistics

The table shows a summary of the number of programs by Levels (Degree, Diploma and Certificates) and by School/s within each Faculty.

Faculty of Education, Arts and Humanities	**Number of Program of Studies by Level**			
	Degree	**Diploma**	**Certificate**	**Programs by School**
School of Education	**3 +1 Post Grad**	**2**	**3**	**9**
School of Media and Journalism	**0**	**1**	**1**	**2**
Programs by Levels	**4**	**3**	**4**	**11**
Faculty of Nursing and Health Science	**Number of Program of Studies by Type**			
	Degree	**Diploma**	**Certificate**	**Programs by School**
Queen Salote School of Nursing and Mid-wifery	**0**	**2**	**2**	4
Programs by Levels	**0**	**2**	**2**	**4**
Faculty of Science and Technology	**Number of Program of Studies by Type**			
	Degree	**Diploma**	**Certificate**	**Programs by School**
School of Information and Communication Technology	**0**	**2**	**2**	**4**
School of Agriculture	**1**	**2**	**4**	**7**
Maritime School	**7 trade programs**			**7**
School of Science and Technology	**8 trade programs**			**8**
Programs by Levels	**1**	**19**	**6**	**26**
Faculty of Business and Public Admintration	**Number of Program of Studies by Type**			
	Degree	**Diploma**	**Certificate**	**Programs by School**
School of Accountancy	**0**	**1**	**1**	**2**
School of Tourism and Hospitality	**0**	**4**	**5**	**9**
Programs by Levels	**0**	**5**	**6**	**11**
Overall Total	**5**	**29**	**18**	**52**

TNU delivers **52 programs in total,** including 5 Degrees, 29 Diplomas, 18 Certificates and Trades Programs.

FACULTY OF EDUCATION, ARTS AND HUMANITIES

The Faculty of Education, Arts and Humanities has the following schools.

1. School of Education (formerly the Tonga Institute of Education – Ako Faka-Faiako)
2. School of Media and Journalism

SCHOOL OF EDUCATION

Program Statements

The School of Education is one of two schools with the Faculty of Education, Arts and Humanities. SOE is the major education provider for teacher education programs in the Kingdom of Tonga. The Schools has a total of **87 courses being taught in 9 programs** as follows:

1. Initial Teachers Certificate in Teaching Level 4

Program Statement: Designs for the untrained teachers at secondary school level. Its aim is to provide high-quality, certified teachers for every classroom in Tonga. The certificate will equip teachers with a philosophical basis for Tongan education, core attributes of an effective teacher, skills in Assessment, pedagogy, teaching resource development using Tongan modern technology to improve teaching and learning in the Tongan classroom context.

2. Teaching Certificate Level 5 – Secondary

Program Statement: Designs for school leavers who wish to teach at secondary school level. It is intended to provide high-quality, certified teachers for every classroom in Tonga, This certificate will equip teachers with a philosophical basis for ***Tongan*** education, core attributes of an effective teacher, skills in Assessment, pedagogy, teaching resource development using modern technology and Tongan to improve teaching and learning in Tongan classrooms.

3. Teaching Certificate Level 5 – Primary

Program Statement: Designs school leavers who wish to teach at primary school level. It is intended to provide high-quality, certified teachers for every classroom in Tonga, The certificate will equip teachers with a philosophical basis for Tongan education, core attributes of an effective teacher, skills in Assessment, pedagogy, teaching resource development using modern technology and Tongan to improve teaching and learning in Tongan classrooms**.**

4. Diploma of Education – Secondary

Program Statement: An applied professional teacher education programme that integrates theory and practice and enables a balanced progression of knowledge, understanding and skills throughout the programme . It aims to produce ***competent*** teachers who possess depth of knowledge, a range of skills and positive attitudes for effective teaching and meaningful participation in the development of education in Tonga. The programme aims to produce teachers with a sound general education, dedication to teaching and can operate in secondary schools at a high level of professional competencies.

5. Diploma of Education – Primary

Program Statement: An applied professional teacher education programme that integrates theory and practice and enables a balanced progression of knowledge, understanding and skills throughout the programme . It aims to produce competent teachers who possess depth of knowledge, a range of skills and positive attitudes ***for*** effective teaching and meaningful participation in the development of education in Tonga. The programme aims to produce teachers with a sound general education, dedication to teaching and who can operate in the primary schools at a high level of professional competence.

6. Bachelor of Education – Secondary

Program Statement: Designs to further enrich teacher trainees in their content, professional, and pedagogical knowledge learnings as Faiako Ma'a Tonga. Courses which will allow for in-depth studying of chosen curriculum teaching areas, context specific tailored education courses, and professional experience ***placement*** are core in this programme. The programme also intends to empower graduates to weave together knowledge and skills, mind and context to inspire and educate young minds. Graduates will understand the world from multiple viewpoints and possess the relational sensitivity, competency and imagination to evaluate and adapt to rapid changes within communities, Tonga and in contemporary society.

7. Bachelor of Education - Primary

Program Statement: Designs to further enrich teacher trainees in their content, professional, and pedagogical knowledge learnings as Faiako Ma'a Tonga. Courses which will allow for in-depth studying of chosen curriculum teaching areas, context specific tailored education courses, and professional experience placement are core in this programme. The programme also intends to empower graduates to ***weave*** together knowledge and skills, mind and context to inspire and educate young minds. Graduates will understand the world from multiple viewpoints and possess the relational sensitivity, competency and imagination to evaluate and adapt to rapid changes within communities, Tonga and in contemporary society.

8. Bachelor of Education - Tonga Early Childhood Teaching

Program Statement: Develops based on a direction from the Ministry of Education and Training to establish after His Majesty King ***Tupou*** VI's state visit to New Zealand in 2013. Amongst the array of economic and social programs and initiatives presented for His Majesty's inspection, an Early Childhood Education degree program was recommended developed. The programme was designed with specific intention for ECE in Tonga that is born out of Tonga, its people, its unique sets of knowledge and skills, values and beliefs, epistomologies and tailored specifically for Tongans in Tonga and to be delivered in the Tongan language.

Target students is not restricted to potential ECE teachers, but is extended to all Tongans of all ages,whether you are in the education sector or not, but who are interested in pursuing an academic qualification that not only ***recognizes*** their perspectives of education, from what and where it is derived, but would also allow them to make a positive contribution to education and society as a whole.

9. Graduate Diploma of Education

Program Statement: Designs to provide its participants with the professional education that will enable them to develop the ***knowledge***, skills, attitudes, and habits of action-research and praxis (reflective practice and active reflection) to provide a sound base for secondary teaching to Form 7. It aims to build on participants' existing ideas to establish a sound theoretical base, to encourage further development of this knowledge through research and practice in the secondary school setting and provide flexibility in both educational thinking and approaches to teaching. The desired outcome is teachers who are confident in their ability to develop and implement effective classroom programmes and aware of the ongoing nature of personal and professional development.

Entry Requirements

For the Initial Teachers Certificate

Applicants must provide evidence of the following:

a) In a teaching position for at least 5 years
b) Letter of support from current school or educational system for entry into programme

c) Minimum age range: 20 years old
d) Recognition of Prior Learning (RPL) will be considered.

For the Diploma of Education (Primary & Secondary)

Applicants must provide evidence of:

a) Tonga National Form 7 results (equivalent to a pass-4 Achieve levels) / or successful completion of the USP Foundation Course (7 Courses) and a minimum of 5 in PSSC English.
b) Serving teachers with Class 1 Teachers' Certificate and a minimum of 5 years teaching experience may also be granted entry into the programme.
c) Successful completion of a TNQAB recognised Diploma, Certificate or equivalent may be granted entry into the last year of the program and to follow their designated professional teacher training program if applicable, but most will be required to follow the normal Diploma of Education programme and in some instances, will be considered case by case.
d) Between the age of 18-45 years old.
e) Recognition of Prior Learning (RPL) will be considered.

For the Bachelor of Education (Primary & Secondary)

Applicants must provide the following evidence:

a) Tonga National Form 7 results (equivalent to a pass-4 Achieve levels)
b) Successful completion of the USP Foundation Course (7 Courses) and a minimum of 5 in PSSC English.
c) Between the age range of 18 – 45 years of age.
d) Recognition of Prior Learning (RPL) will be considered.

For the Bachelor of Education (Tonga Early Childhood Teaching)

Applicants must provide evidence of the following:

e) Tonga National Form 7 results (equivalent to a pass-4 Achieve levels)
f) Successful completion of the USP Foundation Course (7 Courses) and a minimum of 5 in PSSC English.
g) ECE Foundation Certificate or better and/or
h) Minimum 5 years work experience in an ECE Centre
i) Between the age range of 18 – 45 years of age.
j) Recognition of Prior Learning (RPL) will be considered.

For the Graduate Teachers Certificate (Secondary)

Applicants must provide evidence of the following:

a) An undergraduate degree and be a practicing teacher/ or
b) Equivalent status to (a) as determined by relevant educational experience and professional qualifications.
c) Individuals in category (b) above will be considered on a case by case basis.
d) Minimum age range: 20 years old
e) Recognition of Prior Learning (RPL) will be considered.

Programs, Courses and Course Descriptions

Program Name	Semester	Code	Course Name and Description
Initial Teachers Certificate in Teaching - Level 4 Year 1 (6 courses)	**1**	**ED101**	**Philosophy of Education** Provides an overview by way of major philosophical problems, knowledge and skepticism (disbelief), free will versus determinism, the mind-body problem: good versus evil. It is prefaced by an introduction to basic logic and fundamental philosophical concepts. In addition, it introduces students' philosophy of education that addresses philosophical questions concerning nature, aims and problems of education, its underlying principles, purposes, the foundation of knowledge and its application in classroom context. Students will have an opportunity to demonstrate with explicit comprehension of these principles in professional practices, verbally and non-verbally, in assessments and in practicums.
		ED102	**Teaching & Learning 1** Provides students with **basic teaching skills** in their first introduction to the process of teaching. It covers lesson planning, presentation, questioning skills and basic classroom management. It gives opportunities for students to practise teaching skills through the micro-teaching process. Emphasis is placed on these skills being actively practised through class presentations and micro-teaching, as a means to develop confidence and competence in preparation for the trainees going out on teaching practice in the schools.
		ED103	**Professional Standards** Explores Tongan educational policies, frameworks, codes and teacher standards which guide and safeguard educational practices pertaining to thinking, learning, teaching, decision making and ethical behaviour. It further explores historical developments in schooling on an international scene and within the confines of Tonga to stipulate how international perspectives and theories interplay and are relevant for Tonga. It also delves deeper into the social, cultural, political, religious and legal influences on schooling to foster a holistic understanding of the foundations of education in Tonga. The course provides opportunities for teacher trainees to undertake guided critical reflection on local and international perspectives, ideas and reforms and to consider their impact and relevance for Tongan schools and classroom contexts. It is important to note that this course is compulsory for all primary and secondary teacher trainees and lectures will be delivered in a combined mode
		ED104	**Education and Society** Helps the student to understand the many roles Education plays in contemporary societies with comparison to our Tongan Society. It will address student's own experience of Education and culture in the Pacific. This course will also prompt students to evaluate how school systems in Tonga influence our Society and how Society influences Schools. Education and Society will serve as a cornerstone for other Education courses debates within that area. The course challenges students to be active in improving education for Tonga
		CE101	**Core English for Faiako Ma'a Tonga** Focuses on practicing the basic practical and functional English language skills to improve both academic and personal development. Aims to enhance understanding of basic English language and grammar usage. Progresses to the four English language modes of writing, reading, speaking and listening which are fundamental for future professional

			and personal use. Students will have the opportunity to refine and practice basic English skills for quality and effective communication in the classroom and social contexts as well as life in general. These skills will assist students to become more proficient, confident and competent users of the English Language.
		IT101	**Information, Communication & Technology** Information Technology stage 1 is a compulsory course to all student is willing to enrol in any program. Information Technology stage 1 provide students with both the theoretical background relating to learning and creating teaching resources using modern technology, and also practical using computer applications which are appropriate to their teaching context.
Program Name	**Semester**	**Code**	**Course Name and Description**
Teaching Certificate - Level 5 (Secondary)	**1**	**ED101**	**Philosophy of Education** Provides an overview by way of major philosophical problems, knowledge and skepticism (disbelief), free will versus determinism, the mind-body problem: good versus evil. It is prefaced by an introduction to basic logic and fundamental philosophical concepts. In addition, it introduces students' philosophy of education that addresses philosophical questions concerning nature, aims and problems of education, its underlying principles, purposes, the foundation of knowledge and its application in classroom context. Students will have an opportunity to demonstrate with explicit comprehension of these principles in professional practices, verbally and non-verbally, in assessments and in practicums.
		ED102	**Teaching & Learning 1** Provides students with **basic teaching skills** in their first introduction to the process of teaching. It covers lesson planning, presentation, questioning skills and basic classroom management. It gives opportunities for students to practice teaching skills through the micro-teaching process. Emphasis is placed on these skills being actively practiced through class presentations and micro-teaching, to develop confidence and competence in preparation for the trainees going out on teaching practice in the schools.
		ED103	**Professional Standards** Explores Tongan educational policies, frameworks, codes and teacher standards which guide and safeguard educational practices pertaining to thinking, learning, teaching, decision making and ethical behaviour. It further explores historical developments in schooling on an international scene and within the confines of Tonga to stipulate how international perspectives and theories interplay and are relevant for Tonga. It also delves deeper into the social, cultural, political, religious and legal influences on schooling to foster a holistic understanding of the foundations of education in Tonga. The course provides opportunities for teacher trainees to undertake guided critical reflection on local and international perspectives, ideas and reforms and to consider their impact and relevance for Tongan schools and classroom contexts. It is important to note that this course is compulsory for all primary and secondary teacher trainees and lectures will be delivered in a combined mode
		ED104	**Education and Society** Helps the student to understand the many roles Education plays in contemporary societies with comparison to our Tongan Society. It will

			address student's own experience of Education and culture in the Pacific. This course will also prompt students to evaluate how school systems in Tonga influence our Society and how Society influences Schools. Education and Society will serve as a cornerstone for other Education courses debates within that area. The course challenges students to be active in improving education for Tonga
		CE101	**Core English for Faiako Ma'a Tonga** Focuses on practicing the basic practical and functional English language skills to improve both academic and personal development. Aims to enhance understanding of basic English language and grammar usage. Progresses to the four English language modes of writing, reading, speaking and listening which are fundamental for future professional and personal use. Students will have the opportunity to refine and practice basic English skills for quality and effective communication in the classroom and social contexts as well as life in general. These skills will assist students to become more proficient, confident and competent users of the English Language.
		IT101	**Information, Communication & Technology** Information Technology stage 1 is a compulsory course to all student is willing to enrol in any program. Information Technology stage 1 provide students with both the theoretical background relating to learning and creating teaching resources using modern technology, and also practical using computer applications which are appropriate to their teaching context.
		PR101	**Practicum 1** A Ensures the institute's aspiration for its TTs to become the ideal *Faiako Ma'a Tonga* transpires through his/her teaching/learning behavior and performance in alignment with the *Four Pillars of Learning* embedded within the TIOE professional development framework – *Langa Faleako*7 (Building a House of Learning for Tongan Teachers). The pillars are described as *Pou Fale* (Posts of the House).s above
	2	**Major 1a: E.g. AC101**	(Please refer to Compulsory courses for each Major) **Introduction to Teaching and Learning of Financial Accounting 1** Examines the historical background of Accounting as a discipline, and focuses on providing the teacher trainee with a strong and applied understanding of the core concepts, principles, functions and qualities of accounting information and practices. Opportunities are provided for the teacher trainee to experience practical aspects of Accounting such as recording, preparation of financial reports and the analysis of the financial report for the user's decision-making, as a means deepen the trainee's content knowledge of the discipline. The topics covered align with the strands of Tonga's Form 3 Accounting Syllabus, and multiple opportunities are also provided to practise applying pedagogical theory within the Accounting content area, to plan for delivery of the Syllabus content in a Tongan secondary school context
		Major 2b Eg. EC101	**Introduction to Teaching and Learning of Microeconomics.** Introduces the theories, models, and principles of Microeconomics, History of Economic Thought. Develops a deeper understanding of the forms 3 and 4 economics syllabi. Teacher trainees will be given the opportunity to apply teaching pedagogies at these two levels through lesson planning, resource design, micro-teaching, and using ICT. Teacher trainees will benefit from this course where the content and the pedagogies are woven together.

		Major 1c AC102	**Introduction to Teaching & Learning of Managerial Accounting 1.** Examines the theoretical and the practical aspects of managerial accounting such as managerial cost concepts as well as the different costing methods for the decisions made by managers.
		Major 2 c EC102	**Introduction to Teaching and Learning of Macroeconomics.** Ensures that students understand the economic problems of scarcity, inflation,unemployment and the policies which governments use to deal with them. Examines the development, similarities and differences between F3,F4 & F5 syllabus, develops teaching and assessment methods appropriate for these two levels and addresses the drawbacks of our indigenous values in the process of learning economics in our schools.
		PR102	**Practicum 1** The Practical Teacher Training 1, is a 4-week program where the trainee will be given an opportunity to have a teaching experience through systematic observation and communication with their associate teacher and students for a period of 4 weeks in the schools. In addition to this trainees will be required to interact with the experiences from the training through reflection, and from various theoretical perspectives. It places an emphasis on the classroom as an arena for academic, social, and democratic learning.
		EN101	**Introduction To Teaching Secondary English 1** Designs for students majoring in Teaching Secondary English. Introduces an overview of the history and nature of the English language and progresses to analyze Tonga's language policy for education. Learns to understand teaching and learning of English as a second language and discusses how best to apply to the Tongan context. Familiarize students with the English syllabus for classes 7 & 8 focusing on receptive and productive language modes, its principles and practices. Students will have an opportunity to practice applying acquired pedagogical knowledge and skills through assessments, tutorials, written work and practicum
		EN102	**Teaching Secondary English 2** Extends the familiarity of students with curriculum materials and English syllabus for classes 9 & 10. Introduces theories of bilingualism and bilingual teaching and learning focusing on students to understand and develop a toolkit of teaching strategies applicable for Tongan classrooms. Learn to understand both what to teach and how to teach listening, speaking, reading, writing and research skills. The portfolio students will construct through assessment will depict evidence of their learning and reflective practice during lesson planning and resource design.
		GE 101	**Introduction to Teaching and Learning of the Pacific Physical Geography** Designs to equip Year 1 Geography teacher trainees with the importance of keeping a good relationship with other people and the environment, and promote the long-term sustainability of the planet earth. It encourages teacher trainees to teach Forms 3 and 4 syllabi adequately and think critically as they investigate contemporary geographic issues and consider possible solutions. Explore the various perspectives of different groups of people, their interaction with their physical environment, and investigate important issues of relevance to Tonga, Pacific regions, and the wider world.

		GE 102	**Introduction to Teaching and Learning of Cultural Geography** Explores traditional knowledge and understanding of the Pacific Island Cultural Geography, cultural resources, Major Development and Changes, Demographic Change and Patterns of land use in the Pacific Islands. The purpose of this course is to equip Year 1 Geography teachers with adequate knowledge in cultural geography and Form 3 & Form 4 national syllabus.
		HY 101	**Introduction to the History of Tonga** *"To know thyself is the beginning of wisdom,"* a philosophy by Socrates. Knowing who we are means knowing where we come from. Where do we start? Designs to introduce the history of Tonga. Covers a range of topics spanning from the beginning of ancient Tonga, to the period of decolonization in Tonga. It weaves together content and teaching pedagogy appropriate for the teaching of Form 3 History in the secondary schools. Students explore the connections between oral histories of migration theories and the written histories of the people of Tonga, specifically the benefits, drawbacks and ethical implications of historical sources.
		HY 102	**Introduction to Pacific History** *"Oceania is vast, Oceania is expanding … Oceania is us. We are the sea; we are the ocean…"* — **Epeli Hau'ofa.** Introduces the history of the Pacific and provides a great opportunity for anyone who wishes to teach History in Form 4 level. Covers a range of topics within the realm of Pacific history, starting from creation myths to migration theories, focusing on how grassroots movements and ordinary peoples dictate Oceanic influence and presence in global politics. Study of key historical events and forces in the general history of the Pacific. Discusses the paradox of neocolonialism in Oceania, of how imperial forces seek to gain political and economic control of its islands and peoples.
		MA101	**Introduction to Teaching and Learning Secondary level Mathematic** Introduces the Teacher Trainee to all topics covered in the Mathematics syllabus for all classes in the secondary school level. The course will cover topics in the following areas: history of mathematics, analytic and plane geometry, algebra, selected topics in finite mathematics, sequences and series, trigonometry, logarithmic and exponential functions and complex numbers.
		MA102	**Statistics** Introduces the Teacher Trainee to the scope, methods and applications of Statistics and Probability especially in solving real life problems. Be able to teach Statistics effectively in all classes of secondary schools level . Solving real life problems. Be able to teach Statistics effectively in all classes of secondary schools level.
		SC101	**Integrated Science** Revises concepts that are related to General Science for secondary science specialists. It prepares trainees for teaching Classes 9 to Class 11 (Forms 3 to 5) which entwines both content knowledge and pedagogical knowledge. It addresses basic concepts associated with the Science Syllabus with planning and implementing at the introductory level, by weaving teaching pedagogies into how students learn Science in a Tongan classroom. Laboratory works illustrate various scientific skills, assessment for better learning and for establishing achievement in Science. It also provides opportunities to experience and put into

			practice the Standards ofa "Faiako-Ma'a-Tonga" into Teaching and Learning of Science in a Tongan classroom.
		CH102	**Introduction to Teaching & Learning of Chemical Principles** Introduces theoretical knowledge and concepts that are important for teaching Class 11 to Class 12 Chemistry. Aims to impact adequate knowledge with factual, theoretical and experimental background concerning Introduction to chemistry. Laboratory works will demonstrate important scientific skills and employ technique to obtain results with an acceptable degree of precision and accuracy. Teacher trainees will be familiarised with the Chemistry Syllabus for the specified levels and to practice applying pedagogical knowledge and skills to plan effective teaching and learning experiences.
		BY102	**Plant Biology** Designed to raise student's awareness of the diversity of life in the Plant Kingdom and to relate the modified structures and functions of a variety of habitats. There will be an emphasis on plant life in Tonga, and the Pacific regions. Looking at aspects of economic botany, conservation and biotechnology. This course will also look at photosynthesis, a fundamental process in the food chain and ecosystem, and it is responsible for the growth of human civilization
		PH102	**Teaching and Learning of Mechanics** Reinforce and extent students' knowledge on concepts, fundamental principles and applications of mechanics. It will also introduce students to basic laboratory skills, scientific skills, and science teaching pedagogies; enabling them to prepare lesson plan and practical, present, and grading practical and assessment. It will be available to all students to take towards their Diploma or Bachelor in Education majoring in Teaching of General Science and Physics. It will also be suitable as a one-off course for anyone who does not intend to complete all the physics courses but wants to learn the fundamentals of mechanics in Physics. The Course will make extensive use of simple geometry, algebra, and integration and differentiation. Prior knowledge of introductory calculus (simple integration and differentiation) is required. Students will also be required to make regular use of the internet for their research as well as a constant source of up to date information especially in updating teaching techniques that will allow students deepening their understanding of physics concepts.
		TO101	**Talateu ki hono Ako'i moAko e Lea Fak aTonga' *(Introduction to Teaching & Learning of the Tongan Language)*** 'Oku teuteu'i heni 'a e kau faiako 'i he Lēsoni Lea faka-Tongá *(Tongan Language)* te nau faiako 'i he ngaahi kolisi 'i Tonga. 'Oku fakamamafa'i heni mo fakanaunau'aki 'a e 'ilo mo e ngaahi taukei 'i he Lea faka-Tongá. 'Oku kau ki ai 'a e kalama 'o e Lea faka-Tongá mo hono ngāue totonu 'aki 'a e lea faka-Tongá mo e sipela. 'E fai mo e tokangaekina 'a e ngaahi founga kehekehe ki hono ako'i 'o e LEA FAKA-TONGÁ 'i hono Lea'aki, Fanongo, Laukonga mo e Tohi. Ko e fa'unga ngāue 'o e "FAIAKO MA'A TONGÁ" *(FMT)* kae tautefito ki he Pou ko Lea faka-Tongá 'e tokangaekina makehe 'i he lolotonga hono fakahoko 'a e Pepá ni. 'E ngāue'aki 'a e ngaahi founga ako mahení *(learning styles)* 'a e VAKAI TONU, FANONGO TONU, mo ALA TONU *(visual, auditory, & kinaesthetic).*

		TO102	**Ko e Anga Fakafonua mo Hono Ako'i'** Designs for all Year 1 students who are specializing in the teaching of Tongan Language and Culture in Secondary Schools. Specially designed to enhance some areas of the Tongan Culture as specified by the course content below which are relevant and appropriate for all Teachers wishing to teach the Tongan Language and Tongan Society and Culture to secondary students of Tonga.
		JA101	**Teaching & Learning Japanese 1**. Consists of the Japanese language and the teaching methods of Japanese. Introduces some basic knowledge of teaching Japanese such as 4 skills +1 of learning language, flow of the one lesson and advantages and disadvantages of native and non-native teachers, and focuses on improving the Japanese language ability of the students. The students are expected to discuss each topic and encouraged to progress their ability of Japanese proficiency as Japanese
		JA 102	**Teaching & Learning Japanese 2.** This is the course for those majoring in Japanese. This course consists of the Japanese language and the teaching methods of Japanese. It introduces some basic knowledge of teaching Japanese such as learners' needs analysis, course designing and teaching plans, and focuses on improving the Japanese language ability of the students. The students are expected to discuss each topic and be encouraged to progress their ability of Japanese proficiency as Japanese language teachers.
		MU 101	**Introduction to Teaching and Learning of Music.** This is a compulsory primary course for year 1, and has two components: practical experience, and theory. Designed to stimulate individual's interest and attitude towards Tongan Music and culture. It helps to develop an understanding, awareness and appreciation of various cultural and musical traditions. This will also help students to be expressive through music their feelings to others.
		MU 102	**Teaching and Learning of Music.** Designs to deepen the student's knowledge of music theory, oral perception and performances; nurture an enjoyment and understanding of music which would enrich the quality of the student's lives; provide students with opportunities to experience the expressive qualities of music and offer a range of experiences in composing, performing and listening to music. It also provides students' with experience of music from a wide range of styles, periods and origins, encompassing the diverse nature of music; assists students to progressively to develop and extend their music involvement, knowledge and skills; develops an appreciation of the unique qualities of Tongan music and those from other cultures and equips students with the opportunities to share their music experiences with the school and the wider Tongan community.
		DTT101	**Food Technology** Food Technology teaches students to use their imagination and creativity to develop solutions to technological problems. Students will learn and apply a range of technological skills and techniques to design and create food products that they will test and evaluate to make informed decisions that reflect efficient use of resources in their community. Students will have the opportunity to demonstrate safe food practices and investigate the effect technology has on production and preservation of food using appropriate materials, and equipment

			safely and competently. They will apply knowledge of food nutrients, food preparation and presentation skills, and explore the relationship between food selection, health, and nutrition related diseases.
		DTT101	**Textiles and Garment Construction** Textiles Technology teaches students to design and make textiles-based products using appropriate tools and equipment safely and competently. Students will apply the principles of structural and decorative design, selection of fabric and construction techniques. Students evaluate the role of technology in fibre and fabric development. They investigate the properties of textiles and how this affects their use and care. This enables students to develop skills in choosing appropriate materials to satisfy design briefs. Creativity is applied in interpretation of design needs and in decision-making about the specifications of projects. Students can apply appropriate construction techniques and management processes for practical projects, and through reflection evaluate outcomes.
Program Name	**Semester**	**Code**	**Course Name and Description**
Teaching Certificate - Level 5 (Primary)	**1**	**ED101**	**Philosophy of Education** As above
		ED102	**Teaching & Learning 1** As above
		ED 103	**Professional Standards** **As above**
		ED 104	**Education and Society** **As above**
		EN 101	**Introduction to Teaching Primary School English 1** Designs for students majoring in teaching secondary English. Introduces an overview of the history and nature of the English language and progresses to analyze Tonga's language policy for education. Learns to understand teaching and learning of English as a second language and discusses how best to apply to the Tongan context. Familiarize students with the English syllabus for classes 7 & 8 focusing on receptive and productive language modes, its principles and practices. Students will have an opportunity to practice applying acquired pedagogical knowledge and skills through assessments, tutorials, written work and practicum
		MA102	**Introduction to Teaching and Learning Mathematics** Introduces teacher trainees to the nature of mathematics as a discipline of study; develop in-depth knowledge of the primary curriculum documents; consolidate and deepen mathematical knowledge in the strands, Number and Algebra; provide opportunities for the application of pedagogical theory and skills to the teaching of curriculum content; and develop mathematical thinking, logical reasoning, and problem solving skills.
		TO102	**Ako'i mo e Ako 'o e lea faka-Tonga ma'á e lautohi pule'angá (teaching and learning of Tongan language for primary school)** Ke teuteu 'a e kau faiako 'oku nau loto lahi ke ngaue 'i he Lautohi Pule'anga ke nau mateuteu ki hono 'ako'i o e lesoni Lea Faka-Tonga ki he fanau lautohi Pule'anga 'i ngaahi me'a fakakalama, Fatu Tohi , lea, Tohi, Lau mo 'etau ngaahi lea ki he anga 'o e nofo 'o kau ki ai 'a 'etau ngaahi paloveape, Lau Faka-Tonga , Lea faka'aki'akimui mo e ngaahi poto'i fakafaiako ki hono fa'u ha ngaahi naunau ngaue (activities) ke tokoni'i 'aki e fanau 'o fakatatau moe lesoni taki taha

		SC101	**Introduction to Teaching and Learning of Integrated Science** Introduces the first part of the compulsory general science education course for primary science specialists, that is, Introduction to Teaching and Learning of Integrated Science for Primary Level. It interweaves both content knowledge and pedagogical knowledge. That is, it addresses science knowledge, concepts, skills and attitudes associated with the science syllabus for classes 1-8. Students will have an opportunity to enhance knowledge, learning and practice in the content and teaching of science in preparation for class 1-8. In addition, it provides experience that will enable them to put into practice the standards of a Faiako Ma'a Tonga.
Program Name	**Semester**	**Code**	**Course Name and Description**
Diploma of Education (Secondary) Year 2	**3**	**ED201**	**Human Development** Looks at the concept of the "whole child" in a context of life span development. It raises issues about environmental influences on development and discusses concepts of intelligence. It looks at the influence of culture, family and gender on the teaching learning process.
		ED202	**Teaching & Learning 2** Aims to help TIOE teacher trainees in their choice of relevant and productive pedagogies in the Tongan classroom context. It is also to guide them in their adaptation, selection and use of strategies that are relevant and validated for student learning. As it tries to contextualize the pedagogy to befit the Tongan classroom context of the *Faiako Ma'a Tonga* (FMT), the pedagogy taught in the classroom is woven into the four *Pou* (posts) of the *Langa Faleako* framework for the *Faiako Ma'a Tonga - Pou ko 'Ilo* (Knowledge), *Pou ko Poto* (Skills), *Pou ko Lea* (Language*) and Pou ko Fakafeangai* (Teacher Professionalism).The course also provides opportunities for teacher trainees to undertake guided critical reflection and action research on local and international philosophies on culturally inclusive pedagogies that would help students learn.
		ED203	**Assessment & Evaluation** Provides a comprehensive coverage of the purposes and practices of assessment and evaluation. It also explores current issues in assessment policies and providing students with all the necessary skills and procedures for year long assessment of pupils.
		Curriculum Studies	*Students choose to take two majors from three subject option lines (but not two from the same option line)* • *Option 1 English, Mathematics,* • *Option 2 Economics, History, Design Technology, Tongan,* • *Option 3 Accounting, Geography, Biology, Chemistry, Physics.*
		Major 1c Eg. AC201	*(Refer to Compulsory courses for each major)* **Teaching and Learning of Companies** Examines in depth the accounting subsystems of an entity. It will also deepen the understanding of companies, cash flow statement and partnership from the contents covered at the form 7 syllabus. Similarly, the teaching pedagogy covered at the diploma 1 will be enhanced at this course.
		Major 2c. EC201	*(Refer to Compulsory courses for each major)* **Teaching and Learning of Microeconomics.** Seeks to enable the teacher trainees to demonstrate an understanding of the Micro Economics content in areas related to Firms, Production & Cost, Perfect Competition, Monopoly, Monopolistic, Competition & Oligopoly, Labour Markets, Economic of the Environment, Public

			Choices & Public Goods. Alongside strengthening Economic content knowledge, the trainees will be provided with multiple opportunities to practice applying specific aspects of pedagogical knowledge and skills, in ways that best suit the age and learning styles of the Tongan secondary school students in forms 5, 6 & 7, particularly with reference to strand 1 only. Traditional Model and the Flipped Classroom Model (FCM) will enhance independent and collaborative learning in an innovative way, thus promoting the POU ko 'ILO, POTO, LEA & FAKAFEANGAI of the *Langa Fale Ako Framework* (Building the house of learning framework
		Major 1 d eg. AC 202	*(Refer to Compulsory courses for each major)* **Teaching & Learning of Managerial Accounting II** Examines the theoretical and the practical aspects of managerial accounting such as the decision making concepts as well as the planning and control concepts. Further development of the teaching skills will also be considered such as the teaching strategies, planning, assessment and teaching resource.
		Major 2d. eg. EC202	*(Refer to Compulsory courses for each major)* **Teaching and Learning of Macroeconomics.** Examines various concepts of macro-economics at the national level. It aims at promoting understanding the economic problems at this level and helps students to appreciate the effects of Government's attempts to manage these problems both on the business community and the economy as a whole. With reference to strands 2 & 3 of the Economics syllabi, the trainees will be given an opportunity to develop a deeper understanding of the forms 5,6 and 7 economics syllabi through curriculum analysis, planning, delivery and weaving of ICT into the content.
		PR202	**Practicum 2** Practicum 2 is a 6 weeks' full time program which allows the trainees to start mentoring the year one trainees and off course under the supervision of both the Associate teacher in the schools and the supervisor from the university. Trainees will be given multiple opportunities to teach in at least 4 of the core subject areas in classes 5 to 8 in Primary schools. Trainees in secondary schools will be given the opportunity to teach in both teaching majors from forms 5 to forms 7. Trainees should be able to gain confidence in teaching, while extending their content knowledge and skills for teaching their teaching majors at the given level(s). Trainees will be given the opportunities to assume full responsibilities of the teacher in the classroom. Ensures the institute's aspiration for its TTs to become the ideal *Faiako Ma'a Tonga* transpires through his/her teaching/learning behavior and performance in alignment with the *Four Pillars of Learning* embedded within the TIOE professional development framework *Langa Faleako*7 (Building a House of Learning for Tongan Teachers). The pillars are described as *Pou Fale* (Posts of the House).
		CT201	**Ko e Anga Fakafonua, hono ako' mo ako'i.** Designs for all Diploma 2 students who are specializing in the teaching of Tongan Language and Culture in Secondary Schools. This course is specially designed to enhance some areas of the Tongan Culture as specified by the course content below which are relevant and appropriate for all Teachers wishing to teach the Tongan Language and Tongan Society and Culture to secondary students of Tonga.

		CC PE100 & RP1OO	**Physical Education & Restorative Practices** Develops restorative practices in schools to foster an equitable and positive school culture. It is a process by which an individual acknowledges wrongdoing, takes steps to repair harm and is welcomed back into the school community. This fosters a culture that elevates dialogue and values relationships. Rather than traditional punitive approaches, Restorative practice bring the victim and the offender into communication enabling everyone affected to play a part in repairing the harm and finding a positive way forward. Part 2 covers Physical Education for Secondary trainees. It introduces the teacher trainee to the professional knowledge and skills necessary for teaching Physical Education to secondary students, Classes 7-9. The course is designed to: familiarize teacher trainees with the CDU materials in Physical Education for secondary school; enhance the trainee's knowledge about Physical Education, human body systems, skills and methods of exercising to suit the particular ages and levels of secondary school children; develop depth of knowledge in the content areas of the curriculum; and assist trainees to apply the knowledge of Physical Education and pedagogical theories to the teaching and learning of Physical Education in primary schools, including catering for students of diverse physical abilities.
		EN201	**Language and Literature 1** Extends in-depth knowledge of the English syllabus for classes 11, 12 & 13. Aims to widen and strengthen students' knowledge of literary works prescribed for these levels and provides stimulating discussions to develop their own critical and explorative written responses to studied texts. The theory component extends and builds on students' understanding of texts, responding to texts and critical analysis of texts in various genres. The practical component gives students an opportunity to elucidate their understanding through developing and compiling appropriate teaching resources and to practice an array of teaching and learning pedagogies and strategies for effective classroom learning activities and assessments.
		EN202	**Teaching Secondary English: Language** Analysis of theory, processes and practice of the Whole Language Approach to English learning and observe the global debate on the Whole Language vs Phonics Approach to reading particularly its usefulness for Tongan English Learners (TELs). Explores the theoretical lenses of language development to develop a holistic understanding of the acquisition of language from a behaviourist, social interactionist, cognitive and nativist perspective. Students will have an opportunity to expound their understanding through planning, implementing, and evaluating English lessons that are culturally suitable for TELs coupled with the appropriate accumulation of contextual language teaching resources
		GE201	**Advanced Teaching and Learning of Physical Geography** Designs for all Year 2 Secondary Geography majors. It provides the student teachers with an opportunity to demonstrate their understanding of the content of the syllabus, teaching strategies and assessment methods in Form 6 – Form 7 Geography syllabus. It should develop students' personal competence in the teaching and learning of geography. This is essentially a practical course in which the development of personal knowledge and skills will be conducted through workshops.

		GE202	**Advanced Teaching and Learning of Cultural Geography** Makes sense of a complex and changing world and their place in it. In geography, students have the opportunity to: build on and expand their personal experiences of natural and cultural environments, explore real and relevant contemporary contexts, think spatially explore the ways in which features are arranged on the earth's surface, look at the processes that shape our world, undertake fieldwork investigations in different locations outside the classroom, develop an awareness of the connections between people and places, and participate in informed responsible action in relation to geographic issues that affect them. GET202 will equip students with the knowledge and skills to interpret the world in which they live
		HY201	**Introduction to Modern World History** Introduces all Year 2 students, whose majoring is History and who plan to teach at the secondary level, to modern history. Encourages students to demonstrate an awareness of the forces of political change in European countries and their effects on international relations. The concepts will be studied in its entirety and by the end it would already develop the skills required to effectively teach Forms 5 History. This also encompasses the content and the teaching components woven together.
		HY202	**Introduction in to Research in Local History** *'Research is the pursuit of new knowledge.'* Introduces research in local history. Offers a great opportunity for anyone who wishes to teach History at any level in secondary school. Covers the two major types of research, their major characteristics, major components and the research process. Allow students to move through the research process systematically as they conduct a piece of research. Weaves together content and pedagogy as it relates to the teaching of research throughout the history syllabi. Explores research strategies and the benefit to the individual researcher and the community.
		CH201	**Teaching & Learning of Physical Chemistry** Provides students with the necessary advanced physical chemistry principles: Kinetic theory of gases, Electrochemistry, Thermochemistry, Thermodynamics and Reaction Kinetics. This will enable trainees to understand concepts and to apply theoretical knowledge to solve problems in everyday situations. Practical work demonstrates theory taught in lectures and demonstrates important scientific skills. Teacher trainees will be familiarized with the Chemistry Syllabus for Class 13 (Form 7) Physical Chemistry and apply pedagogical knowledge and skills to plan effective teaching and learning experiences.
		CH202	**Teaching & Learning of Organic Chemistry** Revises basic organic chemistry taught at Class 13 (Form 7) and introduces some fundamental concepts that are important in understanding of Organic chemistry including nomenclatures, structures, reactivities and type of reactions of the major functional groups. Basic reactions essential for understanding of the chemistry of organic compounds account for majority of the course content. The practicals illustrate the principles covered in lectures and important skills in Science teaching and learning. Teacher trainees will be familiarized with the Chemistry Syllabus for Class 13 Organic Chemistry and apply pedagogical knowledge and skills to plan effective teaching and learning experiences.

		BY201	**Animal Physiology** Extends the students' knowledge of basic animal form and their function to include physiological aspects that are important in maintaining homeostasis in a large range of living organisms. Students will have the opportunity to establish the required knowledge, understanding and process skills necessary to enhance their understanding of the interdependency within their environment. It will also encourage them to understand the animal life in Tonga and the Pacific.
		BY202	**Genetics** Introduces the fundamentals of genetics, with an emphasis on DNA structures and Replication, Mendelian Genetics and application to Genetics, Genetic variation, monohybrid inheritance, Dihybrid Inheritance, Genetic Change, topics include principles of inheritance, complex traits, chromosomes, gene structures and functions, mutations, genomics, and genetic technologies.
		PH201	**Teaching and Learning of Rotation and Wave** A semester course which is the second of 3 Physics courses series. It is intended to reinforce and extent students' knowledge on concepts, fundamental principles and applications of rotation and waves. It will also introduce students to basic laboratory skills, scientific skills, and science teaching pedagogies; enabling them to prepare lesson plans and practical activities, implementing them, and to grade practical and assessment activities . It will be available to all students to take towards their Diploma or Bachelor in Education majoring in in the Teaching of General Science and Physics. The Course will make extensive use of simple geometry, algebra, and integration and differentiation. Prior knowledge of introductory calculus (simple integration and differentiation) is required. Students will also be required to make regular use of the internet for their research as well as a constant source of up to date information especially in updating teaching techniques that will allow students deepening their understanding of physics concepts.
		PH202	**Teaching and Learning of Electricity and Electromagnetism.** A semester long course which is the third of 3 Physics courses series. It is intended to reinforce and extent students' knowledge on concepts, fundamental principles and applications of electricity and electromagnetism. It will also introduce students to basic laboratory skills, scientific skills, and science teaching pedagogies; enabling them to prepare lesson plan and practical activities, present, and grading practical and assessment activities. It will be available to all students to take towards their Diploma or Bachelor in Education majoring in Teaching of General Science and Physics. It will also be suitable as a one-off course for anyone who does not intend to complete all the physics courses but wants to learn the fundamentals of electricity and electromagnetism in Physics. The Course will make extensive use of simple geometry, algebra, trigonometry, and integration and differentiation. Prior knowledge of introductory calculus (simple integration and differentiation) is required. Students will also be required to make regular use of the internet for their research as well as a constant source of up to date information especially in updating teaching techniques that will allow students deepening their understanding of physics concepts

		TO201	**Ta'anga, Fananga mo e Ngaahi Talatupu'a Faka- Tonga.** 'Oku fakataumu'a 'a e Pepa *(Course)* ko 'ení ki he Polokalama Ako Tipiloma ta'u 2 *(year two)*, ma'á e kau faiako akoako 'oku teuteu ke nau faiako he ngaahi kolisí 'i he ngaahi kalasi Lea faka-Tonga mo e Anga fakafonua. 'Oku nofo taha 'a e kalasi 'i he *ta'anga, fananga mo e ngaahi talatupu'a* 'o Tonga. 'Oku fie ma'u ki he kau akó 'a hono faka'uhinga'i ke loloto ange mo 'analaiso 'a e *ta'anga, fananga mo e talatupu'a* faka-Tongá. 'Oku kau heni 'a e founga faka-Tonga makehe 'o e heliaki mo hono fakafehoanaki 'o e ngaahi me'angāue fakapunake 'i he lea faka-Tonga mo e lea faka-Pilitania. 'Oku fakataumu'a makehe 'a e lēsoní ke fakalahi mo teuteu'i 'a e kau faiakó 'aki ha mahino lahi ange ki he ngaahi *maau faka-Tongá, ngaahi nāunau fakafonuá mo e ngaahi talatupu'á* 'o fekau'aki mo e anga fakafonua 'o e kakai Tongá. 'E fie ma'u 'a e kau faiako ako ke nau vakai'i mo fekumi ki ha ngaahi founga ke fakatolonga ai 'a e *ta'anga, fananga mo e talatupu'a* faka-Tongá. 'E toe fie ma'u foki ke nau fakafehoanaki 'a e ngaahi maau mo e ta'anga 'a e kau punake kehekehe 'i Tonga.
		TO202	**Nima Mea'a 'a e Tonga'.** Ko kinautolu te nau fakahoko 'a e lesoni ko 'eni 'e fie ma 'u ia ke nau ma'u 'a e 'atamai fifili mo faka'uhinga me'a malohi ke nau lava ai 'o faka 'uhinga mo 'analaiso 'a e ngaahi taukei mo e nimamea 'a 'a e Tonga mei ono 'aho kae 'uma 'a 'a e ngaahi taukei kehekehe 'a e Tonga he nofo 'I hono sosaieti, hange ko ia 'i he feime 'atokoni, ngaahi va 'inga, faifolau mo e nimamea 'a foki. 'Oku teuteu'i makehe 'a e lēsoni ko 'eni´ ke fakakoloa mo fakalahi 'a e 'ilo mo e taukei 'a e tokotaha ako fakafaiako´ koe'uhi ke ne lava 'o ako'i lelei 'a e hako tupu 'o e fonua´ he ongo lēsoni Lea faka-Tonga´ mo e Tonga mo e Angafakafonua´ pea ke ne maa 'usia foki 'a e ngaahi taukei he ngaahi tekinolosia 'o ono'aho.
		MUT201	**Theory of Music B** Students of this course will have opportunities to learn, explain and demonstrate understanding of Rondo Form, More about Form (Part I & II), Rhythmic Pattern to a Verse (Part I, II & III), Signs and Terms, Circle of Fifths, Double Sharps and Double Flats, Diatonic and Chromatic Semitones, Intervals of Minor 2nd and Minor 7th, Diminished and Augmented Intervals, Inversions of Intervals Chord IV and Interacted Cadence, Imperfect Cadence and Chord II, First Inversion of Chords, Major and Minor Chords, Doubling Notes, Imperfect Cadences, Harmonization of a Melody (Analysis, Writing: Parts I, II & III), Melodic Invention, Melody to a Verse Couplet, Modulation in a Melody (from Major Keys), Modulation in a Melody (from Minor Keys), Tongan Music and Dances and others.
		MUT202	**Musicianship** Students of this course will have opportunities to learn about Character of Baroque Dances, Stringed Instruments, Clefs & Tunings, Terms and Ornaments, Syncopation and Counterpoint, Checklist: Points to watch in Harmonization, Major Scales and Keys, Melodic Minor Scales (Part II), Diatonic and Chromatic Intervals, Simple and Compound Intervals, Concords and Discords, Chord IIb, Chord VIIb, Second Inversion of Chords, Cadential 6 4 Chord, Harmonization (The Anacrusis, Planning the Base, Completing the Inner Voices), Unaccented Passing Notes, Auxiliary Notes, Passing Notes in Other Voices (Parts I & II), Harmonization in Cadences in Related Keys (Part I & II), Rhythmic

			Invention, Woodwinds Instruments (Part I, II & III), Tongan Music and Dances, and others
		CT201	**Teaching and Learning of Creative Technology** Creative Technology aims to develop a wide range of skills such as problem solving, design processes, construction, communication, critical thinking, analysis, and evaluation. It is intended to be a practical learning environment in which students are engaged with materials and select appropriate techniques and technologies for specific applications. Creative Technology encourages the use of local, traditional resources that are readily available as well as exploring the use of western materials, skills, and techniques where applicable. All learners need to develop technological skills and understandings that are relevant to the world in which they live. Students will develop knowledge of technology and its uses and be confident in its application.
Program Name	**Semester**	**Code**	**Course Name and Description**
Diploma of Education (Primary) Year 2	**3**	**ED201**	**Human Development** Looks at the concept of the "whole child" in a context of life span development. It raises issues about environmental influences on development and discusses concepts of intelligence. It looks at the influence of culture, family and gender on the teaching learning process.
		ED202	**Teaching & Learning 2** Aims to help TIOE teacher trainees in their choice of relevant and productive pedagogies in the Tongan classroom context. It is also to guide them in their adaptation, selection and use of strategies that are relevant and validated for student learning. As it tries to contextualize the pedagogy to befit the Tongan classroom context of the *Faiako Ma'a Tonga* (FMT), the pedagogy taught in the classroom is woven into the four *Pou* (posts) of the *Langa Faleako* framework for the *Faiako Ma'a Tonga - Pou ko 'Ilo* (Knowledge), *Pou ko Poto* (Skills), *Pou ko Lea* (Language*) and Pou ko Fakafeangai* (Teacher Professionalism).The course also provides opportunities for teacher trainees to undertake guided critical reflection and action research on local and international philosophies on culturally inclusive pedagogies that would help students learn.
		ED203	**Assessment & Evaluation** Provides a comprehensive coverage of the purposes and practices of assessment and evaluation. It also explores current issues in assessment policies and providing students with all the necessary skills and procedures for year long assessment of pupils.
		EN201 (P)	**Ako'i mo e Ako 'o e anga fakafonua faka-Tonga ma'á e lautohi pule'anga (teaching and learning of Tongan culture for primary school)** This is a compulsory course for all Primary trainees. It begins with an overview of the history and nature of the English language and its development as a subject in Tonga. The bulk of the course is based on a comprehensive study of the English Language curriculum, syllabus and methodology for Primary School – Classes 6. It is strongly geared towards the development of English teachers as teachers of a second language in Tonga. The course is also designed to provide opportunities for practice at applying newly acquired pedagogical knowledge and skills for effective planning, design and delivery of teaching and learning experience appropriate to the age and language bilingual development of the child, to meet curriculum aims and learning outcomes.

		MA201 (P)	**Mathematics for Primary School Teachers.** Consolidates and deepen mathematical knowledge in Measurements, Geometry, Statistics and Probability; provides opportunities for the application of pedagogical theory and skills to the teaching of curriculum content; and further develop mathematical thinking, logical reasoning, and problem solving skills.
		CC SO100& RP100	**Soroban & Restorative Practices.** Part 1 prepares the trainee with the Soroban skills. The Soroban is the Japanese abacus and is used as part of the national Maths curriculum for primary school children in Tonga.. The teaching Soroban is a larger version which can be used as a tool in the classroom to help children visualise numbers and understand place value and the decimal system. Part 2 covers the restorative practices in schools to foster an equitable and positive school culture. It is a process by which an individual acknowledges wrongdoing, takes steps to repair harm and is welcomed back into the school community. This fosters a culture that elevates dialogue and values relationships. Rather than traditional punitive approaches, Restorative practice bring the victim and the offender into communication enabling everyone affected to play a part in repairing the harm and finding a positive way forward
		TO202 (P)	**Teaching Primary Tongan** Examines the theoretical and the practical aspects of managerial accounting such as the decision making concepts as well as the planning and control concepts. Further development of the teaching skills will also be considered such as the teaching strategies, planning, assessment and teaching resource.
		SC202 (P)	**Teaching and Learning of Integrated Science** Introduces the second part of compulsory general science education course for primary science specialists, that is, Teaching and Learning of Integrated Science for Primary Level. It also interweaves both content and pedagogical knowledge. It also addresses science knowledge, concepts, skills and attitudes associated with the science syllabus for classes 1-8. Students will have an opportunity to continue enhancing knowledge, learning and practice in the content and teaching of science in preparation for Primary Level teachings.
		PR202	**Practicum 2** Practicum 2 is a 6 weeks' full time program which allows the trainees to start mentoring the year one trainees and off course under the supervision of both the Associate teacher in the schools and the supervisor from the university. Trainees will be given multiple opportunities to teach in at least 4 of the core subject areas in classes 5 to 8 in Primary schools. Trainees in secondary schools will be given the opportunity to teach in both teaching majors from forms 5 to forms 7. Trainees should be able to gain confidence in teaching, while extending their content knowledge and skills for teaching their teaching majors at the given level(s). Trainees will be given the opportunities to assume full responsibilities of the teacher in the classroom. Ensures the institute's aspiration for its TTs to become the ideal *Faiako Ma'a Tonga* transpires through his/her teaching/learning behavior and performance in alignment with the *Four Pillars of Learning* embedded within the TIOE professional development framework – *Langa Faleako*7 (Building a House of Learning for Tongan Teachers). The pillars are described as *Pou Fale* (Posts of the House).

		ED301	**Research** Enables teacher trainees (TTs) to practice research skills and experience *Educational Research* on current and pressing issues pertaining to learning in Tonga – a major focus in their practicum experience for this semester. It also keeps TTs abreast with current trends and offers them the opportunity to contribute in carrying out, conducting and searching for solutions to these challenges. It further revisits significant pedagogical aspects of *Classroom & Behaviour Management; Presentation & Delivery; Lesson Planning & Constructive Alignment;* and *Teaching & Learning Activities & Assessment Tasks* to prepare TTs for their final and last practicum experience. The course is compulsory for all primary and secondary TTs and lectures will be delivered in a combined mode.
		ED302	**Inclusive Education** Focuses on the concept of "Education for All" and the idea that all students, despite their ability or learning style, are capable of, and deserve access to education. In order to reach the goal of an inclusive classroom, Ed 302 students will develop an awareness of the differing needs and abilities in an average classroom and the skills and techniques needed to ensure that all students are successful learners.
		ED303	**Counseling** The course (based on Narrative Therapy approaches) has been developed keeping in mind the various theories and concepts of counselling that today's teaching professionals need to be aware of to establish themselves as a competent teaching professional. Narrative Therapy views problems as separate from people and assumes people have many skills, competencies, beliefs, values, commitments and abilities that will assist them to change their relationship with the problem in their lives. This will enable them to better understand, and effectively deal with the challenges that students face in the course of their lives.
		ED304	**Education Technology** Equips the teacher trainee with concrete strategies for how to choose, use, and monitor technology in the classroom. Uses technology as a teaching and planning tool, designs meaningful learning experiences, incorporates technical terminology in their speech, and accommodates underserved populations such as special education and English language learners. In addition, the trainee will be given the opportunity to plan instruction and uses tools for engaging the students both in a traditional classroom or for an online course. The trainees will benefit from the implementation of the technology-based activities in the classroom, as well as connecting to content in new and engaging ways
		Major 1e 301 Eg. AC301	**Financial Accounting** It focuses on the fundamentals of financial accounting from the ground up. Learners will be given the opportunity to prepare a balance sheet, income statement, and cash flow statement, analyze financial statements, calculate and interpret critical ratios. You will also learn the role of managerial judgement in choosing accounting estimates and methods. The course concludes with an introduction to forecasting and valuation to help trainees to establish business goals that are both realistic and feasible.

		AC302	This course is designed to impart skills towards the interpretation and application of accounting standards and other statutory requirements reflected in company financial reports. The first section of the course covers specific company reporting issues such as share capital and reserves, company income tax, heritage and biological assets, and the extractive industries. The remaining section of the course concerns company consolidations, investments in associated entities, foreign currency transactions and translating financial statements of foreign operations**.**
		Major 2e. 301 Eg. EC301	**Advanced Micro- Economics** Applies an analytical approach to the study of how individuals and societies deal with the fundamental problem of scarce resources. It gives the trainees the apply the theories to everyday decisions faced by individuals as they try to maximize their utility, to businesses that try to maximize profits and to the whole of society as it attempts to use its resources efficiently. In addition, the trainees will also get to apply microeconomic tools to the analysis of such controversial issues as minimum wage laws, farm subsidies, rent controls, protectionism, pollution, welfare programs, and the tradeoff between equity and efficiency.
		Major 1f Eg. AC302	**Company Accounting** At the completion of this course, students should be able to understand theoretically and practically why company accounting entries are made and its treatment i.e. comprehensive explanations are given relating the practice of accounting to the theory of accounting particularly as expressed in accounting standards.
		Major 2f. Eg EC302	**Advanced Macro-Economics** Designed to teach students modern macroeconomic analysis and focuses on the standard dynamic general equilibrium model, which is central to current macroeconomic research. Students are given a careful introduction to the overlapping generations version of this model and shown how this model can be adapted in different ways to address a wide variety of economic issues and policy questions.
		PR302	**Practicum 3** Practicum 3 is a 6-weeks' final program which allows the trainees to take leadership in mentoring the year one trainees, assumes leadership roles in the classroom, while extending their knowledge and skills in their teaching majors. In addition to this, trainees will be given the opportunities to adjust the 7-step lesson planning to the school's format. Trainees in both primary and secondary schools will be given the opportunity to teach both teaching majors in at least two different levels. Trainees should be able to gain confidence in teaching, while extending their content knowledge and skills for teaching their teaching majors at the given level(s).
		ENT301	**Linear Algebra 2** Introducing Teacher trainee to the study of Vector Spaces with emphasis on the structure of n-dimensional Euclidean Vector Space. An in-depth knowledge of the axiomatic approach in the study of Mathematics. Topics include dot and cross product as distance and area in 3-D geometry, real vector space and sub-spaces, coordinates and basis vectors and change of basis matrix, row and column space, null space, eigenvectors and eigenvalues and an introduction to complex vector spaces.

		ENT302	**Multivariable Calculus** Introducing the Teacher Trainee to the studying of Calculus with two or more variables and how to use Calculus in explaining the physical universe. Learn about 3-dimensional space and application of linear algebra in solving problems. Students will also learn about partial derivatives, multiple integrals, line integrals and their applications. Greene's Theorem and Stoke's divergent theorem are explored.
		EN301	**Language and Literature** Explores the interactive relationship between language and literature. It is intended to assist the student to develop a permanent consciousness of language, as they approach literary texts. It examines the nature, composition and functions of language in society, and also looks at its practical relationship with meaning in literary texts. Seeks to furnish the student with a sound theoretical understanding of language both as an arbitrary set of symbols, and as a dynamic system of communication on which humans rely to exchange a variety of meanings, and to represent their various worlds through creative writing.
		EN302	**The Structure of English** Focuses on the description and analysis of the structure of English. It looks at the way sounds and words are formed (phonology and morphology), and then examines the way words are joined together as phrases, then clauses, and then sentences (syntax). It aims to reveal the patterns that underlie English, in ways that will be useful for students studying, using or teaching the language.
		GE301	**Biogeography: Plants, Animals & the Human Environment** Examines the importance of plants and animals within the context of their characteristic ecosystems and the importance of physical, biotic and human factors in shaping their communities and the economic importance of plants and animals to the development of the Pacific Islands.
		GE302	**Agriculture, Food & Nutrition in the Developing World** Analyse and evaluate national planning in the Developing World, especially the small island nations of the Pacific on increasing malnutrition and food system change as major obstacles to meaningful national development, Developing World's environment and resource management system and its contribution to agriculture, food and nutrition national development.
		MA301	**Linear Algebra 2** Introducing Teacher trainee to the study of Vector Spaces with emphasis on the structure of n-dimensional Euclidean Vector Space. An in-depth knowledge of the axiomatic approach in the study of Mathematics. Topics include dot and cross product as distance and area in 3-D geometry, real vector space and sub-spaces, coordinates and basis vectors and change of basis matrix, row and column space, null space, eigenvectors and eigenvalues and an introduction to complex vector spaces.
		MA302	**Multivariable Calculus** Introducing the Teacher Trainee to the studying of Calculus with two or more variables and how to use Calculus in explaining the physical universe. Learn about 3-dimensional space and application of linear algebra in solving problems. Students will also learn about partial derivatives, multiple integrals, line integrals and their applications. Greene's Theorem and Stoke's divergent theorem are explored.

		BY301	**Invertebrate Biology** Builds on your introductory knowledge of the diversity, form and function of aquatic and terrestrial invertebrates. The course covers the invertebrate phyla by looking at their diverse forms, functions and evolutionary relationships. Throughout the course, there will be focuses on evolution, morphology, behaviour and ecology. Students will build an understanding of their functional biology in marine, freshwater and terrestrial environments
		BY302	**General Ecology** An introduction to the interactions between living organisms and their physical, chemical and biological environment. Several levels of ecology organisation are examined. These include the study of different types of populations, communities and ecosystems. Topics include population structure and growth, species interaction, energy flow, nutrient cycling, succession and applications to current environmental management issues. Students will perform ecological experiments in the field as well as in the laboratory.
		CH301	**Physical Chemistry** Provides coverage of modern aspects of physical chemistry building on CHT201. It is intended to provide students with the necessary background to study the applications of physical and chemical principles. Such knowledge is essential for a complete understanding of the application of physical measurements to the elucidation of chemical structures and mechanisms of reactions. The laboratory component provides training in a relevant range of theoretical and applied physical chemistry techniques.
		CH302	**Organic Chemistry** The course builds upon the fundamental concepts in organic chemistry that were introduced in CHT202, the branch of Chemistry that deals with the chemistry of carbon. It demonstrates better understanding and interpretation of the concepts of reactivity and behaviour of aromatic compounds and biologically relevant molecules. The practical component will include set experiments which should build confidence in students in carrying out scientific analyses and also enable them to improve their practical analytical skills.
		PH301	**Mechanics** This is the third of 3 Physics series and is intended to reinforce and extent students' knowledge on concepts of mechanics of motion and energy. This course will also introduce students' to basic laboratory skills enabling him/her to prepare, present and grade a practical. This should provide the teacher trainees with a sound sense of what electricity and electromagnetism are which would enable them to teach science confidently in any secondary schools. The practical work should also help the students to know more about the electrical circuits and the electromagnets.
		PH302	**Electricity & Electromagnetism** This course is designed for year 3 teacher trainees who are majoring in physics and are intending to teach science in the secondary schools. This course introduce students to further their knowledge in electricity and electromagnetism, solve problems in electricity and solve problems in electromagnetism.

		TOT301	**Ngāue Fakamea'A moe Nima Mea'a 'a e Tonga' (Traditional Arts & Craft)** Ke lava 'o 'ilo 'a e ngaahi naunau, me'angāue mo e founga totonu na'e ngāue'aki 'e he kakai ki he ngaahi ngāue fakamea'a kehekehe pe 'i ono'aho 'a fafine mo tangata. (To be able to identify and use traditional tools which were being used in the production of handicrafts in those early days). Lava 'o ngaohi ha fa'ahinga naunau mea'a mei' he louniu', lou'akau', tutu' pe 'akau' . (To produce a piece of handicraft from either, coconut leaves, lou'akau, tapa cloth or wood using the correct traditional way and tools) . Ke feangai mo maa'usia 'a e ngaahi taukei 'i he ngaahi fatongia 'o fafine mo tangata he nofo 'api´ mo e nofo´ 'i Tonga. (To be very familiar with women's and men's role in the homes and in the Tongan society).
		TOT 302	**Research in Tongan Studies** This is a compulsory course for Diploma 3 students whose major is Tongan Studies. The course will further deepen student knowledge and understanding of Tongan Culture (social, political and economic aspects) and the underlying reasons for Tongan practices through an investigative approach.
Program Name	**Semester**	**Code**	**Course Name and Description**
Bachelor of Education (Primary) Year 3		**ED301**	**Education Research** Enables teacher trainees (TTs) to practice research skills and experience *Educational Research* on current and pressing issues pertaining to learning in Tonga – a major focus in their practicum experience for this semester. It also keeps TTs abreast with current trends and offers them the opportunity to contribute in carrying out, conducting and searching for solutions to these challenges. It further revisits significant pedagogical aspects of *Classroom & Behaviour Management; Presentation & Delivery; Lesson Planning & Constructive Alignment;* and *Teaching & Learning Activities & Assessment Tasks* to prepare TTs for their final and last practicum experience. The course is compulsory for all primary and secondary TTs and lectures will be delivered in a combined mode.
		ED302	**Inclusive Education** Focuses on the concept of "Education for All" and the idea that all students, despite their ability or learning style, are capable of, and deserve access to education. In order to reach the goal of an inclusive classroom, Ed 302 students will develop an awareness of the differing needs and abilities in an average classroom and the skills and techniques needed to ensure that all students are successful learners.
		ED303/ ED304	**Counselling** Based on Narrative Therapy approaches, the course has been developed keeping in mind the various theories and concepts of counselling that today's teaching professionals need to be aware of to establish themselves as a competent teaching professional. Narrative Therapy views problems as separate from people and assumes people have many skills, competencies, beliefs, values, commitments and abilities that will assist them to change their relationship with the problem in their lives. This will enable them to better understand, and effectively deal with the challenges that students face in the course of their lives.
		ED304	**Education Technology** Equips the teacher trainee with concrete strategies for how to choose, use, and monitor technology in the classroom. Uses technology as a teaching and planning tool, designs meaningful learning experiences,

			incorporates technical terminology in their speech, and accommodates underserved populations such as special education and English language learners. In addition, the trainee will be given the opportunity to plan instruction and uses tools for engaging the students both in a traditional classroom or for an online course. The trainees will benefit from the implementation of the technology-based activities in the classroom, as well as connecting to content in new and engaging ways'
		EN301 (P)	**English Education Teaching English Language Skills (Primary)** Develops teacher trainees skills in teaching English as a foreign language in Primary Classrooms. Design to help teachers prepare teaching resources for different language skills and selecting teaching techniques for appropriate ability level of students.
		MA301(P)	**Mathematics Education** Introducing Teacher trainee to the study of Vector Spaces with emphasis on the structure of n-dimensional Euclidean Vector Space. An in-depth knowledge of the axiomatic approach in the study of Mathematics. Topics include dot and cross product as distance and area in 3-D geometry, real vector space and sub-spaces, coordinates and basis vectors and change of basis matrix, row and column space, null space, eigenvectors and eigenvalues and an introduction to complex vector spaces.
		TO302	**Tongan Education Tongan Language & Study Skills** Extends the knowledge of the trainees on Tongan culture as well as consolidating their existing knowledge. Trainees will also acquire extended knowledge of the literary compositions and appreciate the importance of Tongan culture as far as the life of Tongan society is concerned. It is also a continuation of the strengthening and extension of the students Tongan language and study skills, enabling them to fine tune their ability to use Tongan vocabularies appropriately and employ their analysis skills to further enhance not only their knowledge but also their ability to teach Tongan not only in the primary school level but at secondary school level as well.
		SC302	**Science Teaching** Designs for primary school teachers. It is to empower and enlighten ways how science teaching in the primary classroom is about. It does not focus on learning science facts but it's a develop an understanding of many science concepts. We are learning here as, how you and your students collaborate in investigating meaningful science questions using prior knowledge in both science experiences and other areas of the curriculum.
		PR302	**Practicum 3** Practicum 3 is a 6-weeks' final program which allows the trainees to take leadership in mentoring the year one trainees, assumes leadership roles in the classroom, while extending their knowledge and skills in their teaching majors. In addition to this, trainees will be given the opportunities to adjust the 7-step lesson planning to the school's format. Trainees in both primary and secondary schools will be given the opportunity to teach both teaching majors in at least two different levels. Trainees should be able to gain confidence in teaching, while extending their content knowledge and skills for teaching their teaching majors at the given level(s).

Program Name	Semester	Code	Course Name and Description
Bachelor of Education (Tonga Early Childhood Teaching)		TEC101	**Ko e Fungani ‘o e Ako ‘a Tonga: Koloa 'o Tonga** ‘Oku tatala ‘i he pepa ni ‘a e fatumanongi ‘o e Loto’iTongá mo e Fakamonū ‘o Tongá ke mahino ‘a e ‘uhinga ‘o e akó, ‘iló mo e potó. Ko e koloa fungani ‘o e ako ‘a Tongá, ‘oku tefito ia he ‘Otuá. ‘Oku fakamatala’i heni ‘a e kaveinga ‘o e fonuá, “ ‘Otua mo Tonga ko hoku Tofi’a”, mo e ngaahi fatu fakakaukau fakaako kuo ‘i he Mala’e ‘o e Akó. Fakamatala’i he pepa ni ‘a e koloa ‘a e fonuá, koloa ‘o ‘etau lea Tongá, koloa ‘o ’etau ngaahi tuí, pea mo e ngaahi me’a ‘oku fakamahu’inga’i he loto ‘o e kakai Tongá. Fakamamafa’i heni ‘a e loto’ofa mo e loto hangamālie, ko e koloa ‘o e akó mo e faiakó.
		TEC102	**Tauhi Fonua: Nofo Melino** Fakamatala’i e tui, fakakaukau mo e ‘uhinga ‘o e ‘tauhi fonua’ ke tatala ai e koloa ‘o e akó. Fakamatala’i ‘a e loto melino mo e loto māfana ko e koloa lahi mo mahu’inga he tanumaki ‘o e nofo va lelei he fonuá, ko e tuukunga malie mo taau ki he ako ‘a e Tongá. Tatala mei he Loto’i Tonga mo e Fakamonū ‘o Tongá ‘a e nofo melino ‘i he fonuá. Talanoa’i e koloa ‘o e feohí, ko e makatu’unga ‘o e akó mo e faiakó.
		TECT103	**Otu Kaveinga: Toka 'a Tonga.** Ke fakamatala’i ke mahu’ingamālie ‘a e loto matalá mo e loto toka’í ko e kamata’anga ‘o e ‘iló mo e akó. Fakamatala’i e ‘uhinga ‘o e ‘Otu Kaveingá ‘o fakatefito ‘i he Fatumanongi ‘o e Loto’iTongá mo e Fakamonū ‘o Tongá, ko e founga ke tatala ai e koloa ‘o e ‘Toka ‘a Tongá’. Fatu e ngaahi kaveinga mei he tupu’anga, fa’unga mo e founga ‘o e koloa kuo toka ‘i Tonga, ke ako’i ai e fānau mo e Faiako ma’a Tongá. Talanoa’i ‘a e ngaahi makatu’unga ‘oku fatu ai e *Silapa Fakafonua ma’ae ngaahi Ako Tokamu’a ‘i Tongá,* kau ai e fa’unga mo e founga ‘o e Ako Tokamu’á.
		TECT104 TEC104	**Fonua: Nofo 'a Kainga** Fakamatala’i mo tatala ‘a e lea mo e ‘uhinga ‘o e ‘fonua’ ‘ene ‘uhinga ki he ‘Otua mo e me’a fakatupu kuo fa’u ‘o fakafonu’aki ‘a Tonga mo mamani, pehē ki he fema’uma’utaki ‘o e laumālie ‘o e ‘Otuá mo e loto ‘o e makapuna kuo fanau’i maí. Fakamatala ki he fa’u ‘o e lotó (Loto’iTonga) lolotonga ‘a e tupu ‘a e fānau hangē ko e loto lelei mo e loto ma’a. Fakamatala mo talanoa’i e ‘nofo ‘a kāinga’ he fonuá ke ‘uhinga mo mahu’ingamālie ai ‘a e makapuná ko e koloa ‘a e kāinga kamata mei he tu’utu’uiá, fanau’i mai, mo ‘enau tutupu hake. Fakamatala ki he fakaako ‘o e tui ‘a e kakai Tonga ki he anga hono tauhi, ako’i mo hono ‘ofa’i ‘a e fānau iiki.
		TEC105	‘Oku kamata e pepa ni he tatala ‘o e loto haohaoá, mo e loto ‘oku fu’u fo’oú, ko e me’a ke fofola ai ‘a e ‘uhinga mo e tūkunga ‘o e ‘tauhi’ koloa (fānau) ‘a e Tongá. Talanoa’i ‘a e tefito’i tui ‘o e Mo’ui Māfana pea ke fakaa’u e fakakaukaú ki he Fa’ē mo e fānaú. Fakamatala’i ‘a e tauhi ‘o e mo’ui: fakalaumālie (loto ma’a /mo’ui lelei mo ma’a), fakasino (loto tokanga /mo’ui hao mo malu), faka‘atamai (loto matala/’atamai matala mo puke me’a) mo faka’ekonomika (loto topono/mo’ui fakapotopoto).
		TECT106 TEC106	**Teu Fakaako: Teuteu** Fakamatala mo talanoa‘i ‘a e ‘uhinga ‘o e lea ‘teu’ mo e ‘teuteu’ ‘a e Tongá, ‘o fakama‘unga ‘i he fenāpasi ‘a e fakakaukaú mo e ngāué, tautefito he ala ‘a e nimá. Fakatalatala ‘a e mahu‘inga mo e ‘uhinga ‘o e mo‘ui maheni faingata‘a, ako ke ngāue‘aki lelei ‘a e koloa ‘oku ma’u he nofó mo e kanoloto ‘o e mo‘ui fakapotopotó. Fakamatala‘i e loto tokangá, mo e loto faka‘amanakí, ko e koloa ia ‘a e faiako ‘oku ‘ikai tule pe tuku ke hōloa hono iví, mo ‘ene vekeveke ke tokonaki koloa lelei ma‘ae longa’i fānaú, ko e teuteu e mo’uí ki ha feitu’u pe te nau ‘i ai.

			Fakakau mai ki heni ‘a e ako ki he tekinolosiá mo ‘ene fakafōtunga e ngaahi founga ako fakaonopoōni ‘i he mala‘é.
		TECT107 TEC107 & 108	**Fakamonū ‘o Tonga: Loto Poto** ‘E ma’u faingamalie heni ‘a e fanauako’ ‘i he polokalama ni, ke fakamatala’i ‘a e Loto Poto mo e Loto Ma’u ‘i hono ngāue’aki ‘i he ako’, ‘ilo, mo e poto, ko e me’a ke tatala ai e ako mo e ‘ilo.Tatala e ngaahi fakakaukau ki he mo’oni ‘o e ngaahi ‘Apiako Tokamu’a ke mahu’inga mālie ‘a ‘enau tui mo ‘enau ngāue’. Talanoa’i ‘a e ngaahi fatongia, founga ngāue mo e fakahinohino ma’ae Faiako Ma’a Tonga ‘i hono ako’i ‘a e fanau Ako Tokamu’a
		TECT201 TEC201	**Ko e Fungani ‘o e Ako ‘a Tonga: Fakakoloa 'o Tonga** ‘Oku fakaloloto ‘i he pepa ni ‘a hono ako’i mo ‘ilo’i e ngaahi fatu fakakaukau fakaako ‘oku fungani he fa’unga mo e founga, ko e fakakoloa ia ‘o Tongá ‘i he akó. Tatala e ngaahi fakakaukau mo e founga ‘o hono fakakoloa ‘o e lea Tongá ko e fu’ufu’unga lelei ke faka’ilo ia ki he Faiako Ma’a Tongá ke poto hono tānaki e koloa fakaako mo fakafaiako. Fakamatala’i mo fofola e koloa ‘o e talanoá – ko e founga fakaako ia ke faka’ilo ai ‘a e fungani ‘o Tonga. Fakatalatala mo faka’uhinga e fakakaukau ‘o e Ako mo e Faiako ‘a ia kuo hake mai mei he Pasifiki mo tu’apule’anga foki, pea mo e ngaahi lea fo’ou ‘i he akó.
		TECT202 TEC202	**Tauhi Fonua: Talatalanoa** ‘Oku fakaloloto ‘i he pepa ni ‘a e koloa ‘o e ako ‘i he tauhi fonua, ko e me’a ‘oku fatu mei he laumālie pea fakahopo mai he loto melino mo māfana. Ke ngāue’aki e talatalanoa, ko e founga fakaako, toe fakapolitikale mo fakasōsiale. Ke vakai’i mo fakafehu’i ‘a e ngaahi ma’u’anga talá, fakamatalá, pea ke tatala mo fekumi ki ha ngaahi ‘ilo mo e fakakaukau fo’ou ke hakeaki’i ai mo fakalahi ki he ‘ilo ‘a e kau faiakó ki he feohi, nofo melino mo e tauhi vā lelei. Ke talatalanoa koloa lalahi mo ‘a‘au e ngaahi fakakaukau fakaakó, he lea mahino mo mālie ki he loto mo e ‘atamai ‘o e fānaú, mātu’á mo e kaungā tauhi kakai ‘i he fonuá.
		TECT203 TEC203	**Otu Kaveinga: Fakatoka 'i Tonga** Ke fakamatala fakaikiiki ke mahu’ingamālie ‘a e loto matalá mo e loto toka’í ko e fuofua me’a ia ‘o e ‘iló mo e akó ‘i Tonga. Ke fakaloloto hono talanoa’i e koloa fakalotó ke matu’aki mahino ‘a e fakatoka ‘o e ‘Otu kaveinga ‘a e Ako Tokamu’a ‘i Tongá. Talanoa’i ke mahu’ingamālie ‘a e ‘uhinga ‘o e fakalea “‘i Tonga” pea ke fofola e ngaahi koloa ‘o e ‘Fakatoka ‘i Tonga’ mei he tūkunga ‘o e ‘api, kolo, feitu’u, motu mo e fonua pea fakalea’aki e *‘a*, *‘o* & *‘i* hangē ko ení: ‘a e ‘apí, ‘o e ‘apí, ‘i he ‘apí; ‘a e koló, ‘o e koló, ‘i he koló, ‘a e feitu’ú, ‘o e feitu’ú, ‘i he feitu’ú, pea pehē ki he motú mo e fonuá foki. Fokotu’u ha ngaahi fa’u fo’ou mo e liliu ke fakatoka ‘aki hono ako’i mo fakahinohino e makapuna mo e faiako ma’a Tongá. Fakatalatala ke mahu’ingamālie ‘a e ngaahi makatu’unga ‘o e Silapa Fakafonua mo e fa’unga mo e founga ‘o e Ako Tokamu’á.
		TECT204 TEC204	**Fonua: Kāinga Fo'ou** Fakamatala ‘a e ‘uhinga ‘o e ‘kāinga fo’ou’ ke tatala ai e feohi ‘a e makapuná mo e kakai kehé ‘o mafao atu he nofo-‘a-kāingá. Fakaloloto hono fakamatala’i e ngaahi loto, ‘ulungaanga mo e fakakaukau ‘a e fānau ‘oku fa’u he talanoá mo e feohí hangē ko e feohi fakatamaiki, fakato’u, ‘uma’ā e feohi ‘a e fānau mo e kakai lalahí he tūkunga kehekehe he fonuá. Talanoa’i e koloa he nofo ‘a e ongo kāinga tupu’anga ‘o e tamai mo e fa’ē mo e kāinga fo’ou he feohi ‘a e makapuna. Ako’i e lea Tongá ‘o e feohi he tuukunga kehekehe he tutupu hake, pu’aki lea lelei, mo e lea mahino.

		TECT205 **TEC205**	**Tauhi Fanau: Mo'ui Fakalata mo Fakamāfana** Talanoa'i fakaikiiki 'a e loto haohaoá mo e fu'u fo'ou 'a e lotó 'a ia 'oku fatu ai e tauhi e makapuna mo e hako tupu e fonua. Fakaloloto 'a e fakakaukau 'o e tauhi fānau ko e me'a ke hakeaki'i e mo'ui 'oku lata mo māfana ai 'a e kau tauhí pea mo e tauhi fānau 'oku faí. Tatala e koloa 'o e tauhi fānau ke mahu'ingamālie: 'a e tūkunga 'oku fakalata mo fakamāfana ki he loto 'o e fānau, fakatupu fieako mo fie'ilo, ma'u ivi mo loto fiefia. Fakaloloto 'a e fakakaukau ki he tauhi e fānau ke 'oua 'e fakahōhō loto kae ako'i ke nau loto 'ofa mo ongo'i loto (mahino) 'a e tukunga 'o e nofo, mo'ui 'a e kainga mo e founga tauhi fānau fou 'i he lea'i mo e akonaki.
	4	**TECT206** **TEC206**	**Teu Fakaako: Naunau** Fakamamafa'i 'a e ngaohi 'o e naunau fakaako mei he koloa 'a e fonuá hangē ko e ngaahi koloa mei he 'akau, maka, mo tahi hange ko e nge'esi fingota mo honau ngaahi filio'i ke 'oua e fakatupu lavea pe vevea, kae ue'i e lotó mo e 'atamaí ke toe matala ange ki he 'uhinga 'o e lelei, tolonga, mo e faka'ofo'ofa 'o ha naunau ako. Ako'i, ke tokanga ki he 'uhinga tefito hono teu'í, teuteu'í, mo e anga hono ngāue'aki 'o e naunau akó– hono koloá - lalahi, iiki, mo e fakaikiikí foki, pea ke ako ke ngāue maau, fakamaau mo ala poto foki. Ke mahino foki, ko e naunau fakaakó, 'oku teu'i mo ako'i ai 'a e leá, faka'uhinga me'a mo e poto, hangē ko e poto faka'atamai, lea poto mo e poto he feohi fakatokolahi, talanoa mo poto fakafo'ituitui mo e mata kakai.
		TECT207 **TEC208**	**Fakamonū o Tonga: Poto'i Loto** 'Oku fakamatala fakaikiiki heni ke mahu'ingamalie 'a e Poto'iloto ko e koloa ke loloto ai e Faiako Ma'a Tonga 'i he Ako Tokamu'a', pea ke tānaki atu 'a e Loto 'Alovili mo e Loto Faitotonu ki hono Fakamonu 'o Tonga 'i he Ako Tokamu'a. Fakatalatala e laumalie 'o e ako 'i he Loto Poto mo e ma'u'anga poto 'a e ngaahi Ako Tokamu'a 'i Tonga'. Fakatalatala ke mahu'ingamalie foki 'a e ngaahi founga ngāue, ngaahi tu'utu'uni mo e ngaahi taumu'a 'a e Faiako Ma'a Tonga
	5	**TECT301** **TEC301**	**Ko e Fungani 'o e Ako 'a Tonga: Tofi'a Koloa'ia** 'Oku fofola he pepa ni 'a e fakakaukau 'o e *Koloa'ia 'a e Fonuá* 'i he a'usia 'e he kakai 'a e tumutumu 'o e lelei 'oku tupu mei he Laumālie. Tatala mo tālanga'i 'a e *fungani 'o e ako 'i Tongá* 'o tefito 'i he ma'u e 'ofa 'a e 'Otua 'i he loto'iTongá, pea ngāue'aki ki hono tufotufa mo faka'inasi he akó, mo e poto hono ngāue lelei'aki e koloa 'a e fonua 'o ako'i ai e to'utangatá. Tatala mo tālanga'i 'a e mahutafea 'a Tongá he koloa 'o 'ene leá mo e fungani 'o e loto'iTonga, ko e me'a ke faka'ilo ki he Faiako Ma'a Tongá.
		TECT302 **TEC302**	**Tauhi Fonua: Talanoa Mālie** 'Oku fakaloloto 'a e mahu'inga mo e 'uhinga 'o e tauhi fonua 'aki hono ako'i e kau faiako ke nau a'usia 'a e koloa 'o e TalanoaMālie – "ko e 'ofa 'a e 'Otuá ki mamani ko e Melino ma'ae kakai kuo hoifua ki ai". Fakamatala'i 'a e 'uhinga fakalaumālie, sosiale mo fakaako 'o e 'talanoa mālie'. Ngāue'aki e fakakaukau 'o e TalanoaMālie ke tatala pea mo fatu ai 'a e fekumi fakaakó 'a e Faiako Ma'a Tongá, ko 'ene ngāue tefito ia 'i he mala'é. Fakatalatala ke mahu'ingamālie 'a e talanoamālie 'o e loto'iTongá pea fakamonū ai e ngaahi lelei kuo tanumaki mo toutou fakafoo'u he ngaahi lau-ua 'o e akó.
		TECT303 **TEC303**	**Otu Kaveinga: Toka'i 'o Tonga** Ke tatala e 'uhinga mo e koloa 'o e 'Toka'i 'o Tonga' pea mo hono ngāue'aki fakaako ke hakeaki'i ai mo mo'ui'aki 'e he Faiako Ma'a Tonga 'a e koloa 'o e loto toka'í mo e loto matalá. Ke fakatalatala 'a e fihi 'o e

			ngaahi fakakaukau, loto, mo e founga ‘oku mahino ai hono toka’i ‘o Tongá, tautefito ki he ako ko eni ‘oku fatu he Poto ‘o e Laumālie ‘o e ‘Otuá, he lea fakaTongá. Ke tālanga’i ‘a e ngaahi ‘ilo fakamamani lahi ‘i he Ako Tokamu’a kau ai ‘a e Silapa fakafonua mo e ngaahi fakakaukau mei he Pasifikí mo tu’apule’anga foki ‘a ia kuo ngāue’aki ‘e he kau faiako he mala’e.
	6	**TECT304 TEC304**	**Fonua: KaiMelie** Fakamatala’i mo tatala ‘a e ‘uhinga ‘o e lea, ‘kaimelie’ ke fofola ai e loloto ‘o e fakakaukau tefito ‘o e fonuá ke mahu’ingamālie ‘a e hoko mai ‘a e fānau mei manava ‘o mo’ui he funga ‘o e fonuá; ‘a e fononga ‘oku folaua ‘e he hako tupu ‘o Tonga ‘i he tukui motu ‘o e fonua. Tālanga’i ‘a e ‘uhinga fakasōsiale, fakalaumālie, fakapolitikale, fakaako mo fakafilosofia ‘o e ‘kaimelie’ he fonuá & kainga fo’ou. Talatalanoa ki he tutupu e longa’i fānau ‘i he loto lelei mo e loto ma’a mo e tumutumu e lea fakaTonga te nau ako mo a’usia he fonongá. Ko e ngaahi fakakaukau tefito (FT)ke a‘usia ‘i he Pepa ni ‘oku kau ai ‘a e: tatala e koloa ‘o e loto toponó he ngāue fakafaiako ‘a e Faiako Ma’a Tongá he Ako Tokamu’á; tatala e koloa ‘o e loto fakamātoató he ngāue fakafaiako ‘a e Faiako Ma’a Tongá he Ako Tokamu’a; tatala e fakakaukau fakalaumālie, mo fakaako ‘o e lea *Fonua: KaiMelie*, ke ngāue’aki he ako’i ‘o e longa’ifānaú, ‘i he Ako Tokamu’á, mo e tālanga’i e fakakaukau ‘o e *Fonua: KaiMelie* ‘i ha ngaahi a’usia fakasōsiale, fakapolitikale mo faka’ekonomika, pea faka’uhinga mo ngāue’aki he tauhi mo ako’i ‘o e longa’i fānaú, ‘i he Ako Tokamu’á.
		TECT305 TEC305	**Tauhi Fānau: Mo'ui Kanokato** Fakamatala’i ‘a e ‘uhinga, mahu‘inga mo e a‘usia ‘o e Mo‘ui Kanokato ke mahu‘ingamālie ‘a e ohi mo e tauhi fānau ‘a e Tongá. Talanoa‘i ke loloto ‘a e koloa lelei kotoa he tauhi fānau hangē ko ia ‘oku hā he mo’ui fakalaumālie, sino, ‘atamai, sōsiale mo ‘ekonomika. Fakafehu‘i e loto mo e ‘ilo ‘oku fakava‘e‘aki e ngaahi founga ‘oku fai‘aki e tokanga‘i, ako‘i, mo e tauhi ‘o e fānaú ‘e he kāinga Tongá ‘uma‘ā foki ‘a e Faiako ma‘a Tongá.
		TECT306 TEC306	**Teu Fakaako: Ngalu (e Fasi)** Ke fakamatala’i ‘a e ‘uhinga ‘o e lea ‘ngalu’ (e fasi) hono ngāue’aki he ngaahi naunau ako fakaeonopoōni hangē ko e misini komipiuta mo e ngaahi misini ‘oku ngāue‘aki e huelo mo e peau ongó hangē ko e letio, televisone, me‘a faita, telefoni mo e ngaahi naunau pehē. Ke ako‘i e ngaahi founga hono ngāue‘aki e ngaahi naunau fakaako ni ki he teuteu, fekumi mo e tānaki fakakaukau ‘a e kau faiako kau ai mo hono ako‘i kinautolu ke nau poto hono fakahinohino‘i e fānau ke nau ‘ilo e lelei fakaako ‘oku ma‘u hono ngāue‘aki totonu mo fakapotopoto e me‘angāue; fakamahino foki mo e nānunga kovi mo faingata‘a ‘okapau ‘e ngāuehala ‘aki mo ta‘etokanga. Tānaki foki ‘a e ngaahi lea Tonga (fo‘ou) ‘oku ngāue‘aki ki hono tauhi, tokanga‘i mo ngaue’aki faka-komipiuta ‘a ia ‘oku ako’i ki he fānaú foki.
		TEC307 & TEC308	**Fakamonū ‘o Tonga: Loto Poto Fakapotopoto** ‘Oku ma’u faingamalie heni ‘a e fanauako’ ke nau tatala ‘a e ‘uhinga ‘a e koloa ‘o e Loto Poto Fakapotopoto pea mo hono ngāue’aki fakaako ke mo’ui’aki ‘ e he Faiako Ma’a Tonga’mo hakeaki’i ai pe ‘a e Ako Tokamu’a ‘a Tonga’. ‘Oku nau tatala foki ‘a e koloa ‘o e Loto Hounga mo e Loto Mateaki’ ko e tanumaki e poto fakapotopoto.Ngāue’aki ‘a e tohi Palōveepi (Tohi tapu) mo ha fekumi fakaako ke tatala ai e fakakaukau lelei mo taau ke fakae’a ai ‘a e loto poto fakapotopoto he ngāue e longa’i fanau pea fakakau ki ai e

			kaungā faiako', matu'a mo e kainga 'o e longa'i fanau lolotonga ho'o akoako ngāue 'i he Ako Tokamu'a
Program Name	**Semester**	**Code**	**Course Name and Description**
Graduate Teachers Certificate		**ED411**	**Philosophy of Education/ Fakakaukau Fakaako** Developing skills in critical dialogue regarding education, culture, and social living in Tonga to understand that educational aims stem from a multiplicity of cultures, philosophies, ideologies, histories, and societies. Develop skills for critically interpreting educational documents, curriculum, and media texts with regard to issues of values and bias. Understand ways in which public schools are linked to *sosaieti* Tonga. Understand what a "philosophy of education (*fakakaukau fakaako*)" is, why it is important to have such an understanding, and how a philosophy of education can inform a Tongan teacher's performance and improve the educational experience. Investigate questions of what it means to be educated in Tonga, who should be educated, how should they be educated, and why should they be educated? Consider "whose knowledge, experience, and authority matters? How? For what? Why?"
		ED412	**Professional Standards** The objectives for this course are borrowed from the Minimum Service Standards document which outlines the standards Tongan teachers should achieve. This course endeavors to equip teachers with the necessary skills and knowledge to exhibit and demonstrate the indicators outlined for each standard. More importantly, it will give them the opportunity to reflect on what they do. There are 4 broad strands in the Minimum Service Standards document and this course addresses MSS 1 (Teaching Methods) and part of MSS 2 (Teaching & Management Capacity). It is believed that the rest of the Standards (Learning Environment (MSS 3) & Student Achievement (MSS 4)) will be addressed indirectly as a result of lifting the two this course will concentrate on. Ultimately, the result is quality education for our students.
		ED413	**Assessment & Evaluation** Be able to relate assessment to schooling (curriculum, teaching, learning) and the needs of the society Design and select effective assessment tasks that will engage students in their learning and monitor students' learning progress; Ability to develop valid, teaching-aligned rubrics for scoring performances and peer contribution to group work Ability to create a valid accurate written test that will inform improved instruction and feedback Ability to reflect on and analyse the validity of a test in terms of appropriate evaluation standards, and relevant theories, principles, and contexts Design different rubrics for different assessment tasks Explain how the findings from assessments can be used most effectively to benefit both students and teachers Responds to both internal and external assessments of students to provide effective feedback Use assessment results to redesign curriculum and teaching that will lead to improved learning outcomes Communicates the results of assessment in a timely manner to students, parents and the community

		ED414	**Developing Learning Resources** Provides teachers in Tonga not only with: 1) theoretical backgrounds relating to learning and the development of learning resources but also with, 2) practical experience in using both traditional and modern technology to design and create learning resources that are relevant and appropriate to their own teaching contexts.
		ED415	**Introduction to Educational Research in Tonga** Introduction to Educational Research in Tonga is a course offered at Level 7 for teachers who have a first degree with at least 2 years of teaching experience and some knowledge of research. Research is basically a systematic process of collecting and analyzing information to increase our understanding of a particular phenomenon under study. This course is deliberately situated within the educational context of Tonga. This positioning of the course is done so that teachers are exposed to key educational research studies that have been done in Tonga and draw lessons from these studies that can improve their understanding of education in Tonga. The course, as an introduction to educational research, also covers fundamental concepts and skills in both qualitative and quantitative research.
		ED416	**Socio Cultural Foundations of Education in Tonga.** Develops own understanding and interpretation of the concept of culture. Understands the various social elements that contribute to the distinctiveness of Tongan culture. Interventions in Tongan language and culture Understands the concepts of colonialism and post colonialism. Understands the various ways in which colonialism has impacted Tongan language and culture. Tongan Language Policy - Understands the various ways in which the Tongan Language Policy developed by the Ministry of Education may impact aspects of Tongan Society.

Education Programs Majors

Compulsory Courses for each Major						
Major	**Stage 1**	**Stage 1**	**Stage 2**	**Stage 2**	**Stage 3**	**Stage 3**
	Semester 1	**Semester 2**	**Semester 1**	**Semester 2**	**Semester 1**	**Semester 2**
Commercial Studies: ***Accounting*** ***(4 courses)***	ACT101: **Introduction to Teaching & Learning of Financial Accounting 1**	AC102: **Introduction to Teaching & Learning of Managerial Accounting 1**	AC201: **Teaching & Learning of Financial Accounting 2.**	AC202: **Teaching & Learning of Managerial Accounting 2**	AC301: **Financial Accounting**	AC302: **Company Accounting**
Commercial Studies: ***Economics*** ***(4 courses)***	EC101: **Introduction to teaching &Learning of Microeconomics**	EC102: **Introduction to teaching &Learning of Macroeconomics**	EC201: **Teaching & Learning of Microeconomics**	EC202: **Teaching & Learning of Microeconomics**	EC301: **Advanced Micro-Economics**	EC302: **Advanced Macro-Economics**

English ***(4 courses)***	EN101: **Introduction to Teaching Secondary English 1**	ENT102 **Introduction to Teaching Secondary English 2**	EN201: **Teaching Secondary English: Literature**	EN202: **Teaching Secondary English: Language**	EN301: **Language and Literature 1**	EN302: **Introduction to Linguistics**
Geography ***(4 courses)***	GE 101: **Introduction to teaching and learning of Pacific Islands Physical Geography**	GE102: **Introduction to teaching and learning of Pacific Islands Cultural Geography**	GE103 **Advance Teaching & Learning of Physical Geography**	GE202 **Advance Teaching & Learning Cultural Geography**	GE301: **Biogeography: Plants, Animals & the Human Environment**	GE302 : **Agriculture, Food & Nutrition in the Developing World**
History ***(4 courses)***	HY101: **Introduction to the Teaching of the History of Tonga**	HY102: **Introduction to the Teaching of the History of the Pacific**	HY201: **Introduction to the Teaching of Modern World History**	HY202: **Introduction to the Teaching of Research in Local History**	HY301:	HY302
Design Technology ***(4 courses)***	DT 101: **Teaching & Learning of Design Technology 3**	DT102: **Teaching & Learning of Design Technology 3**	DT201: **Teaching & Learning of Design Technology 3.**	DT202: **Teaching & Learning of Design Technology 3**	DT301:	DT302
Mathematics ***(4 courses}***	MA101: **Introduction to Teaching and Learning Mathematics for Secondary**	MA102: **Mathematics for Secondary Teachers**	MA201: **Linear Algebra and Calculus**	MA202: **Introduction to Statistics and Probability**	MA301: **Linear Algebra 2**	MA302: **Multivariable Calculus**
Science Core ***Chemistry***	SIT101: **Integrated Science**	CH102: **Teaching & Learning of Physical Chemistry.**	CH201: **Teaching and Learning of Advanced Physical Chemistry**	CH202: **Teaching and Learning of Organic Chemistry**	CH301: **Physical Chemistry**	CH302: **Organic Chemistry**
Biology		BYT102: **Plant Biology**	BYT201: **Animal Biology**	BYT202: **Genetics**	B 301: **Invertebrate Biology**	BY302: **General Ecology**
Physics ***(10 Courses)***		PHT102: **Teaching & Learning of Mechanics**	PHT201: **Teaching & Learning of Rotation & Waves.**	PHT202: **Teaching & Learning of Electricity & Electromagnetism .**	PH301: **Mechanics**	PH302: **Electricity & Electromagnetism**

Tongan Studies ***(4 courses)***	TOT101: **AKO MO AKO 'I KALAMA HE LEA FAKA-TONGA**	TOT102: **AKO MO AKO 'I ANGAFAKAFONUA I**	TOT201: **AKO MO AKO'I E TA'ANGA / MAAU / NGAAHI TALATUPU'A MO E FANANGA**	TOT202: **AKO MO AKO'I ANGAFAKAFONUA II**	TO301: **NGĀUE FAKAMEA'A MO E NIMA MEA'A 'A E TONGA'.**	TO302: **Research in Tongan Studies**
Complementary Courses : Students must take two half courses; PE- Physical Education & RP- Restorative Practices in Education for Faiako ma'a Tonga.						

2023 School of Education Calendar

Week #	Dates	Events
1	***Jan*** 2 - 6	Government Ministries open – Jan 4
2	9 - 13	
3	16 -20	Planning Jan 16 – 18 and Launch of TNU, Jan 20
4	23 - 27	Application for admission start Jan 23. TNU open day, Jan 27
5	30 – ***Feb 3***	
6	6 – 10	Application close, Feb 10
7	13 – 17	Enrollment of Year 2 & 3 Screening of applications (2 wks)
8	20 – 24	Sem 1 lectures begin for Year 2 & 3. Feb 20.
9	27 – ***Mar. 3***	Orientation & Enrollment for new entrants
10	6 – 10	Sem 1. lectures begin – Year 1 & 3 new entrants
11	13 – 17	
12	20 – 24	
13	27 - 31	
14	***Apr 3*** - 7	Councilor inauguration – Apr 6
15	10 - 14	Mid sem. Break (1 week)
16	17 – 21	Final Examination papers due – Apr 21
17	24 – 28	
18	***May 1*** - 5	
19	8 – 12	
20	15 – 17	
21	22 – 24	
22	29 – ***Jun 2***	Sem 1. Lectures end
23	5 – 9	Sem 1 Final Examination (2 wks)
24	12 – 16	
25	19 – 23	End of semester break (3 wks)
26	26 – 30	Assessment meeting – Jun 30
27	***Jul 3*** - 7	Research Conference Jul 5 -7
28	10 – 14	Semester 2 lectures begin Jul 10, Practicum 2 & 3 pre-visit – Jul 12
29	17 – 21	Practicum 2&3 (6 wks)
30	24 – 28	
31	31 – ***Aug 4***	Practicum 1 pre-visit Aug 2
32	7 – 11	Practicum 1 (4 wks)
33	14 – 18	
34	21 – 25	
35	28 – ***Sept 1***	
36	4 – 8	Lectures resume, Practicum 1, 2 & 3 marks due – sept 8
37	11 – 15	Final Examination papers due - Sept 15
38	18 – 22	
39	25 – 29	
40	***Oct 2*** – 6	Mid-Semester Break (1 week)
41	9 – 13	
42	16 – 20	
43	23 – 27	
44	30 – ***Nov 3***	
45	6 – 10	
46	13 – 17	Sem 2 lectures end – Nov 17
47	20 – 24	Sem 2 Final Examination (2 wks)
48	27 – ***Dec 1***	
49	4 - 8	Assessment meeting Dec 8
50	11 - 15	Graduation, Sem 2 ends Dec 15.

SCHOOL OF MEDIA AND JOURNALISM

Formerly established within the Tonga Institute of Higher Education (TIHE), the School of Media and Journalism is now being placed within the Faculty of Education, Arts and Humanities.

Program Statements

The School offers two programs of study, each with a Program Statement as shown below.

1. **Certificate in Media and Journalism – Level 4**

   Program Statement: Provides students with the foundational building blocks of media and journalism work. It introduces different forms of news and media and how to effectively construct a story for these different mediums and applications. Graduates will have gained the foundational skills, knowledge and ability to begin professional practice in any of the media, journalism and communications fields available in Tonga. government, non-government organizations or private sector businesses with opportunities to learn practical on-the-job skills.

2. **Diploma in Media and Journalism – Level 5**

   Program Statement: Provides students and professionals with a wide range of knowledge and skills in journalism and reporting. Graduates commence at graduate-level journalist positions in news rooms or graduate-level media communication positions across government, non-government organisations or private sector businesses with opportunities to learn practical on-the-job skills. Continuing to higher-level training such as a Bachelor's level qualification will advance the student's employment opportunities upon completion to mid to senior level positions.

Entry Requirements

For the Certificate in Media and Journalism – Level 4

Candidates must have:

i. A minimum *Grade 4* or an *Achieved* status in Form 6 (TFSC) English and Tongan subjects;
ii. Or a school leaver who has completed the Foundational English and Tongan subjects under the Ako Tu'uloa Pathway
iii. Or an applicant who can demonstrate equivalent industry skills of at least 3 years experience.

For the Diploma in Media and Journalism – Level 5

Candidates can gain entry through:

i. Completion of Certificate Level 4 in Media and Journalism, in other words candidates would have graduated fron the Certificate program.
ii. Recognition of Prior Learning (RPL) for those working in the media and journalism industry in Tonga with at least 5 years experience in the newsroom as a reporter.
iii. Portfolio assessment of journalistic work. The portfolio must show an exceptional standard of work in the area of journalism covered in the Certificate Level 4 units; basic news writing, writing for print, broadcast journalism, political journalism and investigative journalism. Work submitted in the portfolio must not be more than 2 years old. In addition, the applicant must also show an understanding of civics and ethics in relation to media and journalism. Each portfolio will be assessed against its RPL system to determine entry critertia are met.

Programs, Courses and Course Descriptions

Program Name	Semester	Code	Course Name and Description
Certificate in Media and Journalism – Level 4	1	MJ100	**Introduction to Basic News Writing** Designs as an introduction to basic news writing to equip students with skills and techniques about basic news writing. Students are taught about the structure and style of news writing to be able to effectively write well-structured and coherent news articles for different mediums.
		MJ110	**Value and Ethics** Develops an understanding of ethics, evaluate ethical debates in the field / practice of journalism – and in the wider context of the media industry in society.
		MJ120	**Research** Apply skills needed to conduct research, especially in preparation of news and/or investigative story from a well- researched topic. Apply skills of how to conduct triangulation technique in
		MJ130	**Low resource media production** Develops student's understanding of the types of tools available in Tonga across the different media platforms; broadcast, print and online.
		MJ140	**Civics** Develops students writing skills to be able to write/produce news or investigative stories, or journalistic commentary that reflect a good understanding of political systems and their impact on citizens:
	2	MJ150	**Broadcast and Journalism** Designs for students' exposure to the nature, elements, process and practice of writing for print, focusing on critical, interpretive and opinion writing for newspapers and other media in the form of editorials, reviews, columns, letters and cartoons.
		MJ160	**Writing and Print** Develops fundamental journalistic writing techniques - skills that work well in any academic or vocational setting. Develops also skills in critical, interpretive and opinion writing for newspapers and other media in the form of editorials, reviews, columns, letters and cartoons.
		MJ170	**Political Reporting** Develops a deeper learning engagement in the practice of political reporting, concluding work on social and political systems, especially regional institutions and relationships and an interweaving theme of gender perspectives and gender-sensitivity in journalism.
		MJ180	**Investigative Report** Designs with a focus on the various manifestations of corrupt practices in government and private sectors. Aims to train students on how to identify corrupt acts and practices, conduct advanced research, analyse facts and perform investigative reporting.
		MJ190	**Advocacy and Government Information for Media Practitioners** Develops an understanding of the key functions of media advocacy, its relationship between NGOs, government information officers and the mass media. Differentiate between media advocacy & social marketing, the traditional and new media, develops advocacy tools and how to maximize, evaluate and empowering people and communities.
Diploma in Media and Journalism – Level 5	3	MJ200	**Principles of Law and Media** Develops knowledge and understanding of journalists' rights and obligations under the constitution and the pertinent laws, understand broader citizens' rights and obligations in the subject areas below and apply this knowledge in reporting.
		MJ210	**Digital and Social Media**

			Demonstrates an understanding of how digital media is used to communicate across a variety of social and digital media to conduct research in the understanding of the ethical, technological and professional challenges within the South Pacific region.
		MJ220	**Beat Reporting: Police, Court and Parliament** Develops the basics of reporting and news writing focusing on how to gather and organise information, ask effective questions, respond to events and develop story ideas, research facts, and write news items to deadline.
		MJ230	**Beat Reporting: Sport, Environment and Health** Develops an understanding of the role sports plays in the community and in the media; and equip the students with the necessary skills and techniques to handle a sports round for TV, radio, print or the internet. Explores different environmental and health policies and the effective ways of reporting environmental and health issues. Trains students in doing research and in writing of stories that deal with environmental and health concerns and issues.
		MJ240	**Regional and Global Development** Explores the economic situation of the and how it affects their access to social welfare activities of the government, and other civil society organisations; to the human rights situation in the local and global perspectives and the environmental situation.
	4	**MJ250**	**Media Organization** Equips students with the necessary knowledge, skills and attitudes for a career in the media industry; and moreover equip the students with the necessary understanding to reflect as media practitioners on the structure and practices in the media industry.
		MJ260	**Website Design and Management** Develops to maximise the student's use of the computer and the internet in conducting research work and in preparing news reports/stories and other related information materials. It also provides meaningful technical and computer skills for an audience primarily concerned with media in the form of newspaper and radio, enables a method for broadcasting news to a much larger audience for a minimal overhead.
		MJ270	**Sales, Marketing and Program Promotions** Develops sufficient knowledge and skills to understand the basic principles of sales, marketing and program promotions; basic techniques and skills for sales, marketing and program promotions, analyse and express informed opinion on a viable sales, marketing and promotions plan for a media, enable students to appreciate the role of marketing, scheduling and program promotion in attracting readership/audience to a media organisation.
		MJ280	**Tradition and Culture of the Pacific** Develops the necessary knowledge, skills and attitudes to take the traditions and cultures into account in their work as media practitioners in representing the authentic nature of the society's traditions and cultures.
		MJ290	**Team Building** Develops deeper knowledge of advocacy, lobbying, access to information, having access to information, identify key building blocks of advocacy and lobbying and how it is used by both Government and Non-Government Organisations in the context of media and communication in Tonga.

FACULTY OF NURSING AND HEALTH SCIENCE

Initially located and managed through Tonga's Government Ministry of Health, the following schools have merged to form the Faculty of Nursing and Health Science at the Tonga National University.

1. Queen Salote School of Nursing and Midwifery
2. School of Health Science

QUEEN SALOTE SCHOOL OF NURSING & MIDWIFERY

There are 4 programs of study being offered by this School, as explained here in their Program Statements.

Program Statements

1. **Advanced Diploma in Nursing – Level 6**
   Program Statement: Aims to educate and prepare competent and safe to practice registered nurse in Tonga and possibly in the pacific region and beyond. The 3-year (6 semesters) program provides nurses with sound theoretical knowledge, skills and attributes for the delivery of quality holistic nursing care for the people in hospitals and in communities.. It encompasses trends in nursing education informed by evidence-based and best practice, to achieve Universal Health Coverage – Sustainable Development Goals, Tonga Strategic Development Framework II, and the mission of the Ministry of Health.

2. **Diploma in Medical Laboratory Technology - Level 5**
   Program Statement: Provides participating individuals with the skills and knowledge to work in a clinical medical laboratory. It prepares the learner with the skills and knowledge required for a medical laboratory technician to carry out all routine tasks and technical procedures in the following medical laboratory disciplines: Haematology; Biochemistry; Microbiology; Immunology/ transfusion science; Histopathology and Laboratory quality management system.

3. **Certificate in Dental Assisting – Level 4**
   Program Statement: Provides the knowledge and skills required to assist a dentist, dental hygienist, dental prosthetist or dental therapist during oral healthcare procedures. Upon graduating, their role includes maintaining high standards of infection control, taking dental radiographs, assisting with practice management and supporting quality and professionalism in the dental division. The duration of the program is 1 year.

4. **Certificate in Environmental Health - Level 4**
   Program Statement: A 2-yr program which provides knowledge and skills required for professional practice as Environmental Health Inspectors of the Tonga's Ministry of Health.

Entry Requirements

Outlined below are the minimum criteria for entry for each of the programs.

For the Advanced Diploma of Nursing

- Pacific Secondary School Certificate (PSSC) – Aggregate of 14 in 4 subjects and pass English – 4, Mathematics, Biology, and another subject.
  Or
- National Form Six Certificate or its equivalent with an average B pass and English, Mathematics, Biology and another subjects
  Or

- Complementary Foundation Science level subjects or equivalent with a minimum GPA of 2.5/4.0 or 2.75/5.0

And preferably a higher qualification

For the Diploma in Medical Laboratory Technology

- Pacific Secondary School Certificate (PSSC) – Aggregate of 14 in 4 subjects and pass English – 4, Mathematics, Biology, and another subject.
  Or
- National Form Six Certificate or its equivalent with an average B pass and English, Mathematics, Biology and another subjects.
  Or
- Complementary Foundation Science level subjects or equivalent with a minimum GPA of 2.5/4.0 or 2.75/5.0

And preferably a higher qualification

For the Certificate in Dental Assisting

- National Form Six Certificate or its equivalent – pass in English, Biology and another science subject.

For the Certificate in Environmental Health

- Pass the National Form Six Certificate or its equivalent

Programs, Courses and Course Descriptions

Program Name	Semester	Code	Course Name and Description
Advanced Diploma in Nursing – Level 6	**1**	**NR101**	**Social Science** Provides students with the essential knowledge of psychology, sociology and related concepts, principles and psychosocial processes of health. The relevance of psychology and sociology to nursing practice will then be explored with emphasis on their significances for the nursing practice in Tonga and beyond.
		NR102	**Health and Healthy Living** Defines health and the concepts of health as applies to individuals, families, communities and the importance of health determinants like environment to the maintenance of healthy living. Adolescent's Health development in relation to decision making and healthy living of the learners is explored. Various behaviors that promote and risk health are discussed. Health system-structure and status of nursing to support health and healthy living is also explored.
		NR103	**Human Bioscience 1** Introduces the study of anatomy and physiology with an examination of the organization, structure and tissue of the human body. It will cover the body systems, and discuss the essential terminologies, structural organization of the body, Bio-Chemistry, Cells, Glands and Body Tissue. Body systems covered will include Integumentary System, Muscular-Skeletal System**,** Cardiovascular System, and Respiratory System. The processes of the body system are discussed.
		NR104	**Nursing Theory & Practice 1** Introduces concepts and foundational theories of nursing and its practice. The legal and ethical aspects of nursing practice is introduced. Theories and concepts introduced include: Introducing the Nursing care process phases; Growth and development physical developmental theories; The functional health pattern framework;

			Basic Infection Prevention Control, Effective communication and patients-nurse therapeutic relationship. Introduction to professional roles and responsibilities of nurses in their various areas in nursing are discussed.
		NR105	**Primary Health Care 1** Introduces the concepts of Public Health and Primary Health Care (PHC) and how these are applied in nursing practice. The relationship of PHC within the Public Health System is explored. Primary Health Care Approaches are discussed in achieving health for ALL. Sustainable Development goals (SDGs) are identified and their significance to nursing practice. The roles and responsibilities of nurses working in the community are discussed in relation to PHC. The principles of community and family assessment are explored and applied to nursing practice in the community setting.
		NR110	**Clinical Practice 1A** Familiarizes the learners with the health system and differentiate the primary, secondary and tertiary services. Introduces the basic nursing skills that are associated infection control, therapeutic relationship and health assessment. Learners will also identify several external partners that support the health system in delivering quality health services. **Clinical Practice 1B** Introduces knowledge based skills that are essential for nursing care in the hospital setting. Major concepts explored includes cultural safety in the workplace and inflection control is the major focus. Demonstrating competency basic skills required in nursing assessment will be assessed.
	2	**NR106**	**Primary Health Care 2** Discusses the concept of Health Promotion and Nutrition, and their applications to individuals, families, and communities in clinical and community setting. Components of Nutrition are identified and their significance in nursing practice. Strategies (Health Education) for promoting health and changing behavioral pattern are explored.
		NR107	**Human Bioscience 2** Introduces more body systems' Anatomy and Physiology as applied to nursing. Body systems include: Lymphatic System, Immune System, Urinary System, Fluid, Electrolytes & Acid Base Balance, Nervous System, Digestive System, Endocrine System, Reproductive System and Sensory systems. Processes and their significance to human survival will be described.
		NR108	**Human Bioscience 3** Introduces the science of Microbiology and Pharmacology that are essential for effective nursing practice. The main focus of microbiology are the processes by which the identified organism develops and cause disease**,** factors that enhance its growth and extend, methods for prevention and management, and its significance to the study to nursing practice. Discussion of Pharmacokinetics, pharmacodynamics, administration of drugs.
		NR109	**Nursing Theory and Practice 2** Introduces the Tonga National Professional Standards for Tongan Nurses and Nursing Standards for Year 1 nursing students. The nursing process components is described. Caring as central aspects of nursing practice is also discussed with informed by nursing theories.

			Knowledge about a range of nursing skills essential for basic nursing care is also introduced.
	3	**NR201**	**Medical Surgical Nursing 1** Introduces the pathophysiologic mechanisms of disease related to Inflammation and Wound Healing, Fluid, Electrolyte and Acid -Base Imbalances. The concept of pain will further have discovered given it is patient's major reasons for seeking health care. The nursing care management of patients with common problems related to Sensory and Integumentary Function, Musculoskeletal Function, Urinary Function and Gastrointestinal Function are discussed.
		NR202	**Medical Surgical Nursing 2** Discusses the biological concept of Infection, Altered Immunity and Genetics, alteration in the Respiratory, Hematological and Reproductive system . The major communicable diseases seen in Tonga or threatening this country are explored with the preparations for a possible epidemic. Nursing care management of patients experiencing pathological changes resulting in medical or surgical problems commonly occurring in Tonga, including prevention and early identification of deterioration of the patient's health status are discussed.
		NR203	**Maternity Care** Introduces knowledge and skills in caring for normal pregnancy. The normal physiological and psychological changes experienced during antepartum, intrapartum and postpartum period, and fetal development are explored. The roles of nurses in meeting the physiological and psychosocial needs of the pregnant mothers and families are emphasised.
		NR204	**Nursing Theory and Practice 3** Develops the nursing theoretical knowledge and skills to support nursing practice when caring for the hospitalized patient. Applies legal and ethical principle, professional nursing concepts and leadership management to nursing care. Demonstrates a selected list of nursing competencies.
		NR205	**Clinical Practice 2** Enhances skills and competencies in caring for the hospitalized patient, for a second year student nurse, according to the Professional Standards (Folau 'a e Neesi Tonga) re: Medical/surgical nursing including pre-operative and post op care of patients; and Nursing care of the hospitalized antenatal mother, woman in labour & delivery and postnatal period.
	4	**NR206**	**Medical Surgical Nursing 3** Further introduces the pathophysiology and the nursing management of major non communicable diseases seen in Tonga and its burden to the health system; common conditions of chronic illnesses in Tong and the importance of promoting optimum health as preventative measures are explored.
		NR207	**Mental Health Nursing** Introduces mental health concepts, related theories and services in Tonga, including referral systems, specialized care of the mental illnesses. Applies assessment processes to determine the mental health status of clients. Learns nursing management, knowledge of support to clients and families living with illnesses
		NR208	**Child Health Nursing**

			Extends the knowledge and skills of nursing management to the child 0 to 14 yrs, with the integration of developmental stages, and family centered concepts to care. Facilitates the development of independent judgement and problem solving skills when caring for the child.
		NR209	**Nursing Theory & Practice 4** Builds on Nursing Theory and Practice 3 focusing on the nursing knowledge and skills to support nursing practice when caring for the hospitalized patient living with the effect of chronic illness and providing care for a terminally ill patient.
		NR210	**Clinical Practice 3 or 4** Demonstrates selected competencies of nursing practice for pre-hospital care, the hospitalized patient, in hospital wards. Demonstrate competencies for care of clients visiting special and outpatient clinics. Demonstrates competencies required for nursing care of the woman in labour, delivery and postnatal periods under the guidance of the midwife, RN and tutor.
	5	**NR301**	**Complex Maternity Care** Applies knowledge and skills to care for complicated childbearing experiences. Apply nursing management of complication during antepartum, intrapartum and postpartum period. Nutrition, cultural diversity, use of technology, communication, critical thinking and decision based on assessments will be taught and discussed using and applying the nursing process.
		NR302	**Care of the Complex Patient** Applies knowledge of pathophysiology to nursing management of patient with complex health condition. Based on sound evidence based assessment, and diagnostic findings, the student will learn to formulate and implement care of patients with comorbidities and critical conditions. The roles and responsibilities to assess, make sound judgement, decisions and appropriate referrals when caring for a patient with multiple and chronic conditions will be taught and explored.
		NR303	**Nursing Theory and practice 5** Develops nursing skills and knowledge required to manage complex health issues, holistic care to aging patients and palliative care. Introduces emergency triaging and specialized care settings in preparations to provide emergency care in any situation and to respond to crisis effectively.
		NR304	**Clinical Practice 4** Demonstrates selected competencies for nursing practice in a high dependency and specialized nursing care areas like ICU, Paediatric Ward, Special Care Nursery, and Emergency Department and Operating Theatre.
	6	**NR305**	**Remote Island/Area Nursing** Prepares students to work in remote areas such as the outer islands, remote clinics and villages. Conducts and interpret community assessment to explore processes and challenges of managing common conditions in the remote area. Applies national protocols and concepts of Universal Health Coverage to nurse's roles and responsibilities in resource management, interdisciplinary referral and enhancing community stakeholder's engagement.
		NR306	**Nursing in Emergency and Disaster Situations**

			Introduces the concepts of comprehensive approaches to emergency and disaster risk management. Develop nursing skills in preparation for emergency and disaster situations. Conducts risk assessment to guide nursing management in emergency and disaster situations. Explores the impact of national and international protocols in enhancing the nurse's roles and responsibilities in managing an emergency and disaster situation.
		NR307	**Evidence for and from Practice** Introduces nursing research with emphasis on studying research principles, concepts and processes. Explore the significance of evidence for and from nursing practice by conducting a research project. The student is able to consolidate knowledge acquired from research to inform changes and development of nursing practice.
		NR308	**Professional Nursing Practice** Applies the Professional Standard (Siate Folau 'ae Neesi Tonga), Code of Ethics, policy and Nurses' act to prepare the transition of a student to a registered nurse. Applies concepts of leadership and management to sustain professionalism and strengthening collaborations within multidisciplinary contexts. Evaluates the significance of nursing knowledge and skills acquired for personal and professional development.
		NR309	**Clinical Practice 5** Provides the opportunity for students to be in the community health centres consolidating and integrating the knowledge, skills and attributes from related emergency disaster, remote nursing contexts and research to practice of nursing. The students will be placed in the health centres to be part of the health care team in the community health centre setting.
Diploma in Medical Laboratory Technology - Level 5	**1**	**LTD511**	**General Laboratory Introduction** Develops the skills and knowledge required to apply a range of laboratory technologies to conduct scientific-technical tests and sampling in a medical laboratory setting. Students will conduct a wide range of sampling and testing that requires the application of scientific-technical knowledge and skills, with substantial depth in medical laboratory technologies. Although technical officers generally work in a laboratory, they often work closely with personnel in other teams within a section of the workplace.
		LTD512	**Biology of Cells** Describes the performance outcomes, skills and knowledge required to apply the concepts of cell biology in the medical laboratory. This will include cell and cell organelle structure, differences between eukaryotic and prokaryotic cells, the role of key biomolecules in the body and the process of DNA replication, cell division and protein synthesis. This is done both at a microscopic and molecular level
		LTD513	**Quantitative Methods in Life Science** Develops an understanding of a range of standard basic methods for laboratory applications, including in calculus and statistical science. Sources of error in laboratory measurements will be discussed, as well as quantitative data analysis. Data management will also be examined.
		LTD514	**Chemistry 1** Introduces the principles of chemistry including the general characteristics of atoms and molecules and the basic principles of chemical reactions. These fundamental principles will be applied to

			chemistry within the body. Quality control and quality assurance will also be discussed in the context of biochemistry and biochemical diagnostics. Finally, the practical component will involve performing a chemical experiment and will require and understanding of Material Safety Data Sheets (MSDS) for chemicals and their use in identifying chemical hazards.
	2	**LTD521**	**Human Anatomy and Physiology 1** Develops an understanding of the concepts of anatomy and physiology in the context of medical laboratory science. The anatomical structure and physiology of the human body will be studied including the location, structure and function of the various organs and organ systems and its application in the medical laboratory. The interdependency and interactions between organ systems will also be discussed, understanding the mechanisms that maintain homeostasis within the body.
		LTD522	**Human Anatomy and Physiology 2** This course is the continuation of **LTD521**.
		LTD523	**General and Systematic Pathology** Targets the functional and structural changes that occur in cells, tissues and organs in disease. General pathology will be introduced in order to understand cellular and tissue responses to abnormal stimuli in the context of disease. These fundamental concepts in pathology will then be applied to organ systems of the body to examine specific pathological processes that occur in various tissues.
		LTD524	**Chemistry 2** Applies the principles of biochemistry in a clinical context, building on the material learnt in LTD514 Chemistry 1. The importance of carbohydrates, including their structure, function and role in disease, will be discussed. In addition, trainees will be taught the required skills and knowledge to interpret and communicate the clinical significance of biochemical test results carried out in the medical laboratory.
	3	**LTD531**	**Microbiology 1** Covers the fundamental concepts of microbiology; microbial organisms; microbe-host interactions; microbial metabolism and identification methods; microorganisms and human disease; environmental and applied microbiology – all with a focus on medically important pathogens.
		LTD532	**Haematology 1** Develops the knowledge and skills required for students to determine levels, function, activity and interactions of cellular and plasma components of blood using tests and procedures identified with the discipline of laboratory haematology.
		LTD533	**Immunology Unit** Develops a full understanding of the mechanisms that an organism mount to defend themselves against invading disease-causing organisms (pathogens). These defense mechanisms can include basic barriers, induced secreted molecules (interleukins), circulating defense molecules (immunoglobins), general immune cells and specific immune cells (B cells & T cells.). A second layer of defense mechanisms that can adapt to the specific strain of pathogen that causes infection – adaptive immune response (memory cells). Vaccine efficacy is dependent on the adaptive immune system's memory.
		LTD534	**Histology**

			Uses various techniques, histology establishes connections between microscopic structure of cells and tissues and their functions. Develops students theoretical and practical knowledge in Histology.. In the lab component, students will be able to perform various fixation and staining procedures and use a microscope to analyze the microstructure of tissues. In addition, a computer assisted, electron/ordinary micrographs based training to identify histology and histopathology of tissues is also included the lab component.
	4	**LTD541**	**Microbiology 2** Covers microbial organisms; microbe-host interactions; microbial metabolism and identification methods; microorganisms and human disease; environmental and applied microbiology – all with a focus on medically important pathogens.
		LTD542	**Haematology 2** Builds on the skills and knowledge from LTD522 Haematology 1. Trainees will acquire the required skills and knowledge to identify both normal haemostasis and haematological disorders through systematic laboratory investigation and correlate laboratory results to clinical presentation. The importance of haemostasis will be discussed and will include the process of coagulation, laboratory testing and anticoagulant therapy.
		LTD543	**Transfusion Science** Describes the performance outcomes, skills and knowledge required to perform routine tests and procedures that are part of the requirements of pre- and post-blood transfusion practice. The unit also covers tests and procedures that are indicated in laboratory investigations for transfusion related haemolytic reactions such as ABO incompatibilities, haemolytic disease of the newborn, and others
		LTD544	**Laboratory Quality Management System** Educates and trains Laboratory Technicians in the essential principles of Laboratory Quality Management Systems (LQMS) so they can develop and implement Quality Systems in routinely performing Medical Laboratories. This is in accordance with national practicing guidelines and internationally recognised Laboratory standards of quality. The goal is to give students a greater understanding of Laboratory testing performances, the significance of results and their impact in healthcare delivery, and the importance of quality in all aspects of a laboratory service. Trainees will manage a project related to LQMS during the course, and report their findings through an oral presentation and written report at the completion of the unit.
Certificate in Dental Assisting – Level 4 ***(to deliver in 2023)***	**1**	**DA101**	**First Aid** Introduces students to the basic first aid knowledge and skills including basic life support skills.
		DA102	**Microbiology & Infection Control** Provides students with the fundamental principles of microbiology and immunology to understand the mechanisms of the production of disease by microorganisms and the means by which the host protects it against them. It will also provide students with the knowledge and skills on the principles of infection control and occupational health.
		DA103	**Dental Science** Deals with the structure, development and functions of the oral tissues, their inter-relationships and the relation to other organ systems in both health and disease. Also the structure, organization

			and basic function of nervous system, cardiovascular system, inflammation, inflammation, wound healing and Immunity, nervous system and cell physiology
		DA104	**Dental Assisting** Provides an overview of the recognition, care, use and preparation of equipment's, instruments and materials for oral health care procedures such as basic examination, anesthesia, restoration, surgery, periodontics, endodontics, and prosthodontics and to assist the operator during the delivery of these procedures. Students at the end of this module should be able to operate and look after dental chairs, dental sterilizers and various dental equipment's.
		DA105	**Practice Management** Designs to train dental assistants across a range of competencies that will help them in the smooth operation of the clinic. It covers the roles and responsibilities of dental assistant, ethics and jurisprudence, office management, communication and principles of applied psychology.
	2	**DA106**	**Preventive Dentistry** Describes the skills and knowledge required to: prevent oral diseases among various target groups including early childhood, people with a range of disabilities, pregnant mothers and geriatric population; provide oral health education and oral health promotion to individuals, community and schools; identify high risk patient to Oral diseases and motivate patient to good oral health behavior and attitude.
		DA107	**Dental Materials** Provides knowledge on restorative materials available for the direct restoration of permanent and deciduous teeth, their chemistry and physical properties, advantages, disadvantages, indications and contraindications of the materials. Also provides skills on their manipulation, storage and their uses.
		DA108	**Dental Radiography** Describes the skills and knowledge required to: minimise the risk of radiation to the patient and operator during the exposure of dental radiographic image; prepare the patient for dental radiography; operate dental radiographic equipment and position the patient and radiographic film in order to produce a diagnostic image, and ensure all radiographs are of consistent diagnostic standard
		DA109	**Clinical Dentistry** Designs as a clinical component where students puts their knowledge of all modules into practicum. Students learn to prepare the patient for treatment, take X-ray examinations; obtain dental records; sterilize and disinfect instruments and equipment; prepare tray setups for dental procedures; provide postoperative instruction; educate patients in proper oral health care; prepare materials for making impressions and restorations; and expose radiographs and process dental X-ray film as directed by the dentist.
Certificate in Environmental Health - Level 4	**1**	**NR103**	**Human Bioscience 1** Introduces the study of anatomy and physiology with an examination of the organization, structure and tissue of the human body. It will cover the body systems, and discuss the essential terminologies, structural organization of the body, Bio-Chemistry, Cells, Glands and Body Tissue. Body systems covered will include Integumentary

			System, Muscular-Skeletal System**,** Cardiovascular System, and Respiratory System. The processes of the body system are discussed.
		NR107	**Human Bioscience 2** Introduces more body systems' Anatomy and Physiology as applied to nursing. Body systems include: Lymphatic System, Immune System, Urinary System, Fluid, Electrolytes & Acid Base Balance, Nervous System, Digestive System, Endocrine System, Reproductive System and Sensory systems. Processes and their significance to human survival will be described.
		NR101	**Social Science** Provides students with the essential knowledge of psychology, sociology and related concepts, principles and psychosocial processes of health. The relevance of psychology and sociology to nursing practice will then be explored with emphasis on their significances for Health Officer's practice in Tonga and beyond.
		NR102	**Health and Healthy Living** Defines health and the concepts of health as applies to individuals, families, communities and the importance of health determinants like environment to the maintenance of healthy living. Adolescent's Health development in relation to decision making and healthy living of the learners is explored. Various behaviors that promote and risk health are discussed. Health system-structure and status of nursing to support health and healthy living is also explored..
	2	**NR108**	**Human Bioscience 3** Introduces the science of Microbiology and Pharmacology that are essential for effective nursing practice. The main focus of microbiology are the processes by which the identified organism develops and cause disease**,** factors that enhance its growth and extend, methods for prevention and management, and its significance to the study to nursing practice. Discussion of Pharmacokinetics, pharmacodynamics, administration of drugs.
		NR105	**Primary Health Care 1** Introduces the concepts of Public Health and Primary Health Care (PHC) and how these are applied in nursing practice. The relationship of PHC within the Public Health System is explored. Primary Health Care Approaches are discussed in achieving health for ALL. Sustainable Development goals (SDGs) are identified and their significance to nursing practice. The roles and responsibilities of nurses working in the community are discussed in relation to PHC. The principles of community and family assessment are explored and applied to nursing practice in the community setting.
		NR106	**Primary Health Care 2** Discusses the concept of Health Promotion and Nutrition, and their applications to individuals, families, and communities in clinical and community setting. Components of Nutrition are identified and their significance in nursing practice. Strategies (Health Education) for promoting health and changing behavioral pattern are explored.
		EHC414	**Office Duties** Develops the skills and knowledge required to oversee office duties, customer services and respond to environmental health complaints and conduct preliminary investigations under direction and supervision.
	3	**EHC421**	**Vector Control**

			Designs for the environmental health worker to make a basic determination of the relevant diseases they might confront in their work, the mode of disease transmission, and the possible means of transmission control
		EHC422	**Rural water and supply** Describes the competencies needed to identify the basic way in which septic tanks function, and the strategies needed to maintain on-site systems in the community
		EHC423	**Food Borne Diseases** Describes the competencies needed to monitor and oversee food storage and handling procedures taking place within food premises and outlets in the community. Working in compliance with relevant legislation and regulations within which the worker's organisation operates is essential. Processing of applications, training of food handlers, and auditing of premises, including assessments, investigations and enforcement.
	4	**EHC424**	**Community Health Communicable Disease** Develops the skills necessary to assist particular populations/subgroups of interest/ communities to define and assess their health needs. It develops the ability to carefully work with them to examine the problem being targeted and to understand how and why it occurs. The results from the needs assessment guides the design, planning and evaluation of population health projects or interventions
		EHC425	**Environmental Health Buildings and WASH** Describes the competencies needed to identify the basic way in which water supply systems function, and the strategies needed to maintain water supply systems in the community and also to assess the quality of the water supply source in the community, and implement measures to address issues of concern if necessary
		EHC426	**Community Health Needs** Identifies two stages in health needs assessment: the first relates to the task of identifying and prioritising health problems, and the second relates to translating these national goals into concrete action within local communities. The first stage of needs assessment often lies in the hands of health policy makers and population health professionals. Results of this stage are documented in policy papers or legislation detailing national, state or local health goals and the mobilisation of allocated funds.
		EHC427	**Clinical Practice** Provides trainees with the opportunity to experience and gain the knowledge in the work environment and to develop the competency to function independently according to the responsibilities of the environmental Health Inspector in Tonga and public health sectors.

FACULTY OF SCIENCE AND TECHNOLOGY

The Faculty of Science and Technology includes the following 4 Schools;

1. School of Information and Communication Technology
2. School of Agriculture
3. School of Science and Technology
4. Fokololo ‘o e Hau Maritime School

SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

The School of Information and Communication Technology delivers 4 programs.

Programs and Program Statements

1. **Certificate in Information Systems**
   Program Statement: Provides an introduction to information systems; its compoments, design and construction of such systems in commercial, scientific and governmental enterprises;the physical and logical characteristics of processors and stores; characteristics of networks; data types and their representations and the specification of information systems.

2. **Diploma in Information Systems**
   Program Statement: An extension study of the Certificate Program, exploring database management systems, file processing, data models, query languages, recovery and concurrency, security and integrity, the development of database using a relational model, and use of object-oriented programming languages.

3. **Certificate in Computer Studies**
   Program Statement: Introduces students to data structures and algorithms. Develops their basic understanding of Object-Oriented Programming and knowledge of Visual Basic.Net using a visual programming environment, as well as provoding them with a range of skills required to be an apt computer programmer.

4. **Diploma in Computer Science**
   Program Statement: A natural extension of the Certificate Program, aiming mainly to consolidate and extend students’ knowledge, skills and work as a computer programmer. Students have the opportunity to study classical algorithms for solving real world problems in terms of programmatic technique as well as asymptotic analysis. Critical thinking skills are developed through using different techniques to solve new problems.

Entry Requirements

Admission is available to applicants who have satisfied at least one of the following requirements.

a) Have completed Form 6 with a total grade of 15 or less (English, ICT, Mathematics + another subject).
a) Candidates MUST take ICT Form 6 and Mathematics.
b) Completion of Form 7 ICT plus Mathematics with Statistics and Calculus are advantageous,
c) Have relevant at least 5 years of computer working experience indicative of likely success in the program.

Programs, Courses and Course Descriptions

Program Name	Semester	Code	Course Name	Description
Certificate in Information System	1	IT131 Both IS & CS	Mathematics for Science	Designs to help students acquire basic knowledge and understanding of the concepts and skills within the divisions of mathematics which are to be demanded in the area of Information Technology. The course covers those areas of mathematics, algebra and Introduction to Calculus.
		IT141 Both IS & CS	Information System 1	Introduces students to the study of the design and construction of information systems in commercial, scientific, and governmental enterprises. The underlying technologies that are dealt with include the physical and logical characteristics of processors and stores; characteristics of networks; data types and their representations and the specification of information systems. Students develop an operational understanding of available software tools (word processing, spreadsheets, databases, the Internet, news, e-mail).
		IT161	Professional Communication	Designs to develop the students' abilities to communicate positively and effectively, both orally and in written form in their working environment.
		TL100	Thinking and Learning Skills	xxxx
	2	IT133 Both IS & CS	Introductory Statistics	Describes descriptive statistics; sample spaces; events; probability measures; independent events; binomial distribution; normal distribution; normal sampling distributions; t-distribution, chi-square distribution; introduction to hypothesis testing (non-parametric methods); estimation; confidence intervals; goodness of fit; contingency tables; covariance; simple regression; applications
		IT142 Both IS & CS	Introduction to Programming: Visual Basic. Net	Introduces students to the fundamental concepts of program design using the Visual Basic.Net programming language. It emphasizes the design process, producing elegant, well documented and easily maintainable programs. Elements of object-oriented programming are introduced.
		IT162	IT Research Project	Develops key skills in basic research that will enable them to conduct basic research tasks in the workforce. The nature of the course is also designed in such a way that students wishing to pursue further study will be able to carry out basic research in academia.
Diploma in Information System	1	IT233 Both IS & CS	Applied Statistics	Examines important tools for critical thinking, decision making under uncertainty, and quantitative data analysis and applies them in Information Technology decision situations.
		IT244 Both IS & CS	Database Management Systems	Examines database management systems, file processing, data models, query languages, recovery and concurrency, security and integrity, and the development of database using a relational database model.

		IT262	**Principles of Management**	Introduces important management concepts and theories, covering the basic management functions and other important issues from a practical perspective. It provides a comprehensive and integrated introduction to the process of management in both functional and behavioural aspects. In particular, the course targets the development of human skills? personal, interpersonal and group skills by using a wide range of teaching methods that encourage student participation during tutorials.
		WS200 Both IS & CS	**Working and Social skills**	Provides the appropriate Working and Social Skills for workplaces.
	2	**IT235 Both IS & CS**	**Discrete Mathematics**	Iintroduces students to the mathematics of modern computer science which is built almost entirely on discrete math, in particular combinatory and graph theory. This means that in order to learn the fundamental algorithms used by computer programmers, students will need a solid background in these subjects. Discrete mathematics is a required part of pursuing an IT degree.
		IT245	**Management Information System**	Explores information systems; systems analysis including the design, evaluation, and implementation of business systems in general; internal control and control systems; computer-based information systems; and the uses and potential of information systems.
		IT256 Both IS & CS	**Advanced Programming: Visual Basic. Net**	Develops basic understanding of Object-Oriented Programming, and further develop their programming skills and knowledge in Visual Basic.Net and programming using a visual programming environment
Certificate in Computer Science	**1**	**IT131**	**Mathematics for Science**	Designs to acquire basic knowledge and understanding of the concepts and skills within the divisions of mathematics which are to be demanded in the area of Information Technology. The course covers those areas of mathematics, algebra and Introduction to Calculus.
		IT141	**Information System 1**	Introduces the study of the design and construction of information systems in commercial, scientific, and governmental enterprises. The underlying technologies that are dealt with include the physical and logical characteristics of processors and stores; characteristics of networks; data types and their representations and the specification of information systems.
		IT151	**Introduction to Programming - Java**	Introduces students to the fundamental concepts of program design using the Java programming language. It emphasizes the design process, producing elegant, well-documented and easily maintainable programs. Elements of object-oriented programming are introduced. Students will design, code, test, debug, and document JAVA™ programs

				using techniques of good programming style. The course will also address program design and program style.
		TL100	**Thinking and Learning Skills**	**xxxx**
	2	**IT133**	**Introductory Statistics**	Examines descriptive statistics; sample spaces; events; probability measures; independent events; binomial distribution; normal distribution; normal sampling distributions; t-distribution, chi-square distribution; introduction to hypothesis testing (non-parametric methods); estimation; confidence intervals; goodness of fit; contingency tables; covariance; simple regression etc.
		IT142	**Introduction to Programming: Visual Basic. Net**	Introduces students to the fundamental concepts of program design using the Visual Basic.Net programming language. It emphasizes the design process, producing elegant, well documented and easily maintainable programs. Elements of object-oriented programming are introduced.
		IT152	**Data Structure and Algorithms**	Introduces data structures and algorithms as used in computer programming. Topics include arrays, sorting, stacks, queues, linked lists, iteration, recursion, binary trees, and hash tables as well as when to use each data structure.
Diploma in Computer Science	**1**	**IT233**	**Applied Statistics**	Examines important tools for critical thinking, decision making under uncertainty, and quantitative data analysis and applies them in Information Technology decision situations.
		IT244	**Database Management Systems**	Examines database management systems, file processing, data models, query languages, recovery and concurrency, security and integrity, and the development of database using a relational database model.
		IT253	**Computer Organization**	Develops knowledge of computer organization is necessary for people who design programs or need in-depth knowledge or computer systems. This course aims to provide a basic understanding of computer organization and its analysis. It provides a general foundation for further specialized study.
		WS200	**Working and Social skills**	Provides students with the appropriate Working and Social Skills for workplaces.
	2	**IT235**	**Discrete Mathematics**	Introduces the mathematics of modern computer science which is built almost entirely on discrete math, in particular combinatory and graph theory. This means that in order to learn the fundamental algorithms used by computer programmers, students will need a solid background in these subjects.
		IT254	**Design and Analysis of Algorithms**	Studies classical algorithms for solving real world problems in terms of programmatic technique as well as asymptotic analysis. Critical thinking skills are developed through using different techniques to solve new problems.

		IT256	**Advanced Programming: Visual Basic. Net**	Introduces students to develop basic understanding of Object-Oriented Programming, and further develop their programming skills and knowledge in Visual Basic.Net and programming using a visual programming environment

SCHOOL OF AGRICULTURE

The School of Agriculture has 5 programs of study; each has a Program Statement to demonstrate the intentions and expectations of the study.

Program Statements

1. **Horticulture - Certificate Level 2**
   Program Statement: Provides basic operational knowledge of horticulture with moderate range of practical skills which enable the graduates to gain higher levels of study on the field or work in the horticulture industry under general supervision and quality control.

2. **Horticulture - Certificate Level 3**
   Program Statement Provides the horticulture sectors with graduates who have well developed skills and relevant theoretical knowledge of health and safety in the horticulture industry; plants and soil science, plants growing system and environments, to underpin practical capability in a range of horticulture sectors.

3. **Horticulture - Certificate Level 4**
   Program Statement: Provides the practical skills and knowledge which will give students the relevant skills to seek employment or further learning and training within the Agricultural Industry.

4. **Agricultural Science - Certificate Level 4**
   Program Statement: Designs for students to gain the core skills and knowledge required for working in an agriculture environment, especially that of crop production, livestock husbandry and management. The program provides sound practical skills that are relevant for work in the industry with animals, crops and machinery.

5. **Agricultural Science - Diploma Level 5**
   Program Statement: Designs for students who wish to pursue a career in Agriculture or Horticulture production, management, science of plant breeding, entomology, microbiology, agricultural machinery, and food and health. The program develop student's ability to conduct research, plan, organize, conduct projects, solve problems, collect, organize and communicate information. It equips student with knowledge and skills of applying science and technology to the production, processing, marketing, and consumption of products.

6. **Agricultural Science - Diploma Level 6**
   Program Statement: Develops theoretical and practical knowledge and skills in agriculture to ensure the relevance of the discipline in addressing agricultural sector development for food security and sustainable environment. Students will gain applied knowledge in agriculture that will enhance their employment prospects and provide a foundation for continued study and specialization in economics and business, animal management and production science, crop and pasture science, or Environmental and Soil Science.

7. **Agricultural Science - Bachelor Level 7**

   Program Statement: Prepares students with specialized technical knowledge and skills for a professional career in agriculture, horticultural science and agri-business. Graduates will have a strong background in the area of agri-business and marketing, animal management and production science, crops and pasture science, and Environmental and Soil Science. They will gain applied knowledge and skills to create and participate in an agricultural system which can meet the world's needs for food and fibre, and enhance their employment prospects and provide a foundation for continued post graduate study and specialization in economics and business, animal management and production science, crop and pasture science, or Environmental and Soil Science.

Entry Requirements

For Certificate Level 2

Candidates must attain Tonga School Certificate (TSC) Examination. Those who didn't attain TSC **must** sit and pass the School of Agriculture's Language, Literacy and Numeracy (LLN) Test.

OR

Candidates have demonstrated competence at this level through recognition of prior learning (RPL). Evidence for RPL must submit including the following:

- Letters and references, including conformation from an employers, client or community groups.
- Reference from a paid or unpaid work experience.
- Samples of work, including reports.

For Certificate Level 3

Candidates must have completed the Certificate in General Horticulture Level 2

OR have passed their Tonga Form Six Certificate Examination or equivalent in the following subjects: English, Mathematics, Agriculture, Biology and Chemistry.

For Certificate Level 4

Candidates should have:

- Passed Tonga Form Six Examination/Pacific Senior Secondary Certificate (PSSC), with aggregate 16 or higher with grade 5 or higher in English, Mathematics and the basic Sciences.
- Successfully completed the Certificate in Horticulture Science (Level 3) from any recogninsed institution.

Applicants who do not meet the above pre-requisites may be considered for enrolment on a case-by-case basis taking into consideration their qualifications and experinces.

For Diploma Level 5

Candidates should have the following:

1. A pass in the Tonga Form Seven Examination **OR** South Pacific Form Seven Certificate with a pass mark in English, Mathematics and Sciences;
2. Completion of a Certificate in Agricultural Science (Level 4) other recognized tertiary Institution;
3. Completion of a qualification recognized for cross-credit;
4. Recognition of Prior Learning (RPL) especially to do with mature students who have had some qualification and experience in agriculture, and demonstrated competence at this level.

For Diploma Level 6

Students wishing to enrol in the Diploma in Agricultural Science Level 6:

1. Completion of a Diploma in Agricultural Science (Level 5) from TNU or other recognized tertiary Institution.
2. Completion of a qualification recognized with cross-credit arrangements.

For the BA Agricultural Science

Students wishing to enrol in the Bachelor of Agricultural Science Level 7:

1. Completion of a Diploma in Agricultural Science (Level 6) from this institution or other recognized tertiary Institution.
2. Submit a Research Proposal.

Programs, Courses and Course Descriptions

Program Name	Semester	Code	Course Name and Description
Horticulture - Certificate Level 2	**1**	**HORTC201**	**Literacy and Numeracy skills in Horticulture** Applies effectively the knowledge of literacy, numeracy, and digital skills while working in the field of horticulture and in their daily chores
		HORTC202	**Introduction to Digital Literacy** Applies effectively the knowledge of literacy, numeracy, and digital skills while working in the field of horticulture and in their daily chores
		HORTC203	**How to Use, Maintain, and Store Agricultural Chemical Personnel Protective Equipment** Demonstrates Health and Safety in handling agri-chemicals.
		HORTC204	**Maintain Hand Tools and Service Small Engine Use in Horticulture** Demonstrates knowledge and skills of how to maintain hand tools and service small engine use in horticulture.
		HORTC205	**Introduction to Soils and Growing media** Applies knowledge of characteristics of soils and soilless growing media to grow/plant flowers, vegetables and fruits.
		HORTC206	**Introduction to Soils and Plant Nutrition** Applies knowledge and skills of how to improve the soil condition and potting mix and what fertilizers required to maximize plant growth in horticulture.
		HORTC207	**Introduction to Plant Classification, Structure and Functions of Plants** Applies knowledge of plant taxonomy, structure and functions of plants to classify plants in horticulture.
		HORTC208	**Introduction to Plant Selection** Demonstrates understanding of horticulture, trees or herbaceous plants selections.
		HORTC209	**Introduction to Plant Propagation** Demonstrates understanding of how to grow plants from seeds, cutting, grafting, and propagating new plants.
		HORTC210	**Introduction to Ground Preparation for Seeding and Planting** Demonstrates understanding of ground preparation for seeding and planting in horticulture.
		HORTC211	**Introduction to Establishment and Maintenance of Plants Outdoors** Demonstrates an understanding of how to establish and maintain plants outdoors in horticulture.
		HORTC212	**Introduction to the Cultivation of Decorative Plants** Demonstrates an understanding of the cultivation of decorative plants in horticulture.

		HORTC213	**Principles of Sustainability Horticulture** Applies principles of sustainable horticulture and relate them to growing in horticulture system.
		HORTC214	**Introduction to Principles of Plant Health and Protection** Demonstrates an understanding of plant health and protection by identifying weeds, pests, diseases, disorders, and the most effective management techniques to rectify them.
Program Name	**Semester**	**Code**	**Course Name and Description**
Horticulture - Certificate Level 3	**2**	**HORTC301**	**Horticultural Health and Safety** Provides learners with knowledge of potential hazards and correct safely procedures as well as basic first aid training.
		HORTC302	**Horticultural Numeracy Skills** Provides students with skills in performing calculation required for agricultural operations, and in collection, presentation and analysis of data.
		HORTC303	**Workplace Communication** Develops an understanding of proper communication in workplace
		HORTC304	**Introduction to Computer Literacy** Provides an introduction to the world of technology and its many benefits and use.
		HORTC305	**Plant Science** Provides learners with an understanding of the principles of plant science and how these can be applied in practice. They developed understanding of how plants grow and develop, through knowledge of their structure and physiology.
		HORTC306	**Soil Science** **Develops** the learners understanding of soil characteristics, and their relationship to crop growth and development
		HORTC307	**Soils and Growing Media** Provides learners with the skills and knowledge to identify, and explain the characteristics of soil and soilless growing media; and explain the characteristics of soil as a growing medium
		HORTC308	**Plant Materials** Provides learners with an understanding of planting materials used in horticulture
		HORTC309:	**Plant Propagation** Provides learner's knowledge and skills to propagate a diverse range of plants with particular emphasis on cutting and seeds and explain budding and grafting technique.
		HORTC310	**Manage Soil Water** Develops an understanding of how to manage soil water and how this can be applied in practice in horticultural situations and be able to maintain irrigation and drainage systems.
		HORTC311	**Identification, Planting and Care of Trees** Provides learners with an understanding of the identification, planting and care of trees and how this can be put into practice. The learner will be able to identify trees and shrubs by botanic name and specify woody plants that are suitable for the situation and site. In addition, learners will be able to plant a range of tree types and provide immediate aftercare. They will also be able to specify future maintenance need
		HORTC312	**Introduction to Sustainable Horticulture** Provides learners with an understanding of the principles of sustainability in horticulture
		HORTC313	**Principles of Plant Health and Protection**

			Provides learners with an understanding of the principles of plant health and protection and how this can be applied in practice. Identifies weeds, pests, diseases and disorders within a horticulture industry. They will also be able to review the range of control measures viable and specify integrated control
		HORTC314	**Horticulture Business Planning** Provides learners with and an understanding of developing business planning, budgeting, solve range of horticulture financial problems.
Program Name	**Semester**	**Code**	**Course Name and Description**
Horticulture - Certificate Level 4	**1**	**HORTC401**	**Soils and Growing Media** Designs to enable learners to develop an understanding of those soil properties and processes that are basic to the optimum utilization of soils now and in the future
		HORTC402	**Plant Form and Identification** Develops the context of the origins of Tongan plant diversity with special emphasis on selected and iconic Tongan plant groups. Native and introduced plant groups are emphasized in practical studies and some emphasis will be placed on understanding the status of rare, threatened and priority weed plant groups.
		HORTC403	**Plant Structure and Functions** Applies knowledge of plant sciences and their structure and functions to determine how plant grow in response to its environment and how to control plant diseases, pests and weeds in horticulture.
		HORTC404	**Plant Growth and Environment** Provide the student with a foundational understanding of environmental and physiological basis (mechanisms and principles) of the interactions between plants and their environment in relation to their survival and ecological distribution.
		HORTC408	**Communication and Supervision** Introduces the basic principles of communication and supervision roles as they relate to field of employment in horticulture.
		HORTC412	**Horticultural Computing** Develops learners to understand and be competent in using the internet for research and communication as it pertains to horticulture and: **b**e competent in Microsoft Window 10**,** proficient in using Microsoft Word program and Microsoft Excel as well as Power Point presentation for communication.
	2	**HORTC405**	**Plant Propagation** Develops knowledge and skills in plant the propagation of different plant species from: Seeds, using different seed propagation methods. Plan the propagation of different types of plants from cuttings, using different cutting propagation methods.
		HORTC406	**Plant Culture and Garden Maintenance** Designs as a foundation for people working as gardeners, and for some can be a stepping stone to developing a garden maintenance business, or to further studies leading to a career in horticultural management, education or media.
		HORTC407	**Plant Protection** Develops the student's ability to identify, describe and control a variety of pests, diseases and weeds in horticultural situation, and to describe safety procedures when using agricultural chemicals.
		HORTC409	**Small Business Management** Provides the learners basic skill of how to plan for success, market products or services, find the right sources to finance a business, and

			write an effective business plan step by step in order to start your own small business or manage a small business for someone else.
		HORTC410	**Business Planning and Marketing** Introduces students to the basic concepts of marketing and demonstrate how these may be applied to small horticulture business.
		HORTC411	**Horticulture Tools and Equipment** Develops knowledge and skills necessary for use and maintenance of a range of horticulture tools equipment correctly and safely. The learner will also be capable of identifying possible hazards and safety precautions as required. The learner will also explore power hand tools use and maintenance including safety checks, mixing fuel, checking and fixing of leaks, use pedestrian machinery including mist blower, knapsack and rotovator, and horticultural machinery including tractor and mower.
Program Name	**Semester**	**Code**	**Course Name and Description**
Agricultural Science Certificate Level 4	**1**	**AGC011**	**Agricultural System** Introduces sustainable agriculture and to consider agriculture as part of a total dynamic system. It also aims to build their understanding of the inter-relationship of the factors that affect the systems within which agriculture exists.
		AGC012	**Agricultural Maths and Statistics** Develops students skills in performing calculation required for agricultural operations, and in collection, presentation and analysis of data.
		AGC013	**Computing** Develops skills in selecting, using and maintaining personal computer systems for personal, professional and study purposes.
		AGC014	**Communication Skills** Develops skills of effective communication in all situations including the workplace, and introduce students to scientific writing.
		AGC015	**Farm Management Records** Develops skills and knowledge to organize and maintain physical and financial records for the farm business in a format suitable for use by management
	2	**AGC020**	**Plant Science** Develops skills and knowledge of how plants function and the factors which effect plant and development.
		AGC021	**Crop Production 1** Develops skills and knowledge on crop husbandry and management practices of field crops, root crops, and other crops of importance to Tonga.
		AGC022	**Animal Production 1** Develops an understanding of the Animal Production systems of Tonga and an appreciation of the interaction with the environment on the integration of animal production into agricultural systems. Knowledge of the development of management and husbandry practices appropriate to the domestic market requirements and the facilities required to implement these management strategies.
		AGC023	**Farm Workshop Practices** Develops skills and knowledge in the fields of farm workshop practices, small engine workshop practices, fence construction and building construction.
		AGC024	**Industry Based Work Experienced**

			Provides students with an experience and opportunity of employment in an agricultural or related industry. Practices and enhances skills relevant to agricultural production and related activities.
Program Name	**Semester**	**Code**	**Course Name and Description**
Agricultural Science - Diploma Level 5	**1**	**AGD511**	**Entomology** Provides students with an understanding of the biology of insects with particular reference to their activities which are significant for agricultural production
		AGD512	**Animal Anatomy and Physiology** Provides students with an understanding of the structure and function of the skeletal, muscular, circulatory, respiratory, digestive, reproductive and immune systems of the animals of Agricultural significance
		AGD513	**Crop and Horticultural Production** Provides students with tools needed to assess the potential for diversifying crop production with various horticultural crops. It will provide information on basic production and marketing information that needs to be considered when assessing whether a horticultural crop will be a viable alternative to an existing or a new farming venture in Tonga.
		AGD514	**Animal Production II** Provides students with an understanding the current production and production practices and also discuss some of future opportunities that may occur in animal production in Tonga and the Pacific.
		AGD515	**Agriculture Foods and Health** Provides students with an understanding of the relationship between agricultural production, food consumption and health, with knowledge of human nutrition and the impact of food supply on the health of various population groups, and with an appreciation of, and skills to manage agricultural production with a view to improving human nutrition and health.
	2	**AGD520**	**Agricultural Chemistry** Provides students with a basic understanding of the structure and properties of inorganic chemicals and components of cells in plants, animals and microorganisms and their functional significant to agricultural production, the nature of chemical change and the factors relevant to processes in agriculture, and knowledge and skills in the analytical techniques used for agricultural purposes.
		AGD521	**Animal Nutrition and Breeding** Develops an understanding of ruminant and monogastric digestive systems, composition of feeds, animal requirements and ration formulation. An understanding of the basic principles of genetics, their application in livestock breeding programs, breeding programs, artificial breeding and selection programs.
		AGD522	**Agriculture Chemistry** This subject aims to provide students with a basic understanding of the structure and properties of inorganic chemicals and components of cells in plants, animals and microorganisms and their functional significant to agricultural production, the nature of chemical change and the factors relevant to processes in agriculture, and knowledge and skills in the analytical techniques used for agricultural purposes.
		AGD523	**Micro-Biology** Provide students with a basic understanding of the structure and properties of inorganic chemicals and components of cells in plants,

			animals and microorganisms and their functional significant to agricultural production, the nature of chemical change and the factors relevant to processes in agriculture, and knowledge and skills in the analytical techniques used for agricultural purposes.
		AGD524	**Agricultural Machinery** Provides students with skills and knowledge in the management, maintenance, selection and safe operation of farm machinery.
		AGD525	**Industry based Work Experience** Provide students with an experience and opportunity of employment in an agricultural or related industry. Opportunities to practice and enhance skills relevant to agricultural production and related activities; develop new skills; take responsibility for their own and other's actions; see the impact of their activities on the operation of an agricultural enterprise, and appreciate the nature of interactions which occur within organizations such as workplaces
Program Name	**Semester**	**Code**	**Course Name and Description**
Agricultural Science - Diploma Level 6	**1**	**AGD611**	**Animal Health** Demonstrates an understanding of the causes of disease, the defense mechanisms both natural and artificial used by the animal to combat disease. Classifies the main animal diseases in Tonga, their identification, treatment and control. Reflects upon the importance of quarantine and hygiene in restricting the spread of disease.
		AGD612	**Farm Business Management** Provides students with knowledge and skills to operate an agricultural business and also introduces skills and techniques of managerial decision-making in the farm context. Using both production and business skills they should be able to evaluate the performance of a farm business and use recognized techniques to plan for its future.
		AGD613	**Soil Science** Provides students with a clear understanding of the role and function of soil as a natural resource and as a medium for plant growth, and to enable students to describe the physical, chemical and biological properties of soils, and relate such to plant growth and land use patterns, after considering the major soil types in Tonga.
		AGD614	**Agriculture Climatology and Climate Change** Explores the relationship between climate and agriculture in order to appropriately make use of every given climatic conditions to maximize agricultural yield for maximum gains.
		AGD615	**Plants and Animal Products and processing** Provides students with knowledge and understanding of the methods and technologies available for processing agricultural products with a view to reducing spoilage and health risks and to encourage value in the form of quality food products.
	2	**AGD621**	**Human Resources Management and Agricultural Extension** Deepens students knowledge of the principles and practice of human resource management, relevant to being an employee in an organization and also appropriate to those with supervisory responsibilities and also provide learners with the basic knowledge and skills to be a competent extension/rural development practitioner
		AGD622	**Crop Protection** Provides students with skills and knowledge about protection of plants from pest infestation, disease infection: importance, bio morphology, and ecology of plant pests; importance and concept of plant disease; classification of plant disease; symptom and the damage caused by

			plant pathogens; parasitism and disease development; the causal agents of plants disease; plant defense against infection plant disease; plant disease epidemy and the factors involved; principles of plant and disease management; and integrated pest management concept.
		AGD623	**Agricultural Economics and Marketing** Provides students with skills and knowledge of the basic theoretical concepts of agricultural economics and its application to the developing country economies, and also provide skills and knowledge of the marketing strategies and techniques appropriate to agricultural products and services, both locally and internationally
		AGD624	**Plant Health** Deepens students' knowledge and skills providing for a common and clear understanding of correct and consistent implementation plat health management control In Tonga and the world.
		AGD625	**Agricultural Research Methodology** Provides students with skills and knowledge of experimental design and its application to agriculture, especially in relation to **Crops and Animal Science**. The aim of the course will be achieved by the following: Create an insight into statistical methods and presentation of research findings in tabular and graphical forms.
Program Name	**Semester**	**Code**	**Course Name and Description**
BA (Agricultural Science) – Level 7	**1 & 2 (see course Options in 3rd Year)**	**BAE711**	**Agricultural Production Economics** Designs for students to use concepts, approaches, and methods from Agricultural Economics curricula in their career or future studies to understand and evaluate issues, plans, or projects. Develops a thorough understanding of the classical microeconomic theory of the firm under static certainty. Develops the ability to perform graphical and mathematical analyses using production economic theory. Provides experience in applying production economic theory to managerial and policy problems.
		BAE712	**Farm Business Management** Provides students with tools needed to measure management performance and financial condition of the farm business. It develops decision-making skills in planning, organizing, and directing and controlling farm business.
		BAE713	**Agriculture Marketing Management** Develops an understanding of the field of marketing. The focus will be on imparting knowledge of the basic concepts, tools, and functions of marketing.
		BAE714	**Consumer Behaviour** Deepens knowledge of behavioral perspectives in marketing that will provide a conceptual perspective to any participant working in retailing /advertising /brand management / sales management/ marketing research (appreciation of consumer behavior only and not marketing research tools)/ marketing strategy/ digital marketing in areas of consumer fast moving goods/ durable goods/services.
		BAE715	**Agribusiness Marketing and Value Chains** The course introduces students to the concepts and processes of agricultural supply chain management, framework for structuring supply chain drivers; network designs, demand forecasting, inventory planning, sourcing decisions and enablement of supply chain.
		BAE716	**Agricultural Policy** The course aims to examine domestic and international agricultural issues and the role of government in formulating agricultural policy.

			Students will become familiar with the role of agriculture in the national economy and how agricultural policy decisions affect the general public. Students will develop an understanding of the economic impact of the agricultural policies of individual nations on international trade.
		BAA712	**Farm Animal Growth and Development** Develops knowledge of the nutrients provided by foods and the factors that determine their digestive and metabolic use, in order to assess their efficiency of use. It also includes the definition and assessment of the needs of domestic animals in their different physiological phases and the analysis of the different feeding systems that allow them to be satisfied. It is intended that the achievement of these objectives will facilitate the understanding and construction of their own knowledge in the other disciplines of the degree
		BAA713	**Animal Health and Management** Develops understanding of animal health and disease management including: signs of good and poor animal health, principal causes of diseases; methods of disease transmission and diagnosis; mechanisms of disease prevention and management including biosecurity, host immune responses and vaccination; zoonotic diseases and public health; common diseases of farm animals and management. Open to animal sciences majors, pre-veterinary and related fields.
		BAA714	**Ruminant Animal Production** Designs and provides learner with a general concept and understanding of the husbandry and management principles of ruminant animals for production purposes.
		BAA715	**Pig Production** Equips learners an in-depth knowledge of the pig production aspect of the general livestock production. It is conceived as an elixir to the many challenges confronting the establishment and successful take off of swine enterprise in Tonga or other countries.
		BAA716	**Poultry Production** Provides learner with knowledge on principles for successful poultry production such as breeds and breeding, building and equipment, incubation of eggs, hatchery management, and different facets in the management of poultry.
		BAC711	**Forage and Pasture Crops** Provides the basic principles of pasture and forage crops production with emphasis on native pastures, improved pastures and forage crops in Tonga.
		BAC712	**Pasture Crops Management** Provides the learner with the scientific background that explains how to produce and manage forage crops and grazing systems that are economically profitable, meet goals for soils, plants and animals, and that are compatible with local natural resources.
		BAC713	**Horticulture Science** Provides learner with the scientific background of horticultural and botanical classification; climate and soil for horticultural crops; Plant propagation-methods and propagating structures of vegetables, fruits and flowers crops, outdoor and indoor crops, plant pests and fertilizer application in horticulture crops.
		BAC714	**Agronomy** Introduces students to basic agronomy and provides them with opportunities to develop interest in different aspects of agriculture.

		BAC715	**Plant Growth and Development Processes** Provides learner an understanding on the development processes of plant growth, and how environmental factors interact to affect and control plant growth and development.
		BAC716	**Sustainable Agriculture and Food Systems** Introduces students to the principles and practice of "sustainable agriculture" and "food security" from multiple perspectives, and able to succinctly summarize why sustainable agriculture is not merely desirable, but necessary in order to meet coming global challenges.
		BAE711	**Fundamental of Crop Protection** Provides learner with basic knowledge about protection of plants from pest infestation and disease infection, and explain its importance, bio-morphology, and ecology of plant pests; importance and concept of plant disease; classification of plant disease; symptom and the damage caused by plant pathogens; parasitism and disease development; the causal agents of plants disease; plant defense against infection plant disease; plant disease epidemy and the factors involved; principles of plant and disease management; and integrated pest management concept.
		BAE712	**Entomology and Palnt Diseases** Provides learner with basic knowledge of common insect pests and pathogens of crops, a review of the basic principles of entomology and plant pathology. Including taxonomy, morphology, physiology, ecology, behavior, insect/human relationships, pesticides, biological control and the causes, nature and control of plant pathogens. A 'least is best' philosophy will be emphasized, regarding the use of pesticides in controlling the various competitions for plant health. Integrated plant management will be the basis for control strategy.
		BAE713	**Sustainable Agriculture** Provides the learners with theories, principles and techniques related to sustainable food production. It provides a foundation in plant and soil science, integrated pest management, and ecological agriculture.
		BAE714	**Fundamental of Soil Science** Provides the learners with basic knowledge of the physical, chemical, and biological properties of soils, and develop an understanding of the origin, classification, and distribution of soils and their relationship to people and food production.
		BAS715	**Soil Fertility and Fertilizers** Raises awareness of the role of essential plant nutrients in crop production and how these nutrients can be replenished in soil through application of organic and inorganic fertilizers.
		BAE716	**Sustainable Soil Management** Applies soil science principles in sustainable management of agricultural ecosystems to simulate a real-life evaluation of soil properties to establish the most appropriate management practice in a particular ecosystem.
		AGRI711	**Research Project** Develops skills and applying procedures and techniques of investigation and understand complexity, and apply an integrated understanding of the selected topic to the investigation of a supervised project that models professional practice.
		AGRI712	**Agriculture Internship** Provides professional agricultural experiences to students in the operation and management of agricultural businesses, or public or

			private agencies; thus enhancing preparation for a career in agriculture.

School of Agriculture Programs by Semesters

CERTIFICATE IN HORTICULTURE LEVEL 2				
SEMESTER 1 COURSES			**SEMESTER 2 COURSES**	
	Course Code & Name	Credit	**Course Code & Name**	Credit
1	HORTC201 Literacy and Numeracy skills in Horticulture	**5**	HORTC208 Introduction to plant selection	5
2	HORTC202 Introduction to Digital Literacy	**5**	HORTC209 Introduction to plant propagation	5
3	HORTC203 How to use, maintain, and store Agricultural Chemical Personnel Protective Equipment	**5**	HORTC210 Introduction to ground preparation for seeding and planting	5
4	HORTC204 Maintain hand tools and service small engine use in Horticulture	**5**	HORTC211 Introduction to establishment and maintenance of plants outdoors	5
5	HORTC205 Introduction to Soils and Growing media	**5**	HORTC212 Introduction to the cultivation of decorative plants	5
6	HORTC206 Introduction to soils and plant nutrition	**5**	HORTC213 Principles of sustainability horticulture	5
7	HORTC207 Introduction to plant classification, structure and functions of plants	**5**	HORTC214 Introduction to principles of plant health and protection	5

CERTIFICATE IN HORTICULTURE LEVEL 3				
SEMESTER 1 COURSES			**SEMESTER 2 COURSES**	
	Course Code & Name	Credit	**Course Code & Name**	Credit
1	HORTC301 Horticultural Health and Safety	6	HORTC308 Plant Materials	6
2	HORTC302 Horticultural Numeracy skills	6	HORTC309 Plant Propagation	6
3	HORTC303 Workplace Communication	6	HORTC310 Manage Soil Water	6
4	HORTC304 Introduction to Computer Literacy	6	HORTC311 Identification, Planting and Care of Trees	6
5	HORTC305 Plant Science	6	HORTC312 Introduction to sustainable horticulture	6
6	HORTC306 Soil Science	6	HORTC313 Principles of Plant Health	6
7	HORTC307 Soils and Growing Media	6	HORTC314 Horticulture Business Planning	6

CERTIFICATE IN HORTICULTURE LEVEL 4				
SEMESTER 1 COURSES			**SEMESTER 2 COURSES**	
	Course Code & Name	Credit	**Course Code & Name**	Credit
1	HORTC401 Soils and Growing Media	10	HORTC407 Plant Protection	10
2	HORTC402 Plant Form and Identification	10	HORTC408 Communication and Supervision	10
3	HORTC403 Plant Structure and Function	10	HORTC409 Small Business Management	10
4	HORTC404 Plant Growth and the Environment	10	HORTC410 Business Planning and Marketing	10
5	HORTC405 Plant Propagation	10	HORTC411 Horticulture Machinery	10
6	HORTC406 Plant Culture and Garden Maintenance	10	HORTC412 Horticultural Computing	10

CERTIFICATE IN AGRICULTURAL SCIENCE LEVEL 4				
SEMESTER 1 COURSES			**SEMESTER 2 COURSES**	
	Course Code & Name	Credit	**Course Code & Name**	Credit
1	AGC411 Agricultural System	12	AGC421 Plant Science	12
2	AGC412 Agricultural Mathematics and Statistics	12	AGC422 Crop Production 1	12
3	AGC413 Computing	12	AGC423 Animal Production 1	12
4	AGC414 Communication Skills	12	AGC424 Farm Workshop Practices	12
5	AGC415 Farm Management Records	12	AGC425 Farm BUSINESS PLANNING and Marketing	12
			AGD526 Industry Based Work Experience (3 x 4 Wk)	S

FIRST YEAR DEGREE COURSES - DIPLOMA IN AGRICULTURAL SCIENCE LEVEL 5				
SEMESTER 1 COURSES			**SEMESTER 2 COURSES**	
	Course Code & Name	Credit	**Course Code & Name**	Credit
1	AGD511 Plant Health	12	AGD521 Animal Nutrition and Breeding	12
2	AGD512 Animal Anatomy and Physiology	12	AGD522 Agricultural Chemistry	12
3	AGD513 Crop and Horticultural Production Ii	12	AGD523 Microbiology	12
4	AGD514 Animal Production II	12	AGD524 Agricultural Machinery	12
5	AGD515 Agriculture Foods and Health	12	AGD525 Biometrics	12
			AGD526 Industry Based Work Experience (3 X 4 Wks)	S
SECOND YEAR DEGREE COURSES - DIPLOMA IN AGRICULTURAL SCIENCE LEVEL 6				
SEMESTER 1 COURSES			**SEMESTER 2 COURSES**	
	Course Code & Name	Credit	**Course Code & Name**	Credit
1	AGD611 Animal Health	12	AGD621 Human Resources Management and Agricultural Extension	
2	AGD612 Farm Business Management	12	AGD622 Crop Protection	
3	AGD613 Soil Science	12	AGD623 Agricultural Economics and Marketing	
4	AGD614 Agriculture Climatology and Climate Change	12	AGD624 Organic Farming Principles	
5	AGD615 Plants and Animal Products and Processing	12	AGD625 Agricultural Research Methodology	

THIRD YEAR DEGREE COURSES - BACHELOR IN AGRICULTURAL SCIENCE LEVEL 7				
SEMESTER 1 COURSES			**SEMESTER 2 COURSES**	
	Course Code & Name	**Credit**	**Course Code & Name**	Credit
	AGR711 Research Project			24
	AGR712 Internship (Work Placement)			24
	Choose only 1 course from the following:			
	BAA711 Animal Nutrition	12	BAE722 Agribusiness Marketing and Value Chains	12
	BAC714 Agronomy	12		
	BAE713 Sustainable Agriculture	12		
	Choose Five courses from the following: AGRICULTURAL ECONOMICS AND BUSINESS			
	BAE711 Agricultural Production Economics	12	BAE721 Consumer Behaviors	12
	BAE712 Farm Business Management	12	BAE722 Agribusiness Marketing and Value Chains	12
	BAE713 Agricultural Marketing Management	12	BAE723 Agricultural Policy	12
	ANIMAL MANAGEMENT AND PRODUCTION SCIENCE			
1	BAA711 Animal Nutrition	12	BAA721 Ruminant Animal Production	12
	BAA712 Farm Animal Growth and Development	12	BAA722 Pig Production	12
	BAA713 Animal Health and Management	12	BAA723 Poultry Production	12
	CROP AND PASTURE SCIENCE			
	BAC711 Agronomy	12	BAC721 Forage and Pasture Crops	12
	BAC712 Plant Growth and Development Processes	12	BAC722 Pasture Crops Management	12
	BAC713 Horticulture Science	12	BAC723 Sustainable Agriculture and Food System	12
	SOIL SCIENCE AND SUSTAINABLE ENVIRONMENT			
	BAE 711 Fundamental of Crop Protection	12	BAE721 Fundamental of Soil Science	12
	BAE712 Entomology and Plant Diseases	12	BAE722 Soil Fertility and Fertilizers	12
	BAE713 Sustainable Agriculture	12	BAE723 Sustainable Soil Management	12

SCHOOL OF SCIENCE AND TECHNOLOGY

A school having the same name as the Faculty it belongs to, Fokololo e Hau Technical and Vocational School **offers 8 programs**. The program name and program statement is tabled below.

Program Statements

1. **Automotive Light Vehicle**
   Program Statement: Provides trainees with the skills and experiences of maintaining an aumotive light vehicle.

2. **Panel Beating & Spray Painting**
   Program Statement: Provides trainees with the skills and experiences of panel beating and spray painting.

3. **Plumbing**
   Program Statement: Provides trainees with the basic skills and experiences of working as a plumber.

4. **Building and Construction**
   Program Statement: Provides trainees with the basic skills and experiences of working as a building and construction worker.

5. **Electrical Engineering**
   Program Statement: Provides trainees with the basic skills and experiences of wotking as a plumber.

6. **Fitting and Machining**
   Program Statement: Provides trainees with the basic skills and experiences required of a fitter.

7. **Welding**
   Program Statement: Provides trainees with the basic skills and experiences of wotking as welder.

8. **Sustainable Energy**
   Program Statement: Provides trainees with the knowledge about sustainable energy and its applications in Tonga.

Entry Requirements

To gain entry into any of the trades programs, candidates must have:

i. Completed Form 3 secondary schooling
ii. Work experiences in the trades area applied for, recognition of prior learning (RPL) will be considered.

Due to high demand in some trades, an interview may be conducted to select suitable candidates.

Programs, Courses and Course Descriptions

Program Name	Stage	Code	Course Name and Description
ELECTRICAL ENGINEERING CERTIFICATE LEVEL 4	**STAGE 1**	**EE100**	**Occupational Health and Safety** Provide an overview of OccupationalHealth and Safety and introduce safe procedures for personnel working in the electrical/electronic environment.
		EE101	**Drawings and Diagrams for Electrical Work** Assist trainees to read, interpret and draw architecturaldrawings for the locations of electrical circuits, accessories and appliances.
		EE102	**Engineering Science** Develop a good understanding of the SIsystem of measurement, the conversion between units, substitute formula, use trigonometric theorem and transpose equations and formulas.
		EE103	**Workshop Practices**
		EE104	**Electrical Principles 1** Develop a fundamental knowledge of electricity, basic dc circuit and describes a range ofcommonly used electrical components
		EE105	**Cells and Batteries** Develop the knowledge of identification, applications, care and handling of primary and secondary cells, test, charge and maintain secondarybatteries.
		EE106	**Electrical Drawing Interpretation and Connection** Develop skills and knowledge of identify, design, read electrical and architectural drawings, planning, servicing, altering of electrical equipment and installations.
		EE107	**Test Equipment** Develop skills and knowledge of setting, reading, measuring of current, voltage, resistance, etc utilizing types of electrical test equipment for electrical measurements.

		EE108	**Electrical Wiring and Equipment 1** Develop knowledge and skills of the safe procedures for testing and isolating an electrical circuit, associated standards requirements for electricalsafety, specifications, colour coding and applications ofvarious cords and cables.
		EE109	**Dc Power Supply Fundamental 1** Develop knowledge and skills on calculate, measure voltages and currents in rectifier circuit, identify and draw waveforms at the source andthe load, determine if the power supply operate correctly and locate a defective component.
	STAGE 2	**EE200**	**Electrical Principles 2** Develop knowledge of electrical and electronic theory, focuses on AC theory and simple analogue electronic circuit designs. They applied thistheory in the construction and testing of electrical installations and electronic circuits.
		EE201	**DC Machines** Familiarize trainees with basic structure, function, operation, characteristics and if any mathematical andpractical problems associated with electrical DC machines.
		EE202	**Electrical Wiring and Equipment 2** Develop knowledge and skills for installing an electrical circuit, segregation of low voltage wiring from wiring of other system, associated standards requirements for electrical safety.
		EE203	**Electrical Wiring and Equipment 3** Develop knowledge and skills for installing an electrical circuit using flat TPS in skirting trunking, floor duct, and test to ensure electrical safety.
		EE204	**Electrical Installation and Requirement 1** Develop knowledge and skills in determining the maximum demand of a domestic installation and using that demand, select the correctsize cable for the installation and applying SAA requirements for switchboards, meters, earthing and special situations within a domestic installation.
		EE205	**Electrical Installation and Requirement 2** Develop knowledge and skills in determining the maximum demand of a domestic installation and using that demand, select the correctsize cable for the installation and applying SAA requirements for switchboards, meters, earthing andspecial situations within non-domestic installation.
		EE206	**DC Power Supply Fundamentals 2** Develop knowledge and skills in describing the principles of single-phase half-wave,full-wave rectifier, voltage regulator and troubleshooting linear power supply circuit.
		EE207	**Amplifier Fundamentals** Develop knowledge and skills on the operation of the BJT, various biasing methods of amplifier, calculating and measuring circuit voltages, input/output resistance and voltage gain of BJT amplifiers.
		EE208	**Digital Fundamentals** Develop knowledge and skills to understand basic logic gates, basic combinational logic circuits, display systems, commonly used digital codes and number systems.
		EE305	**Electrical Testing** Develop knowledge and skills on the requirements of the Electricity Regulation and the AS/NZS 3017:1996 Electrical Installation-Testing guidelines, develop an understanding of the obligations and responsibilities of electrical contractors, electrical workers and supply authorities and the test equipment needed to conduct the test.

		EE300	**Electrical Principles 3** Develop knowledge and skills required to comprehend the principles associated with single and three phase a.c. circuits.
		EE301	**Single & Three-Phase Transformer** Develop knowledge of single and three- phase transformers construction, operation and electrical characteristics, impedance and voltage regulation, transformer auxiliary equipment and the procedures to safely work on high voltage distribution transformer.
		EE302	**Generation & Distribution of Electrical Energy** Develop knowledge and skills on electrical energy generation and distribution, generating systems, high and low voltage distribution, overhead and underground methods, substation, and protection.
		EE303	**Three Phase Induction Motor** Introduces the fundamental principles of three-phase motors operation, basic construction, introduce requirements for starting large motors, connections, braking, rotation reversal and fault-finding techniques.
	STAGE 3	**EE304**	**Single Phase Induction Motor** Introduces the single-phase split phase induction motor,capacitor motors, shaded pole motor, series universal motors, speed control protection and diagnostic testing of various single phase induction motors.
		EE306	**Circuit Development 1** Develop trainees with knowledge and skills used to develop, draw and connect single and three phase circuits that contain relays, contactors, timers, convertwiring diagram to a circuit diagram, test and fault- finding technique.
		EE307	**Programmable Logic Controller** Introduces the basic operating principles of programmable controllers, the difference from fixeddigital control logic and electric relay control logic.
		EE308	**Analogue Electronics** Developed and understand the design, analysis, selection of workable substitutions in circuits usingmodern op-amp and analogue IC.
		EE309	**Microprocessor Fundamental** Develop trainees with knowledge and skills of complete microprocessor system, how the memory section works,how to program the microprocessor and how input andoutput devices connected.
		EE310	**Microprocessor Applications** Introduce range of microprocessor support chips commonly found in electronic equipment, range of input/output devices including keyboards, printers, display devices, main features and operations of theinput/output devices.
		EE209	**Power Control Devices** Developed trainees with knowledge and skills of methods to control power to electrical circuits, the advantages and disadvantages of controlling power, operation, characteristics and rating of thyristor.
Program Name	**Stage**	**Code**	**Course Name and Description**
CARPENTRY CERTIFICATE LEVEL 4	**STAGE 1**	CP100	**Occupational Health and Safety** Equip trainees with knowledge and skills necessary for work safely at the workplace and on-site-job under the OHS Acts.
		CP101	**Introduction to Trade** Equip trainees with knowledge and skills necessary for using hand tools, calculation of materials quantity and costing.
		CP102	**Static Power Machines** Introduces trainees with knowledge and skills of the procedures for setting out, operating and maintenance the static power machines.

		CP103	**Timber as a building material** Equip trainees with the knowledge and skills necessary to identify, explain, demonstrate the defects in timber, Identify the grade and size of the timber.
		CP104	**Basic fasteners and Adhesives** Equip trainees with knowledge and skills necessary for identify, selecting the types of fasteners and their uses.
		CP105	**Preparing site and set out footing** Equip trainees with knowledge and skills necessary for interpreting, analyse, plan, specification to get the right information for preparing site and set out footing.
		CP106	**Concrete strip footing** Equip trainees with knowledge and skills necessary for interpreting, analyse the plan and specification to get the right information for constructing concrete strip footing site and set out footing.
		CP107	**Concrete slab on ground** Equip trainees with knowledge and skills necessary for interpreting, analyse the plan and specification to get the right information for constructing slab on ground.
		CP108	**Timber sub-floor structure** Equip trainees with knowledge and skills necessary for interpreting, analyse the plan and specification to get the right information for constructing sub-floor structures.
		CP109	**Flooring** Equip trainees with knowledge and skills necessary for interpreting, analyse the plan and specification to get the right information for constructing flooring material.
		CP110	**Wall framing** Equip trainees with knowledge and skills necessary forinterpreting, analyse the plan and specification to get the right information for constructing wall frame structure.
		CP111	**Basic roof and ceiling framing** Equip trainees with knowledge and skills necessary forinterpreting, analyse the plan and specification to get the right information for constructing cable roof andceiling frame.
		CP112	**Cladding, lining and moulding** Equip trainees with knowledge and skills necessary forinterpreting, analyse the plan and specification to get the right information for constructing cladding, lining and moulding.
		CP113	**Stairs without riser** Equip trainees with knowledge and skills necessary forinterpreting, analyse the plan and specification to get the right information for constructing stair without riser.
		CP114	**Communication and industrial relations** Equip trainees with knowledge and skills necessary for good communication and interact with other workers atthe site, apply the skills to solve problems cause by miscommunication at the construction site.
		CP115	**Trade drawings** Equip trainees with knowledge and skills necessary tointerpret drawings and specifications, draw and dimension in two- and three-dimensional views according to standard.
	STAGE 2	CP200	**Brick veneer dwelling** Equip trainees with knowledge and skills necessary for designing and constructing the brick veneer dwelling.

		CP201	**Reinforced Concrete** Develop the understanding the properties of concrete and reinforcement and interpret the type offorce which acts on concrete.
		CP202	**Formwork for columns and walls** Equip trainees with knowledge and skills necessary for preparing and constructing the formwork for columns and walls.
		CP203	**Formwork for suspended slab and beam** Equip trainees with knowledge and skills necessary for preparing and constructing the formwork for suspendedslab and beam.
		CP204	**Flat roof construction** Equip trainees with knowledge and skills necessary for preparing and constructing the flat roof structure.
		CP205	**Roof trusses** Develop trainees understanding and interpret the type of force which acts on truss, design and construct thetruss for gable and hip roof.
		CP206	**Insulation and natural ventilation** Equip trainees with knowledge and skills of insulation, ventilation and install it to decrease the energyconsumption.
		CP207	**Wet area construction** Develop trainees with knowledge and skill of the appropriate type and method of construction to becarried out at the wet area in the building.
		CP208	**Doors and windows** Develop trainees with knowledge and skills the methodof constructing of doors and windows to avoid the water leakage.
		CP209	**Scaffolding** Equip trainees with knowledge and skills necessary for preparing and constructing timber and steel scaffold.
		CP210	**Interior stair** Develop trainees with knowledge and skills of thespecifications, standard for stairs and set out the materials to construct the interior stair.
		CP211	**Residential drawings and designs 2** Equip trainees with knowledge and skills of the outcome required to identify, plan and draw brick layout residential house according to the standards and specifications.
	STAGE 3	CP300	**Hip and valley roof** Equip trainees with knowledge and skills for interpreting, analyse the plan an specification of hipand valley, gambrel roof, calculating materials quantitie and cost, design, set out materials and construct hip and valley and gambre roof.
		CP301	**Formwork for concrete stairs** Equip trainees with knowledge and skills for interpreting, analyse the plan and specification of concrete stair, calculating materials quantities and cost for stair formwork, reinforcement and concrete, design,set out materials and construct formwork for concrete stair according to standards.
		CP302	**Construction and install cupboard** Equip trainees with knowledge and skills for interpreting, analyse the plan and specification of kitchen cupboard, calculating materials quantities and cost, design, set out materials and construct.
		CP303	**Shop fronts and fitting** Equip trainees with knowledge and skills for interpreting, analyse the plan and specification of shop front and display units, calculating materials quantitiesand cost, design, set out materials and construct.

		CP304	**Construction in high wind areas** Equip trainees with knowledge and skills for identifyingtype of fasteners used to fix in each connection of building structure from roof down to foundation according to building codes.
		CP305	**Tonga building codes (timber framingcode)** Equip trainees with knowledge necessary for the standards and building codes relevant for Tonga.
		CP306	**Leveling** Equip trainees with knowledge and skills to set up instrumental level, carry out field survey, determine the slope ground level for excavation and calculate the amount of soil to be excavated.
		CP307	**Hoardings, barricades and gantries** Equip trainees with knowledge and skills necessary for design, set out materials and construct Hoarding, Barricade and gantry.
		CP308	**Explosive powered tools operation** Equip trainees with knowledge and skills necessary forcleaning, inspection and lubrication, load the correct charge and operate explosive powered tools.
		CP309	**Residential drawing and designs 2** Equip trainees with knowledge and skills necessary forplan, design, draw detail residential plans and costing.
Program Name	**Stage**	**Code**	**Course Name and Description**
PLUMBING CERTIFICATE LEVEL 4	**STAGE 1**	PL100	**Carry out interactive workplace communication** Equip trainees with knowledge and skills to improve the way of communication with colleagues, customers and various people at work.
		PL101	**Read plans and calculate plumbing quantities** Develop knowledge and skill of workplace regulations and standards, safely set up work area, interpret scales,plans, symbols and job specifications.
		PL102	**Work effectively in the plumbing industry** Develop trainees with knowledge and skills of being part of a team, setting goals, sharing information, supporting, being confident to ask for assistance and sharing information.
		PL103	**Carry out OHS requirements** Equip trainees with knowledge and skills necessary for work safely at the workplace and on-site-job under the OHS Acts.
		PL104	**Handle and store plumbing materials** Equip trainees with knowledge and skills to handle and store plumbing materials safely to yourself and fellow workers.
		PL105	**Use plumbing hand and power tools** Develop trainees with knowledge and skills on the functions of a range of hand and power tools commonly used in the plumbing sector, selecting the right tool for the job, ensure the safety of the tool and well maintained.
		PL106	**Cut and join sheet metal** Equip trainees with knowledge and skills of cutting, join sheet metal of various types and utilise different techniques of joining that conduct in the plumbing industry.
		PL107	**Mark out materials** Equip trainees with knowledge and skills of marking out materials prior to fabrication of piping, steel sections, ducting, roofing and cladding.
		PL108	**Weld using oxy-acetylene equipment** Equip trainees with knowledge and skills of specifying outcomes required to weld/braze metals associated with fabrication, installation and repair of plumbing components and systems using oxy-acetylene equipment.

		PL109	**Weld using manual metal ARC welding** Equip trainees with knowledge and skills for applying the principles of fusion welding low carbon steel using the arc welding to a specified standard.
		PL110	**Fabricate and install non-ferrous pressure piping** Equip trainees with knowledge and skills of fabricating, installing and testing of pipe systems that utilise non-ferrous pipe materials.
		PL111	**Carry out simple concreting and rendering** Equip trainees with knowledge and skills of patching up or repairing of concrete and render.
		PL112	**Weld polyethylene and polypropylene pipes usingfusion method** Equip trainees with knowledge and skills of the required fusion weld polyethylene and polypropylene, polymer pipes, and test joints in polymer pipe up to DN100 for water, sanitary and stormwater application.
	STAGE 2	PL200	**Select and install roof sheeting and wall cladding** Develop trainees with knowledge and skills of selecting,install roof sheeting, steel battens, wall cladding for roofs, non-metallic roof materials associated with metal roofing and of insulation materials.
		PL201	**Collect and store roof water** Develop trainees with knowledge and skills of specifying the outcomes required to determine storage requirements, plan, prepare, install storage tanks, related piping for the collection and storage of roof water.
		PL202	**Fabricate roof coverings for curved structures** Equip trainees with knowledge and skills of specifyingthe outcomes required to design and fabricate curved industrial roof coverings.
		PL203	**Receive roofing materials** Equip trainees with knowledge and skills of the outcomes required to coordinate the delivery, receipt and handling of roofing materials on a site.
		PL204	**Fabricate and install roof drainage components** Equip trainees with knowledge and skills of the outcomes required to fabricate, install roof drainage components, rainwater goods for commercial and residential roof systems.
		PL205	**Fabricate and install external flashings** Equip trainees with knowledge and skills of the outcomes required to fabricate and install externalflashings for roof and ceiling installations.
		PL206	**Install roof components** Equip trainees with knowledge and skills to select and install industrial type roofing components in roofs.
		PL207	**Install roof coverings to curved roof structures** Equip trainees with knowledge and skills to set out andinstall roofing to hyperbolic, paraboloid, barrel vault roof, curved roof and bull-nosed roof structures.
		PL208	**Install composite roof systems** Equip trainees with knowledge and skills to select, install roof sheeting and wall cladding, selection, installation of metallic and non-metallic roof materials associates with metal roofing and insulation materials.
		PL209	**Install and adjust water service controls and devices** Equip trainees with knowledge and skills to install water service controls and mixing devices used to manually control water mix and flow. It includes the basic adjustment and maintenance of correct flow operation for flushing devices, control valves, temperature control devices pumps and appliances, and excludes the commissioning and adjustment of backflow prevention devices and thermostatic mixing valves.

		PL210	**Install and commission water heating systems** Equip trainees with knowledge and skills the outcomes required to install, commission water heaters for domestic and commercial applications.
		PL211	**Set out and install water services** Equip trainees with knowledge and skills of the outcomes required to install heated, cold and tempered water services from the water supply to the fixture or points of discharge and storage.
		PL212	**Connect and install storage tanks to a domesticwater supply** Equip trainees with knowledge and skills of the outcomes required to connect and install storage tanks to a domestic water supply.
		PL213	**Install discharge pipes** Equip trainees with knowledge and skills of the outcomes required to install pipework from soil and wastewater fixtures to a stack or drain.
		PL214	**Work safely on roofs** Equip trainees with knowledge and skills of the outcomes required to perform safe work practices when undertaking plumbing work on roofing structures.
		PL215	**Flash penetrations through roofs and walls** Equip trainees with knowledge and skills of the outcomes required to set out, cut and flash a roof and wall penetration.
		PL216	**Install and fit off sanitary fixtures** Equip trainees with knowledge and skills of the outcomes required to install, fit off sanitary fixtures, installing sanitary plumbing, connection of discharge pipes and drainage, including soil and waste fixtures.
	STAGE 3	PL300	**Carry out levelling** Equip trainees with knowledge and skills of the outcomes required to plan and use levelling equipment to establish, record, apply those levels to the plumbing and services industry.
		PL301	**Cut using Oxy-LPG Acetylene** Equip trainees with knowledge and skills of the outcome required to use oxy-LPG-acetylene equipment to carry out basic cutting of mild steel in support of plumbing and applications and fabrication to meet job specifications.
		PL302	**Install water pump sets** Equip trainees with knowledge and skills of the outcome required to install and test water pumps.
		PL303	**Fit off and commission heated and cold-watersystems** Equip trainees with knowledge and skills of the outcome required to fit off and commission heated and cold-water services to appropriate fixtures.
		PL304	**Connect irrigation systems from drinkable watersupply** Equip trainees with knowledge and skills of the outcome required to connect irrigation and watering systems from a drinking water supply.
		PL305	**Install water services** Equip trainees with knowledge and skills of the outcome required to install a water supply system from the authority's main to the metering device, according to water authority's requirement.
		PL306	**Install water pipe systems** Equip trainees with knowledge and skills of the outcome required to install a water supply system from the authority's main to the metering device, according to water authority's requirements.
		PL307	**Fabricate and install fire hydrants and hose reelsystems** Equip trainees with knowledge and skills of the outcome required to fabricate and install fire hydrant and hose reel systems.

		PL308	**Plan layout for a residential sanitary plumbingsystem** Equip trainees with knowledge and skills of the outcome required to plan the layout, size and install a sanitary plumbing system for residential buildings.
		PL309	**Fabricate and install sanitary stacks** Equip trainees with knowledge and skills of the outcome required to fabricate and install sanitary stacks for soil and waste discharges.
		PL310	**Install pre-treatment facilities** Equip trainees with knowledge and skills of the outcome required to install pre-treatment facilities designed to intercept and retain prohibited discharges to the sanitary plumbing and drainage system.
		PL311	**Locate and clear blockages** Equip trainees with knowledge and skills of the outcome required to locate and clear blockages to sanitary plumbing and drainage with the use of mechanically operated drain clearing machines and attachments, closed circuit television (CCTV) and manually operated drain cleaning tools and equipment where required.
		PL312	**Install domestic treatment plants** Equip trainees with knowledge and skills of the outcome required to install approved prefabricated domestic treatment plants.
		PL313	**Maintain effluent disinfection systems** Equip trainees with knowledge and skills of the outcome required to maintain chlorine disinfection systems for domestic treatment plants.
		PL314	**Install stormwater and sub-soil drainage systems** Equip trainees with knowledge and skills of the outcome required to install stormwater and sub-soil drainage systems to an approved point of discharge.
		PL315	**Install trench support** Equip trainees with knowledge and skills undertaking trench excavations and the re-instatement of trenches up to a depth of 1.5m and all work must be supervised and team situation.
		PL316	**Install pre-fabricated inspection openings and Enclosures** Equip trainees with knowledge and skills of the outcome required to install prefabricated inspection openings and enclosures.
		PL317	**Plan layout of residential sanitary drainage system** Equip trainees with knowledge and skills of the outcome required to install, plan and layout residential sanitary drainage system and connection.
		PL318	**Install below ground sanitary drainage systems** Equip trainees with knowledge and skills of the outcome required to install below ground sanitary drainage systems for sewage and waste discharge from sanitary fixtures to the authority's approved point of connection.
		PL319	**Install on-site disposal systems** Equip trainees with knowledge and skills of the outcome required to install an on-site effluent disposal system from a domestic treatment plant.
Program name	**Stage**	**Code**	**Course name and Descriptions**
AUTOMOTIVE LIGHT VEHICLE CERTIFICATE LEVEL 4	**STAGE 1**	AL100	**Communication and Industrial Relations** Provide the trainees with knowledge and skills that enable them to demonstrate how to communicate effectively with other in the workplace, access information from various sources to enable referencing, servicing and repair and also enable them to complete Repair Order and Job Card and present documents and records.

		AL101	**Occupational Health and Safety & First Aid** Enable the trainees to identify the rights and responsibilities of both employers and employees under the OH&S Act, hazard and risk control strategies use to eliminate the risk and examine safetysignage so that you understand warnings and precautions.
		AL102	**Automotive Workplace Safety, Tools, Equipmentsand Practices** Provide the trainees to be able to demonstrate correctly the application of personal safety standards, fire safety. Identify and demonstrate automotive hand tools application and different types of friction and bearings in automotive.
		AL103	**Workshop Practices (TGE 102 Hand Tools)** Provide the trainees with skills and knowledge for useof Automotive tools that have been designed to make automotive repairs, modifications and servicing easy,when working on vehicles. Without the right tools on-hand, it will be difficult to complete the tasks needed to perform without errors or delays.
		AL104	**Automotive Hydraulic and Pneumatic Principles** Provide the trainees with knowledge and skills that enable them to explain and demonstrate the terms, mechanical, Hydraulic and Pneumatic principles andwhere they are applied in automotive engineering.
		AL105	**Automotive Engine Operation** Provide trainees to be able to identify SI and CI engine operation of 2 and 4 stroke engine and demonstrate dismantling and reassembling of engine in a safety condition.
		AL106	**Automotive Electrical Principle 1** Demonstrate knowledge of automotive electrical principles. Service an automotive battery.
		AL107	**Automotive Vehicle Systems** Enable the trainee to identify types of lubricants and Lubrication system and how it applies in automotive field.
		AL108	**Automotive Maintenance and Service Procedures** Enable trainees to demonstrate how to complete vehicle service and maintenance and demonstrate a safe working environment while conducting engine service.
		AL109	**Automotive Heating and Welding Procedures (TGE 109 Welding 1)** Provide trainees with the knowledge and skills necessary to carryout basic oxy acetylene and metal arc welding.
	STAGE 2	AL200	**Automotive Electrical Systems** Provide trainees with the knowledge and skills required to check and test the starting system components and determine its operation. It also enables the trainees to diagnose faults on the lighting systems and electronic component of the vehicle.
		AL201	**Light Vehicle Ignition Systems** Provide the trainees to be able to identify various type of ignition system and it differences. It also acquires trainees with the skills and knowledge to diagnose faults using proper test equipment including an engine diagnostic oscilloscope.
		AL202	**Light Vehicle Heating and Air-conditioning Systems** To provide the trainees to be able to explain the system operating principles and have the skills to carry out the correct procedures for servicing and repair the system. They should be able to identify the legislation requirements associated with the automotive air conditioning system.

		AL203	**Light Vehicle Cooling Systems** This module will equip trainee with knowledge of the operation, perform routine service procedures, develop in-depth knowledge of components, specific features and their operations. Testing and identifying faults, removing, replacing and repairs of cooling system components.
		AL204	**Light Vehicle Petrol Fuel Systems (carburetor)** To provides trainees with knowledge and skills to test, repair and adjustment procedures on petrol fuel systems.
		AL205	**Light Vehicle Emission Control Systems** To provides trainees with knowledge and skills to identify and explain vehicle emission control systems, components and their functions and learn how to service and test these systems. Trainees also gains knowledge and skills on how to diagnose problems associated with emissions and emissions control systems.
		AL206	**Light Vehicle Diesel Fuel Systems** To provide trainee with knowledge to explain light vehicle diesel fuel system operation and perform its service and repair procedure.
		AL207	**Light Vehicle Automotive Brake systems andServices + ABS** Provide the trainees to be able to identify and explain brake system operation principles and have the skill to perform a test to identify fault and also perform a brake repair.
		AL208	**Light Vehicle Automotive Suspension & SteeringSystems and Services** To provides trainees with knowledge and skills to explain and conduct a service on suspension and steering system and also learn about different types of steering.
		AL209	**Light Vehicle Wheel Alignment** After completing this module, the trainee should gain knowledge and skills on how to conduct a wheel alignment adjustment and diagnose of vehicle stability.
	STAGE 3	AL300	**Light Vehicle Electrical Systems** Provide the trainees to be able to demonstrate safety precautions and skills on how to operate, remove, reinstall and diagnose common faults in warning systems, cruise control systems and supplemental restraint systems.
		AL301	**Light Vehicle Engine Managements Systems** To provide the trainees to know how the engine management system operate, also demonstrate skills on how to remove, replace and diagnose faults and results of the engine management system.
		AL302	**Light Vehicle Final Drives and Drive Shafts** Provide the trainees to demonstrate understanding on how final drives and drive shafts operate, trainees will also attain skills on how to check and test for faults, remove, replace and determine the final drives and drive shaft operational status.
		AL303	**Light Vehicle Clutch and Manual Transmissions** Assist trainees to be able to demonstrate knowledge on how clutch and manual transmission operate, alsodemonstrate skills on how to remove, replace, test and diagnose a faulty clutch and manual transmission.
		AL304	**Light Vehicle Automatic Transmissions** To provide the trainees to identify and know how an automatic and transmission component operate, also attain skills on how to test and repair a faulty automatic transmission, and skills on how to handle an automatic transmission.

		AL305	**Light Vehicle Engine Testing and Cylinder Heads** Assist the trainees to identify and explain an operational Cylinder Heads. Trainees will attain skills on how to test and repair a faulty Cylinder Head, and also skills on how to remove and reinstall Cylinder Heads.
		AL306	**Light Vehicle Cylinder Blocks** Provide trainees with knowledge on how to identify an operational Cylinder Block, skills on how to test and diagnose a faulty cylinder block components and determine its operational status. Trainees will also be able to remove and replace cylinder blocks and components.
		AL307	**Light Vehicle Turbocharger Systems** Enable trainees to identify and explain how a Turbocharger System operate, also be equipped with skills to perform a test and diagnose faults on the Turbocharger system.
		AL308	**Light Vehicle Exhaust Systems** Equips trainees with knowledge and skills on how an Exhaust System function and how to inspect and test for faults in the Exhaust system. Trainees will also be equipped with skills on how to remove and repair Exhaust systems.
		AL309	**Light Vehicle Engine Diagnostics Procedures** Provide trainees with the required knowledge to evaluate and analyse strategies and procedures on how to diagnose a faulty Diagnostic equipment. Trainees will also be able to demonstrate how to remove and replace Diagnostic equipment.
Program Name	**Stage**	**Code**	**Course Name and Descriptions**
	STAGE 1	PS100	**Demonstrate knowledge and skills in Occupational Health and Safety.** Provide the trainees to be able to demonstrate knowledge of Occupational Health and Safety (OH&S), legislation, rights and responsibilities of employers and employees under OH&S Act, knowledge and skills to identify, control and eliminate hazards, importance of signage, understand manual handling and risks and legal requirements, workplace emergency and security procedures and be able to work safely with fellow workers at the workplace and comply with OH&S policies and standards.
		PS101	**Demonstrate knowledge and skills in Communication and Industrial Relation.** Provide trainees to be able to demonstrate knowledge and skills in effective communication through the line and process of communication, identify and access source of technical information, categorize, present and communicate the information clearly, identify workshop records and write clear messages
		PS102	**Demonstrate knowledge and skills in the application of tools and equipment for Body and Paint repair.** Assist trainees to be able to demonstrate knowledge and skills to select and use properly and safely the tools and equipment to produce the desired outcome according to job specifications.
		PS103	**Demonstrate knowledge and skills to select, use and care for engineering hand tools**. Assist trainees to be able to demonstrate knowledge and skills to identify, select, use and care for types of engineering hand tools to meet task specifications.
		PS104	**Demonstrate knowledge of general locations and functions of motor vehicle systems and main components.** Assist trainees to be able to identify the locations and layouts of systems and main components on motor vehicles, and demonstrate knowledge of the functions of motor vehicle systems and their main components.

		PS106	**Demonstrate knowledge and skills in methods of Paint Removal.** Provide trainees to be able to demonstrate knowledge and skills of safety precautions, measure and identify paint thickness, identify types of paint removal, select and carryout types of paint removal competently.
		PS107	**Demonstrate knowledge of the composition of common Engineering Metals.** To provide trainees to be able to demonstrate knowledge of ferrous and non-ferrous metals and their composition; and techniques for determining the composition of engineering metals.
		PS108	**Demonstrate knowledge of Oxy-AcetyleneWelding.** To provide trainees to be able to demonstrate knowledge of oxy-acetylene welding plant, welding processes (Range; fusion welding, brazing, soldering, heating metal, cutting and low temp. brazing) and weld faults according to industry standard.
		TPS109	**Oxy-Acetylene Welding.** Assist trainees to be able, to prepare to weld a piece of steel, weld two pieces of steel (range: lap, tee fillet) using Oxy-acetylene welding plant and join metal using brazing to industry standard.
		PS110	**Demonstrate knowledge of MIG Welding.** Assist trainees to be able to demonstrate knowledge of MIG welding; and MIG welding processes, welding faults and procedure for shutting down according to industry standard.
		PS111	**MIG Welding.** Assist trainees to be able to prepare MIG welder and metals for welding, prepare safety shields, weld metal in position to specifications and standard, shutting down and maintain MIG according to industry standard.
		PS112	**Demonstrate knowledge and skills in the application of Plastic Polyester Filler.** Assist trainees to be able to demonstrate knowledge of types of plastic polyester filler and skills to safely carrying out preparing substrate, preparing and applying plastic polyester filler and finishing to specification competently.
		PS113	**Demonstrate knowledge of Colours, Paint andapplication of primers.** Provide trainees to be able to demonstrate knowledge of paint colours, motor vehicle finish coats and prepare and apply primers.
		PS114	**Manually produce and interpret EngineeringDrawing.** Assist trainees to be able to draw under supervision, manually prepare, produce and interpret engineeringsketches, and drawings.
	STAGE 2	PS200	**Welding Technique** Provide skills and knowledge required for trainees tocarry out advanced gas metal arc welding (GMAW) to replace structural and non-structural vehicle bodysections during vehicle body repair work. It involves preparing for the task, selecting and using GMAW equipment, operating gas metal arc welder, selectingand using suitable personal protective equipment (PPE), and completing workplace processes and documentation.
		PS201	**Panel Repair Technique** Provide the skills and knowledge required for trainees to carry out metal finishing, incorporating heat shrinking, to repair vehicle body panels, preparing for the task, selecting and using specialist tools and equipment, setting an oxyacetylene plant, panel beating and file finishing vehicle panels to pre-paint condition without using body fillers, and completing workplace processes and documentation.

		PS202	**Surface Preparation Procedure** Assist the trainees for the performance outcomes required to apply masking materials in preparation for vehicle and component refinishing. It involves preparing for the task, selecting and using tools and equipment, selecting masking materials appropriate to the vehicle or component, masking off surrounding panels and components before refinishing activities, and completing workplace processes and documentation.
		PS203	**Spray Booth** Assist the trainees for the performance outcomes required to prepare paint drying equipment. It involves preparing for the task, selecting and using specialist tools and equipment, setting, operating and maintaining paint drying equipment to manufacturer specifications, and completing workplace processes and documentation.
		PS204	**Minor Structural Repair** Assist the trainees for the performance outcomes required to inspect, repair and align chassis, frame and components to vehicles. It involves preparing forthe task, selecting and using specialist tools and equipment, identifying damage, taking pre-repair measurements, conducting repairs, taking post- repair measurements according to original equipment manufacturer (OEM) or authorized agency specifications, and completing workplace processes and documentation.
		PS205	**Compressors, Transformers and Airlines** Assist the trainees for the performance outcomes required to service air compressors, pressure regulators, water traps, filters and air lines. It involves cleaning and replacing filters, making necessary adjustments, and completing workplace processes and documentation as part of the day-to-day maintenance of the system.
		PS206	**Colour Matching Fundamentals** Provide trainees to be able to demonstrate knowledge and skills in colour matching fundamentals, also preparing for the task, selecting and using specialist tools and equipment, preparing colour matching test cards, mixing and spraying paint and conducting a visual colour match, and completing workplace processes and documentation.
		PS207	**Acrylic Lacquer Application** Provide trainees to be able to demonstrate knowledge and skills in acrylic lacquer to a variety of vehicle components by spray gun application. It is involves preparing for the task, selecting and using specialist tools and equipment, mixing and applying automotive paint materials according to manufacturer specifications, and completing workplace processes and documentation.
		PS208	**Spray Equipment & Spray Technique** Provide trainees to be able to demonstrate knowledge and skills in spray equipment and spray technique, also required to clean and maintain vehicle spray painting equipment. It involves preparing for the task, selecting and using cleaning materials and equipment, preparing spray painting equipment for vehicle refinishing activities, and completing workplace processes and documentation.
	STAGE 3	PS300	**Paint Material Preparation** Assist trainees to be able to prepare and paint plastic and composite vehicle surfaces, and prepare vehicle substrates for refinishing.
		PS301	**Acrylic Lacquer Primer** Provide trainees to be able to prepare primers and apply refinishing primers to vehicle surfaces.

		PS302	**Colour Matching Acrylic Lacquer & Two PackCOB Metallics** Provide the trainees to learns of the different colour matchings and procedures to apply multi- layer and clear over base two-pack paints on vehicles and components, as well as the techniques of matching direct gloss solid paint colour on vehicles or components.
		PS303	**Acrylic Urethane COB Touch Up** Provide trainees to learns to apply clear over base multi-layer and pearl refinishing materials to vehicle body components, included the techniques of primer preparation, application and masking the vehicles.
		PS304	**Acrylic Lacquer Touch-Up (Solid & Metallic)** **P**rovides the trainees to analyses abrasive surfaces on vehicles, carry out proper preparation stages in accordance with the manufacturer's specifications, which precede the application of top coats in minor and major spot repair using the solid acrylic lacquer touch-up techniques for solid and metallic surfaces, and the clear over base two-pack materials, and also to achieve quality final paint finish in the repair of vehicle components.
		PS305	**Vehicle Detailing Procedures** Assist the trainees to learns about the detailed parts and materials that make up the interior and exterior of an automotive vehicle, compounds needed to and appropriate ways of cleaning and polishing these materials, and how to correct visible vehicle painting faults through the use of the right tools and equipment, and also be able to de-nib, buff and polish vehicle painted surfaces.
		PS306	**Vehicle Inspection and Estimating** Provide the trainees to be able to inspect vehicle damage and determine the repair procedures with good estimation skills. Vehicle damage involves panel damage, panel replacement, trim damage, accessories and paintwork. The trainee will also use proper estimation procedures to provide a reliable quotation on the necessary repair required.
		PS307	**Application of Air Dry Polyurethane Enamels** Enable trainee to examine the use, mixing and application procedures specifically in the Automotive industry in terms of polyurethane enamel to achieve a quality finished product. Polyurethane paint is mainly used on transportation vehicles, aircraft and marine equipment and in a wide range of industrial applications. The trainee will be able to apply air dry and polyurethane refinishing to automotive materials.
		PS308	**Acrylic Urethane Solid Colour Respray** Provide trainees with the necessary knowledge and skills to repaint a motor vehicle using an acrylic urethane solid colour. Trainees will carry- out custom painting techniques to vehicle body panels with due considerations on the materials to use and the effectiveness of executing the tasks at hand.
		PS309	Apply water based refinishing materials to vehicle bodies and substrates.
		PS310	**Motor Body and Related Trades** Trainees at the end of this module are able to prepare and apply primers, fillers and sealers to motor body and related parts, and use safety practices in the process and disposal of materials used.

Program Name	Stage	Code	Course Name and Descriptions
WELDING CERTIFICATE LEVEL 2	STAGE 1	WD100	Demo and apply knowledge of safe welding procedures under supervision
		WD101	Demo and apply knowledge of welding low carbonsteel
		WD102	Demo & apply knowledge of welding aluminium & stainless
		WD103	Weld steel in all positions using GMAW and FCAW processes
		WD104	Demo and apply knowledge of welding aluminium -GMAW
		WD105	Weld Stainless Steel sheet using the GTAW Process
		WD106	Weld Aluminium in using the GTAW Process
		WD107	Demo knowledge of metal cutting and gouging processes
		WD108	Cut metals using the thermal processes
		WD109	Weld steel structure in all positions using MMAW
WELDING CERTIFICATE LEVEL 3	STAGE 2	WD200	Demo and apply knowledge of safe welding procedures under supervision
		WD201	Demo and apply knowledge of welding low carbon steel
		WD202	Demo & apply knowledge of welding aluminium &stainless
		WD203	Weld steel in all positions using GMAW and FCAW processes
		WD204	Demo and apply knowledge of welding aluminium GMAW
		WD205	Weld Stainless Steel sheet using the GTAW Process
		WD206	Weld Aluminium in using the GTAW Process
		WD207	Demo knowledge of metal cutting and gougingprocesses
		WD208	Cut metals using the thermal processes
		WD209	Weld steel structure in all positions using MMAW
Program Name	**Stage**	**Code**	**Course Name and Descriptions**
FITTING AND MACHINING CERTIFICATE LEVEL 4	STAGE 1	FM100	**Occupational Health and Safety** Equip trainees with the knowledge and skills necessary to work safely at the workplace and comply with workshop standards, also expected to carry out safety work practices and demonstrate minor first aid at the workshop and on-job.
		FM101	**Material 1** Equip trainees with knowledge of steel production, composition and properties of metals and their applications, and also expected to develop skills in comparing different metals, advantage and disadvantages in a particular set of requirements, developed a sound understanding of the link between theory and practice in the science of metal and engineering environment.
		FM102	**Hand Tools** Equip trainees with the knowledge and skills to use and care for hand tools competently, and also expected to select and use properly and safely hand tools to produce the desired outcome according to job specifications.
		FM103	**Drills and Drilling Operation 1** Equip the students with knowledge of drills and drilling machine and skills to operate and perform specific operation on a drilling machine, and also expected to carry out drilling safely on different types of drilling machine and drill bit according to the materials and specification, carry out maintenance and care for both drilling machine and drill bit.
		FM104	**Fasteners** Equip trainees with the knowledge and skills necessary to identify, select and use different types of fasteners, and also expected to identify and use different types of fasteners safely in different applications, carry out riveting in the metal and engineering environment.

		FM105	**Grinding** Equip students with the knowledge of grinding wheels and skills to select, test and install grinding wheels according to specifications and safety, and also to be able to select the most suitable grinding machine for a job and use grinding machine in the correct and safe procedures to produce the desired outcomes according to the specifications.
		FM106	**Brazing and Braze Welding** Equip students with the knowledge and skills necessary to prepare and conduct brazing and braze welding. Trainees also will have the skills to prepare and conduct correctly and safely brazing and braze welding of metals according to the standard outcomes required.
		FM107	**Lathe 1** Equip students with the knowledge and skills necessary to conduct turning of metals in a metal lathe. Trainees is expected to identify the parts of a metal lathe and also conduct setting of work and tool post and turning metals according to specifications.
		FM108	**Principles of Forging Operation** Equip students with the knowledge and skills necessary to conduct forging properly and safely. Trainees will be able to identify and explain forging equipment or tools and their functions, also conduct forging operations in the correct and safe procedures to produce desired outcomes according to the specifications.
		FM109	**Welding 1** Equip trainees with the knowledge and skills necessary to conduct gas welding of sheet metals and manual metal arc welding, and also be able to identify different parts and functions of gas and arcwelding equipment, and also conduct welding according to the industry standards andspecifications.
		FM110	**Trade Calculation 1** Equip trainees with the knowledge and skills necessary to calculate and solve basic engineering problems.
		FM111	**Trade Drawing 1** Assist trainees with the knowledge and skills necessary to interpret, draw and dimension engineering drawings, and also expected to interpret drawings and specifications, draw and dimension in two- and three-dimensional views according to standard specifications.
	STAGE 2	**FM200**	**Lubrication and Cutting Fluid** Assist trainees with the knowledge and skills necessary to select the correct types of cutting fluids or lubricants used in metal and engineering industry. A trainee is expected to identify different types and properties of cutting fluids and lubricants, and also be able to select and use the correct cutting fluid for the job and the machine.
		FM201	**Bearings, Seals and Gaskets** Assist trainees with the knowledge and skills necessary to identify and select the correct bearing, seals or gasket when performing maintenance and repair. A trainee is expected to identify, explain and demonstrate the methods of checking, cleaning and packing of bearings and seals, and also be able to install bearing, seals and gasket in the correct procedures.
		FM202	**Transmission of Power** Equip trainees with the knowledge and skills necessary to identify the connection of power or rotary motions of energy to a machine or from one line to another using shafting, couplings, pulleys and belts, sprocket and chains or gears. A trainee is expected to identify, explain and select the correct method of connecting power, by using shaft, coupling, belts and pulleys, sprocket and chains or gears.

		FM203	**Drills and Drilling Operation 2** Equip trainees with the knowledge and skills necessary to identify, select and use different types of drills and drilling operations. A trainee is expected to identify and select the correct drill bits suitable for the job, and conduct different types of drilling operations according to standards and specifications.
		FM204	**Pipe Work** Equip trainees with the knowledge and skills necessary to carry out working with pipes in engineering environment, and also trainees is expected to identify and demonstrate the application of different pipes according to the materials which are made of, carry out cold and hot bending of pipe, aligning and cutting using power tools or cutting wheel, and identification of pipe using code or symbols.
		FM205	**Lathe 2** Equip trainees with the knowledge and skills necessary to identify, select and use lathe cutting tools in different turning operations. A trainee is expected to identify and select the appropriate lathe cutting tools according to the requirement of the job, and also maintain lathe cutting tools and all its accessories including sharpening, store and maintenance of lathe machine.
		FM206	**Limits, Fits and Tolerances** Equip trainees with the knowledge and skills necessary to identify and demonstrate the applications of limits, fits and tolerances. A trainee is expected to identify, read and calculate limit of fits, tolerance or allowances in an engineering drawing.
		FM207	**Material 2** Equip trainees with the knowledge and skills necessary to identify different processes of heat treatment of alloys and steels. A trainee is expected to identify different processes of heat treatment and demonstrate the correct and safe procedure of conducting heat treatment of steels and alloys.
		FM208	**Milling 1** Equip trainees with the knowledge and skills necessary to prepare and carry out milling according to specification. A trainee is expected to identify milling machine parts, types of milling cutters and demonstrate skills in operating the milling machine in the correct and safe procedures.
		FM209	**Engine Operation** Assist trainees with the knowledge and skills to demonstrate engine operation cycles, engine components and their functions, engine classification and safety.
		FM210	**Trade Calculation 2** Equip the trainees with the knowledge and skills necessary to calculate and solve basic engineering calculations. A trainee is expected to calculate the percentage of wastage of any material, calculation using laws of indices, calculate tolerance of fit and mass of material according to the density.
		FM211	**Trade Drawing 2** Equip trainees with the skills and knowledge necessary to draw and dimension engineering drawings. A trainee is expected to draw and fully dimension a pyramidal-work pieces, half and full sections, internal and external threads, nuts and bolts and third angle projections.
	STAGE 3	**FM300**	**Handling Materials and Equipment** Equip trainees with the knowledge and skills necessary to safely and efficiently handle materials in engineering environment. Trainee is expected to handle different materials safely involving lifting or carrying loads from one area to another manually, or with the aids of mechanical

			devices/equipment.
		FM301	**Machine Components for Loads & Power Transmission** Equip trainees with knowledge and skills necessary to identify machine components for loads and power transmissions, and also trainee is expected to identify and explain types of machine components that carry and support loads, types of stresses that machine components are subjected to under different applications.
		FM302	**Lathe 3** Assist trainees with the knowledge and skills necessary to carry out further turning operations that can be performed on the centre lathe, also trainee is expected to carry out lathe tools preparations and operations including taper turning, eccentric turning, spherical turning, set up machine for thread cutting and cutting multi-start thread (2 starts only).
		FM303	**Welding 2** Assist trainees with the knowledge and skills necessary to carry out pressure or gas metal arc welding, and also is expected to identify safety and types of welding process using GMAW and demonstrate welding in different position to specifications.
		FM304	**Gears and their Application** Assist trainees with the knowledge and skills necessary to identify different types of gear and their applications, and also trainee is expected to identify and explain terminology for spur gears, metric module pitch, diametric pitch, transverse pitch, base pitch and the relationship between these profiles. Demonstrate the applications of toothed gear and explain materials used for producing gears.
		FM305	**Milling 2** Assist trainees with the knowledge and skills necessary to carry out milling operations safely and accurately according to standards or specifications, also trainee is expected to identify and demonstrate planning of task, setting gear cutting using different types of indexing head and carry out milling operation according to the operational plan.
		FM306	**Surface and Cylindrical Grinding** Assist trainees with the knowledge and skills necessary to carry out surface and cylindrical grinding safely and accurately, also trainee is expected to identify types of surface and cylindrical grinding machines, prepare and set up work, operate and carry out grinding safely according to specification.
		FM307	**Pumps** Assist trainees with the knowledge and skills necessary to identify different types of pumps and demonstrate how to service or install pump, also is expected to identify pump in terms of types, chambers, transmission of energy and exchanging of momentum. Demonstrate how to identify faults and remedies, service and install pumps according to standards or specifications.
		FM308	**Hydraulic** Assist trainees with the knowledge and skills necessary to describe and demonstrate the principles of hydraulics, its system and applications, also trainee is expected to identify how hydraulic system works, demonstrate basic service and maintenance of the system.
		FM309	**Electrical Fundamentals** Assist trainees with knowledge and skills necessary to define the voltage, current, resistance, open and short-circuit, describe the difference between a conductor and an insulator, identify and draw the electrical circuit and component symbols.

		FM310	**Trade Calculation 3** Equip trainees with the knowledge and skills necessary to carry out engineering calculation.
		FM311	**Trade Drawing 3** Equip trainees with the knowledge and skills necessary to interpret and carry out engineering drawing to specifications.

FOKOLOLO 'O E HAU MARITIME SCHOOL

The Faculty of Science and Technology has Fokololo e Hau Maritime School (formerly known as the Tonga Maritime Polytechnic Institute) **offers 7 programs** throughout the semester. The program name and program statement are outlined below.

Program Statements

1. **General Practice Rating**

   Program Statement: Prepares young people for a career at sea aboard vessels trading either internationally or in Tongan waters. A fully residential and training program, this takes place in a disciplined environment in anticipation that trainees will develop a strong sense of self-discipline, an essential attribute if the graduates are to pursue a successful career in the maritime industry. Trainees will be introduced to the basic skills required by ratings working in the deck, engine and catering departments aboard ship in order to achieve a better understanding of shipboard life and routines and to maximize employment opportunities.

2. **Able Seafarer Deck and Engine**

   Program Statement: Prepares young people for a career at sea aboard vessels trading either internationally or in Tongan waters. The training takes place in a disciplined environment in anticipation that trainees will develop a strong sense of self-discipline, an essential attribute if the graduates are to pursue a successful career in the maritime industry.

3. **Master Class 4**

   Program Statement: Prepares young people for a career at sea aboard vessels trading or in Tongan waters. The successful candidates can be a Master or Chief Engineer on Vessel less than 500 gross tonnage and they can also be an Officer on vessel 500 gt or more**.** The program is a 23 weeks and training takes place in a disciplined environment in anticipation that trainees will develop a strong sense of self-discipline, an essential attribute if the graduates are to pursue a successful career in the maritime industry. Candidates will be introduced to the basic skills required by watchkeeping working in the bridge deck, engine control room aboard ship in order to achieve a better understanding of shipboard life and routines and to maximize employment opportunities.

4. **Master Class 5**

   Program Statement: Prepares young people for a career at sea aboard vessels trading or in Tongan waters. The successful candidates can be a Master or Chief Engineer on Vessel less tha than 250 gross tonnage and they can also be a Officer on vessel 250 gt or more. The program is a 20 weeks and training takes place in a disciplined environment in anticipation that trainees will develop a strong sense of self-discipline, an essential attribute if the graduates are to pursue a successful career in the maritime industry. Trainees will be introduced to the basic skills required by ratings working in the deck, engine and catering departments aboard ship in order to achieve a better understanding of shipboard life and routines and to maximize employment opportunities.

5. **Master Class 6**

   Program Statement: Prepares young people for a career at sea aboard vessels trading either internationally or in Tongan waters. The program is fully residential and training takes place in a disciplined environment in anticipation that trainees will develop a strong sense of self-discipline, an essential attribute if the graduates are to pursue a successful career in the maritime industry. Trainees will be introduced to the basic skills required by ratings working in the deck, engine and catering departments aboard ship in order to achieve a better understanding of shipboard life and routines and to maximize employment opportunities.

6. **Dangerous Cargo**

   Program Statement: Prepares students for any emergency like fire or survival technique arises while at sea. Trainees will be introduced to the basic skills required by SOLAS while working onboard vessel.

7. **Basic Safety of Life at Sea**

   Program Statement: Prepares young people for a career at sea aboard vessels trading either internationally or in Tongan waters. This program prepares students for any emergency like Fire or survival technique arises while at sea. Trainees will be introduced to the basic skills required by SOLAS while working onboard vessel.

Programs and Course Topics

Program Name	Topics
General Practice Rating	a) Basic & Vocational English for Seafarers b) Literacy, Numeracy and Communication c) Health & Hygiene d) Personal Survival Techniques e) Fire Fighting Techniques f) First Aid g) Occupational Health & Safety h) Shipboard Operations & Maintenance i) Deck, Engine-room & Shipboard Catering Practices j) Deck & Engine-room Watch-keeping Practices k) Ship Security Familiarisation & Awareness l) Tanker Familiaristion – oil, chemical and LPG m) Crowd Management & Control
Able Seafarer Deck and Engine	a) Contribute to a safe navigational watch b) Contribute to berthing, anchoring and other mooring operations c) Contribute to the handling of cargo and stores d) Contribute to the safe operation of deck equipment and machinery e) Apply occupational health and safety precautions f) Apply precautions and contribute to the prevention of pollution of the marine environment g) Contribute to shipboard maintenance and repair h) Personal Survival Techniques i) Fire Fighting Techniques j) First Aid k) Occupational Health & Safety l) Shipboard Operations & Maintenance m) Ship Security Familiarization & Awareness n) Watchkeeping Duties o) Machinery Operation p) Marine Diesel Engine

	q) Propulsion System r) Steam Boiler and Turbine s) Hydraulic and steering Gear t) Compressed Air System u) Fuel Oil Transfer Operation v) Pumping System
Master Class 6	a) Basic & Vocational English for Seafarers b) Literacy, Numeracy and Communication c) Health & Hygiene d) Personal Survival Techniques e) Fire Fighting Techniques f) First Aid g) Occupational Health & Safety h) Shipboard Operations & Maintenance i) Deck, Engine-room & Shipboard Catering Practices j) Deck & Engine-room Watch-keeping Practices k) Ship Security Familiarisation & Awareness l) Tanker Familiaristion – oil, chemical and LPG m) Crowd Management & Control
Master Class 5	a) Basic Radar b) Vessel construction and Machinery c) Nautical Knowledge d) Personal Survival Techniques e) Fire Fighting Techniques f) First Aid g) Occupational Health & Safety h) Shipboard Operations & Maintenance i) Navigation Aids j) Navigation and Position Determination k) Small vessel Stability l) Security Awareness
Master Class 4	a) Instrumentation and Navigation Aids b) Basic Radar c) Vessel construction and Machinery Revised d) Nautical Knowledge e) Visual Communication Revised f) Personal Survival Techniques g) Advance Fire Fighting Techniques h) Cargo Operation i) Shipboard Operations & Maintenance j) Navigation Aids k) Navigation and Position Determination l) Small vessel Stability m) Security Awareness
Dangerous Cargo	a) International and local regulations governing the carriage of dangerous, hazardous, and harmful cargoes are outlined. b) Documentation and procedures required to load and unload dangerous cargoes are described. c) Classification of dangerous goods in accordance with the IMDG Code is explained. d) Ability to identify the hazards associated with a particular cargo with reference to it's markings/labels is demonstrated.

	e) Ability to plan the stowage of dangerous goods, including segregation requirements, in accordance with the IMDG Code and National Regulations is demonstrated. f) Ability to extract and interpret information from EmS and MFAG is demonstrated.
Basic Safety of Life at Sea	a) Personal Survival Techniques b) Fire Fighting Techniques c) First Aid d) Occupational Health & Safety

Entry Requirements

For General Practice Rating

Minimum Age: 16 years

Medical Standard: Acceptable Seafarer's Medical Certificate.

Minimum Education: Satisfactory completion at Form 5 level with the ability to communicate well in both written and spoken English.

Identification:Ability to obtain a Seafarer's Identification & Service Record Book

For Able Seafarer Deck and Engine

Minimum Age: 18 years and one year of sea service from GPR or Basic Safety

Medical Standard: Acceptable Seafarer's Medical Certificate.

Minimum Education: Satisfactory completion at Form 5 level with the ability to communicate well in both written and spoken English.

Identification: Ability to obtain a Seafarer's Identification & Service Record Book

For Master Class 6

Minimum Age: 16 years

Medical Standard: Acceptable Seafarer's Medical Certificate.

Minimum Education: Satisfactory completion at Form 5 level with the ability to communicate well in both written and spoken English.

Identification: Ability to obtain a Seafarer's Identification & Service Record Book

For Master Class 5

Minimum Age: 18 years and must have one year of sea service from Abel Seafarer

Medical Standard: Acceptable Seafarer's Medical Certificate.

Minimum Education: Satisfactory completion at Form 5 level with the ability to communicate well in both written and spoken English.

Identification: Ability to obtain a Seafarer's Identification & Service Record Book

Applicants for the Master Class 5 Program will be subject to a stringent interview process to assist in the assessment of suitability and potential for a successful seagoing career.

For Master Class 4

Minimum Age: 18 years and must have one year of sea service from Master Class 5

Medical Standard: Acceptable Seafarer's Medical Certificate.

Minimum Education: Satisfactory completion of Master Class 5 with the ability to communicate well in both written and spoken English.

Identification: Ability to obtain a Seafarer's Identification & Service Record Book

For Dangerous Cargo

Minimum Age: 18 years with a valid Basic Safety of Life at Sea Certificate
Medical Standard: Acceptable Seafarer's Medical Certificate.
Minimum Education: Satisfactory completion at Form 5 level with the ability to communicate well in both written and spoken English.
Identification: Ability to obtain a Seafarer's Identification & Service Record Book approx over 2 weeks.

For Basic Safety of Life At Sea

Minimum Age: 16 years
Medical Standard: Acceptable Seafarer's Medical Certificate.
Minimum Education: Satisfactory completion at Form 5 level with the ability to communicate well in both written and spoken English.
Identification: Ability to obtain a Seafarer's Identification & Service Record Book

2023 Calendar for Fokololo-Oe-Hau Maritime School

Certificate In Technical And Vocational Skills (Citvs) Program And Sst Franchise Program (Tfp): Schools In Tongatapu, Vava'u, Ha'apai & 'Eua

WK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV
1	2nd – 6th CALL TO PRAYER	30th – 3rd THSM & BBM Confirmed	27th – 3rd WK 3 Tt: MD HP: MD	3rd – 7th Eua: MOD 1 Vv: MOD 1	1st – 5th WK 4	29th – 2nd Eua: MOD2 Vv: MOD 2	3rd – 7th WK 5	31st – 4th WK 1 Round 4 begins HP: MOD3 Tt: MOD 3	4th – 8th WK 6	3rd – 7th	30th – 3rd 2024 Calendar Draft
2	9th – 13th FSST PLANNING	6th – 10th SECONDARY SCHOOL START Tt, Eua, Vv, HpVerification THSM & BBM schedules	6th – 10th WK 4 Vv: MD EUA: MD	10th – 14th WK 1 Round 2 begin HP: MOD1 Tt: MOD1	8th – 12th WK 5	5th – 9th WK 1 Round 3 Begins HP:MOD2 Tt: MOD2	10th – 14th WK 6	7th – 11th WK 2	11th – 15th WK 7 Round 4 Ends	9th – 13th Results of MOD Prepare Graduation Lists & Certificate	6th – 10th Documentation
3	16th – 20th	13th – 17th WK 1 Round 1 begins	13th – 17th WK 5 Schools Final Enrolment	17th – 21st WK 2	15th – 19th WK 6	12th – 16th WK 2	17th – 21st WK 7 Round 3 Ends	14th – 18th WK 3	18th – 22nd Eua: MOD4 Vv: MOD4	16th – 20th Continue Prepare Graduation Certificate	13th – 17th Documentation & Calendar Final 2024
4	23rd – 27th SECONDARY SCHOOL PLANNING	20th – 24th WK 2	20th – 24th WK 6 Programs Final Enrollment	24th – 28th WK 3	22nd – 26th WK 7 Round 2 Ends	19th – 23th WK 3	24th – 28th Eua: MOD3 Vv: MOD3	21st – 25th WK 4	26th – 30th HP:MOD4 Tt: MOD4	23rd – 27th Final Lists Certificates	20th – 24th
5			27th – 31st WK 7 Round 1 Ends			26th – 30th WK 4		28th – 1st WK 5			Merry Christmas

KEY: THSM – Tertiary High School Model **BBM** – Big Brother Model **PMD** – Pre – Moderation **MD** – Monitoring Development **MOD** – Moderation **Tt –** Tongatapu **Vv** – Vava'u **Hp** – Ha'apai

2023 Calendar for School of Science and Technology

Wk	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
1	2nd – 6th CALL to PRAYER Planning	30th – 3rd Enrolmt Training Program Orientat n SD	27th – 3rd WK4 Course Fees: Due SD	3rd – 7th WK9 WPV & MT	1st – 5th WK 13 WPV & MT SD	29th – 2nd WK1 Level 3 Begins SD, AC – 2	3rd – 7th WK6 WPV & MT	31st – 4th WK10 WPV & MT SD	4th – 8th WK1 Level 4 Begins AC – 3	2nd – 6th WK5 WPV & MT SD	30th – 3rd WK9 GD WPV & MT SD	27th – 1st WK13 Graduation SD
2	9TH –13TH Planning	6th – 10th WK1 Level 2 A & B Begins	6th – 10th WK 5 WPV & MT	10th – 14th WK10 WPV & MT	8th – 12th WK14 Level 2 A Ends MOD 2A	5th – 9th WK2 WPV & MT Level 3 Final List	10th – 14th WK7 PM3	7th – 11th WK 11 WPV & MT	11th – 15th WK2 WPV & MT Level 4 Final List	9th – 13th WK6 GD WPV & MT	6th – 10th WK10 GD WPV & MT	4th – 8th WK14 Level 4 Ends MOD 4
3	16TH – 20th Verificatn	13th – 17th WK2 Level 2 Final List	13th – 17th WK6 WPV & MT	17th – 21st WK 11 WPV & MT	15th – 19th WK15 WPV & MT	12th – 16th WK3 WPV & MT	17th – 21st WK8 WPV & MT	14th – 18th WK12 WPV & MT	18th- 22nd WK3 WPV & MT	16th – 20th WK7 GD PM4	13th – 17h WK11 GD WPV &MT	11th - 15th Documenta tion SD
4	23rd –27th Verificatn AC – 1	20th -24th WK 3 WPV & MT	20th -24th WK7 PM2	24th –28th WK 12 WPV & MT	22nd – 26th WK16 Level 2B Ends MOD 2B Level 3 Enrolmt	19th – 23rd WK4 Course Fees: Due WPV & MT	24th –28th WK9 WPV & MT	21st –25th WK13 WPV & MT SD	25th -29th WK4 Course Fees: Due WPV & MT	23rd -27th WK8 GD WPV & MT	20th –24th WK12 GD WPV & MT	18th- 22nd Merry Christmas
5			27th –31st WK8 WPV & MT SD			26th – 30th WK5 WPV & MT SD		28th – 1st WK14 Level 3 Ends MOD 3 Level 4 Enrolmt				

KEY: **WPV** – Work Place Visit **SD** – Staff Development **PM** – Pre – Moderation **MOD** – Moderation **MT** – Monitor Training **GD** – Graduation Deve **AC** – Academic Committee **Vv** – Vava'u **Hp** – Ha'apai

FACULTY OF BUSINESS AND PUBLIC ADMINISTRATION

The Faculty of Business and Public Administration includes the following Schools;

1. The School of Accountancy
2. The School of Tourism and Hospitality
3. The School of Law Enforcement and Security (Tonga Police College)

SCHOOL OF ACCOUNTANCY

The School of Accountancy delivers two programs, namely Certificate in Accounting Level 4 and a Diploma in Accounting Level 5.

Program Statements

1. Certificate in Accounting Level 4

Program Statement: This 12 months program of study provides the vocational education and training necessary for school leavers, civil servants and private sector employees to become efficient and effective in the office environment whether in the civil service or in the private sector. It also contributes to a student's repertoire of basic employable office skills needed by employers in the job market. Graduates are ideal candidates for positions such as junior clerk, accounting officer, or any position that provides clerical and bookkeeping functions.

2. Diploma in Accounting Level 5

Program Statement: This 2-year program builds upon the Certificate program and provides a sound educational base to facilitate the successful completion of university level studies. This also satisfies the basic requirements for entry into the Tonga Society of Accountants. Graduates are capable of performing the tasks of an accounting officer, assistant accountant, internal auditor, cost accountant and accountant in a managerial role. These are highly sought after skills in the growing expansion of the private sector businesses.

Entry Requirements

Applicants must provide evidence of the following:

(a) Pacific Senior Secondary Certificate (PSSC)/Tonga Form 6 Certificate (TFSC) with a total of 14 or less in 4 subjects and with a minimum of 4 in English, and 3 in Mathematics, for entry into the first year of the Certificate programme.
(b) South Pacific Form 7 Certificate (SPFSC) pass (B average or better)/Tonga National Form 7 Certificate (TNFSC) or successful completion of the USP Foundation Course (7 Courses). Applicants who meet these criteria may be granted entry into the first year of the Certificate programme.
(c) Applicants working in a field (not less than 5 years) relevant to their chosen programme may be granted entry into the first year of the Certificate or Diploma programme pending their assessment on appropriate activities pertaining to their chosen programme.
(d) Applicants with a Diploma in Education (Secondary) from the TIOE majoring in Accounting may be granted entry into the first year of the Diploma in the Accounting programme
(e) Applicants with passes in relevant courses from the University of the South Pacific (USP) or similar institutions may be granted cross crediting points. Entry level will depend on results of cross crediting.

Programs, Courses and Course Descriptions

Program Name	Semester	Code	Course Name and Description
Certificate in Accounting – Level 4	1	AC010	**Business Entrepreneur** Develops the understanding of Entrepreneurship/Managing your Business to acquire competence in the exercise of the occupation and to carry out the functions, tasks and activities of the occupation at the level required for entry into the job market. Integrates an understanding of the specific context of the selected occupation; and provide for job mobility by helping acquire career-management skills.
		AC011	**Business Communication Skills** Develops writing, reading, listening, speaking, researching, and critical thinking. The topics are designed to provide skills to assist those in the workplace with their assigned tasks and also for those who continue with further studies, they should be able to cope with writing good essays, plan and carry out good researches on projects and assignments, and be able to write good reports and make good presentations.
		AC013	**Accounting Principles 1** A compulsory course for all students focuses on both trading and service businesses and it covers the accounting cycle from source documents to final reports; and analysis and interpretation. It also provide the student with the knowledge of accounting concepts and conventions. It will also cover the basic structure of accounting Systems of Cash, Payroll and EDP systems.
		AC014	**Business Environment** Introduces the world of work and developing their knowledge and skills to cope and maintain a healthy environment at work. The course covers knowledge of workplace documents such as the Duty Statements and their purpose, the reciprocal nature, rights and responsibilities of employers and employees, and the importance of their cooperation in the workplace. It also covers the function, organisational structure, goals and objectives of both public and private organisations. It covers principles and implementation of equal opportunity and anti-discrimination as they apply to the workplace, and the ongoing changes that can occur in the workplace.
		AC012	**Thinking and Learning Skills** Introduces creativity and imagining, problem solving, knowledge, critical thinking, accessing and analyzing information, Agility and Adaptability, Handling critics, innovation and exploration and learner autonomy. Through critical analysis of research on higher education as well as reflection upon one's own teaching experience, participants will engage in their own professional development. This course is also designed for individuals with all level of teaching experience who wish to further develop their teaching skills and continue on their studies locally and abroad. While each seminar has its own focus relating to a pertinent topic in higher education, these topics combined form the basis of effective teaching skills recognized as being critical for teaching in lower and higher education.
	2	AC022	**Computerized Accounting** Introduces and uses an integrated computerized software called Elite Two (Version 04) to establish and update the general ledger. It will also introduce and use MYOB (Version 12) an integrated software package to establish and update the account receivable, account payable, and stock ledgers. The MYOB fixed asset register package will also handle all aspects of accounting for fixed assets on computer. The MYOB Payroll

			Management software will also be used to show the features of a computerized payroll package producing accounting data and reports.
		AC023	**Accounting Principles 2** Focuses on both trading and service businesses and it covers the accounting knowledge and skills for subsystem other than cash, their basic structure, processes and the internal controls that are applied to them as well as the role of the internal and external auditor. It looks at various subsystems such as sales, accounts receivable, purchase, accounts payable, non-current assets, and stock. Then it will cover internal and external audit issues including ethics, operational reviews and non-profit organisations. In the section of inventories, physical and perpetual systems are covered along with retail inventory and disclosure requirements according to the accounting standards.
		AC025	**Financial Accounting Applications** Designs to cover analysis and interpretation of financial data for management decision-making purposes. It looks at alternative accounting systems adopted by non-profit organisations and businesses that do not maintain double entry records. It also covers accounting for partnerships which includes manner of formation, introduction of a new partner, partnership profit & loss and appropriation, operation and partnership dissolution in contrasted with joint ventures. It looks also into accounting for primary producers (grazing enterprises & agricultural enterprises), consignments, leases and investment registers. Accounting for consignments (books of the consignee and the consignor) at an introductory level. Accounting for leases covers the treatment of both operation and financing leases from the point of view of the lessee, and also disclosure requirements of leases of a company. Investment registers examines the preparation of an investment register where a company has invested in another business.
		AC026	**Business Mathematics** Provides students with the skills (or refreshing of existing skills) in calculation and solving of common commercial problems involving percentages, profit & loss, and taxation, calculating of simple and compound interest, present and future value annuities using both formulas and financial tables. It will also look into plotting and drawing of graphs for costs and income which will be useful for business decision making.
Diploma in Accounting – Level 5	**1**	**AC112**	**Working and Social Skills** Develops students' working and social skills in the market. It will help enhance the working and social skills of students so that they could practice them in the various work places that they take up whether locally or internationally.
		AC113	**Financial Management Principles** Provides students with the knowledge and skills of financial and operating budgets and their design. It looks at the budget schedules for a range of organisations and how to prepare flexible budget for service, trading and manufacturing operation and how to prepare performance report. It will also cover financial management, sources of finance, how working capital can improve operations, the financial ratio analysis and its importance or making relevant decision such as allocation of funds to longer-term, or capital, investments through capital budgeting. It will go on to financial planning and controlling where the financial manager must advise on the financial activities that enables the business to achieve its goals and must be able to monitor the results of these financial activities and take appropriate action.

		AC117	**Business Law** Develops understanding of the basic Legal Systems and legal framework which are most commonly encountered by people working in a business environment in Tonga and Pacific regions. It includes nature of law, Institutions formulating and enforcing the law, applications of civil law, legal requirements and implications of starting a business and managing of financial transactions, Concept of Principal and Agency law, Contract Law, and consumer law. The purpose, administration, procedures and consequences of bankruptcy law is discussed. The trustee's power to avoid antecedent transactions is analysed. Bankruptcy is contrasted with alternative procedures and a list of advantages and disadvantages of bankruptcy from the perspective of creditors and debtors is discussed.
		AC118	**Management Accounting Principles** Covers costing procedures in a range of enterprises, including costs of materials, labour and overhead as well as manufacturing statements, responsibility accounting, direct costing and cost-volume profit analysis.
		AC119	**Economics for Business** Develops understanding of how economics affects business on both short and long term basis. It also shows the supply and demand theory for goods and services which is relevant to business because of an understanding of how supply and demand interact and what their determinants are, this information can be used in pricing decision. Elasticity of demand and supply further develops this. This will also focus on macroeconomics concepts such as unemployment, inflation, economic growth and the money supply and how these concepts affect business
	2	**AC122**	**Advance Accounting Spreadsheet** Introduces students to Microsoft Excel and learning to design, construct, and manipulate a spreadsheet to enter data and use formulas to perform calculations on spreadsheet automatically. The students will also learn about the feature of a well-designed spreadsheet and some advanced spreadsheet techniques, and how to import and export data. It also shows how to print various types of graphs and prepare professional looking report.
		AC125	**Company Accounting** Covers various types of company, the legal requirements for formation of company and the conversion of sole trader and partnership to company. It will also concentrate on how to prepare Accounting reports of a company – final accounts, cash flow, and consolidated accounts.
		AC127	**Taxation Law** Designs and implements a tax system which would estimate, collect and safeguard the public money and penalize those who evade payment of taxes. It will concentrates on different taxes applied and the law in relation to those types of taxes.. It includes Pay As You Earn (PAYE) system and the employment declaration showing what happen if an employee does not quote their tax file number on employment declaration form and the employee responsibilities upon receipt of such a form.
		AC128	**Management Accounting Application** Focuses on exploring different costing systems used by industries for various applications. It demonstrates the application of job cost systems for these industries that manufacture products and provide services and also the application of activity based costing for industries that manufacture products or provide services. It also evaluate form factory management techniques namely economic order quantity, recorder point and safety

			stock; just in time purchasing and production; materials requirement planning and quality control.

2023 Academic Calendar - School Of Accountancy

January 4 Wednesday	Work **BEGINS**
January 11 Wednesday	**Advertisement for new applications and returning students**
January 12 Thursday	**REGISTRATION** for returning students BEGINS
January 17 Tuesday	**Advertisement for NEW APPLICATIONS**
January 20 Monday	**TNU Launch**
January 25 Wednesday	Deadline for registration of returning students
January 27 Friday	TNU Open Day
February 1 Wednesday	Deadline for New Applications
February 2 Thursday	**INTERVIEW** of new students
February 3 Friday	**INTERVIEW** of new students continues
February 6 Monday	Submit students' list for Approval
February 7 Tuesday	Announcement of students' list for Accounting Programmes
February 7 Tuesday	New Students Registration BEGINS
February 8 Wednesday	Contract sign for Lecturers and INDUCTION
February 9 Thursday	Orientation and Assembly with the HOD and AHOS **END of REGISTRATION** for New students
February 13 Monday	**SEMESTER 1 BEGINS**
March 10 Friday	Deadline for Semester 1Tuition Fees Deadline for Withdrawal
April 7 Friday	**Good Friday (Holiday)**
April 10 Monday	**Easter Monday (Holiday)**
April 11 Tuesday	**Semester 1 Mid-Semester break begins (1 week)**
April 14 Tuesday	**Semester 1 Mid-Semester break ENDS**
April 17 Monday	Lectures Resume for the Second Half of the First Semester
April 25 Tuesday	**ANZAC Day (Holiday)**
May 12 Friday	**Final Exam paper due**
June 2 Friday	Lectures End for the Accounting
June 5 Friday	**Emancipation Day (Holiday)**
June 6 Tuesday	**Study Week for the Accounting and Media Programmes Begin (1 week)**
June 9 Friday	**End of Study Week for Accounting Programmes**
June 12 Monday	**Accounting Programmes' Final Examinations Begins**
June 23 Friday	**Semester 1 Final Examination for Accounting ENDS** **SEMESTER 1 ENDS**
June 26 Monday	**SEMESTER 1 BREAK BEGINS (3 weeks)**
June 30 Friday	Deadline for Tutors Marks
July 3 Monday	Exam Committee Meeting
July 4 Sunday	**KING'S BIRTHDAY PUBLIIC HOLIDAY**
July 10 Monday	Distribution of Students Report for Semester Registration for Semester 2 Begins
July 14 Friday	Contract signs for Lecturers and INDUCTION Registration for Semester 2 ENDS & Semester 1 Break ENDS
July 17 Monday	**SEMESTER 2 COMMENCES**
August 11 Friday	Deadline for Tuition Fees Deadline for Withdrawal
September 11 Monday	**Semester 2 Mid-Semester Break Begins (1 week)**
September 15 Friday	**Mid Semester Break Ends**

September 17 Sunday	**Crown Prince's Birthday (Holiday)**
September 18 Monday	**Lectures Resume for the Second Half of the second semester**
October 13 Friday	**Due date for Final Exam Paper**
November 3 Friday	Lectures End for the Accounting Programmes
November 6 Monday	**Tonga National Day (Holiday)**
November 7 Tuesday	**Study Week for the Accounting Programme begin (1 week)**
November 10 Friday	**Study Week Ends for ACCOUNTING Programmes**
November 13 Monday	**FINAL EXAMINATIONS BEGINS**
November 22 Friday	**Semester 2 Final Examinations ENDS**
November 24 Friday	Deadline for Lecturers Marks
November 27 Monday	Examination Committee's Meeting
December 28 Wednesday	Examination Committee's Meeting
December 4 Monday	**King Tupou I Day (Holiday)**
December 13 Tuesday	**Graduation Rehearsal**
December 14 Wednesday	**Graduation Ceremony**

SCHOOL OF TOURISM AND HOSPITALITY

The School of Tourism and Hospitality offers 9 programs: 4 Diplomas, 2 Certificates and 3 TNQAB National Certificates. The program statements give an indication of the contents of each program.

Program Statements

1. Diploma in Tourism and Hospitality Level 5

Program Statement: Every candidate's programme of Study for the Level 5 diploma shall comprise seven units – and include 6 compulsory units and one elective Tourism Management unit.

2. Diploma in Business Level 5

Program Statement: Every candidate's programme of study for the level 5 diploma shall comprise seven units, including four compulsory units.

3. Diploma in Hospitality Operations Level 5

Program Statement: Aims to provide a thorough understanding and application of the characteristics of the hospitality industry and introduces the student to the many sectors which form part of it. ***This*** includes the hotel sector, food and beverage operations, accommodation management, managed services, gaming and other attractions. The course introduces the concepts of sustainability and how these may be applied to each sector of the industry.

4. Diploma in Information Technology Level 5

Program Statement: Every candidate's programme od study for the level 5 diploma shall comprise eight compulsory units [six at level 5 and two units in level 6 Comp 617 and comp 602]

5. National Certificate in Front Office- Level 4

Program Statement: Designs for front office executives, front office officers, receptionists, front office managers, and other relevant staff who work at an organization's front office to enhance customer satisfaction ***and*** experience. The holder of this qualification will be able to supervise services at the front line and confidently demonstrate knowledge in yield management, workplace health and safety requirements as well as, maintenance of interactions between front line staff and customers.

6. National Certificate in Customer Service Level 3

Program Statement: Designs for guest relations officers, customer service representatives, receptionists, customer service managers, and other relevant staff who work in the customer service environment to enhance customer satisfaction and experience. Customer service, one of the key areas with significant skills gap identified in a recent case study 1 in Tonga. The success or failure of our tourism and hospitality businesses and destinations depends on service. The realization of "a more progressive Tonga supporting a higher quality of life for all" 2, also begins with enhanced customer satisfaction through effective customer service in all Tongan businesses, offices, departments and ministries.

7. National Certificate in Tour Guiding - Level 3

Program Statement: Designs for both land and marine tour guides, and for people who are interested in becoming tour guides, to help prepare and deliver guided tours and interpretation of the unique Tongan culture and the physical environment to enhance the overall visitor experience and contribute to business sustainability. Tourism is a rapidly developing industry in Tonga 123, with a growing number of tourists visiting the friendly isles annually. Further, Tonga's tourism industry also ***relies*** heavily on visitors being highly satisfied from their experiences whereby tour guides play a key role with providing information and direction.

8. TNU Certificate in Tourism (Tour Guiding) Level 2

Program Statement: Develops the role of individuals who have a defined and limited range of tourism operational skills and basic industry knowledge. They are involved in mainly routine and repetitive tasks and work under direct supervision.Designs for the people of Tonga who are interested to work in many tourism and travel industry sectors and for a diverse range of employers including travel agencies, tour wholesalers, tour operators, accommodation and resorts, ***attractions*** and heritage sites, and in many tourism industry sectors. Work could be undertaken in an office environment where the planning of tourism and travel products and services takes place, in the field where products are delivered and providing customer service or at a commercial environment where tour guiding activities is taking place or a combination of these.

9. TNU Certificate in Tourism - Level 1

Program Statement: Develops the role of individuals who participated in a range of routine and predictable tourism work activities. They work under close supervision and are given clear directions to complete tasks. Designs for the people of Tonga who are interested in a range of job roles in the tourism industry in organisation with a Tongan focus. These includes travel and aviation industry, tour operators, accommodation and resorts, operators of a site, cultural event or heritage centre. Individuals may have a specific role in a business or an office environment as a Tongan to share aspects of Tongan culture and local events with visitors in a formal or informal way, and or serve as frontlines in a commercialise environment where customer interaction is taking place or a combination of these.

Entry Requirements

For the Diploma Programs in Tourism and Hospitality

Applicants must provide evidence of the following:

a) Pacific Senior Secondary Certificate (PSSC)/Tonga Form 6 Certificate (TFSC) with a total of 14 or less in 4 subjects and with a minimum of 4 in English, and 3 in
b) Mathematics, for entry into the Diploma in Information Technology Level 5.
c) South Pacific Form 7 Certificate (SPFSC) pass (B average or better)/Tonga National
d) Form 7 Certificate (TNFSC) or successful completion certificate in Tourism & Hospitality Studies.

Applicants who meet these criteria may be granted entry into the first year of the Diploma programme.

a) Applicants working in a field (not less than 5 years) relevant to their chosen programme may be granted entry into the first year of the Certificate or Diploma programme pending their assessment on appropriate activities pertaining to their chosen programme.
b) Applicants with a Diploma in Education (Secondary) from the TIOE taking Information Technology or Tourism Studies as their major may be granted entry into the Diploma in the Tourism Management or Diploma in Information Technology programme
c) Applicants with passes in relevant courses from the University of the South Pacific (USP) or similar institutions may be granted cross crediting points. Entry level will depend on results of cross crediting.

For the Certificate in Tourism and Hospitality Level 1

a) Must be a citizen of Tonga.
b) Completed Certificate in Tourism Level 1 or;
c) Completed Year 11 or Form 5 with 50% in English and Tongan studies with sound local knowledge or;
d) Attempted secondary education with at least two years' work experience in a field related to Tourism and Hospitality

e) Recognition of Prior Learning (RPL) for mature students and current employees who have:
   - Completed secondary education with five or more years of experience in a related field to Tourism and Hospitality.
   - Completed Primary education with at least fifteen years of experience in a related field plus a strong interest to pursue Tourism studies.

The RPL process considers relevant skills, knowledge and experience gained through a combination of:
   - Work experience (paid job)
   - Life experience (non-paid job/ community involvement)
   - Previous informal and/ or formal training

f) Students must provide evidence of their skills, experience, and /or studies.
g) Must be age 17 by the beginning of the semester or older.
h) Eligible candidates from diverse backgrounds include persons living with a disability.

For the Certificate in Tourism (Customer Service) Level 2 & Certificate in Tourism (Tour Guiding) Level 2

a) Completed Certificate in Tourism Level 1
b) Completed Year 11 or Form 5 with 50% in English and Tongan studies with sound local knowledge.
c) Attempted secondary education with at least two years of work experience in a field related to Tourism and Hospitality.
d) Recognition of Prior Learning (RPL) for mature students and current employees who have:
   - Completed secondary education with at least five years of experience in a related field to Tourism and Hospitality.
   - Completed Primary education with at least fifteen years of experience in a related field plus a strong interest to pursue Tourism studies.

   The RPL process considers all relevant skills, knowledge, and experience developed through a combination of:
   - Work experience (paid job)
   - Life experience (non-paid job/ community involvement)
   - Previous informal and/ or formal training.

e) Students must provide evidence of their skills, experience, and/or studies.
f) Must be age 17 by the beginning of the semester or older.
g) Eligible candidates from diverse backgrounds include persons living with a disability.

Programs, Courses and Course Descriptions

Program Name	Semester	Code	Course Name and Description
Diploma in Tourism Management - Level 5	**1**	**ST1508**	**Principles of Tourism** Introduces the fundamentals and basic processes within the international tourism industry its meaning development components and dynamics. Students will have an opportunity to develop an understanding of tourism consumer behavior, tourism activities. Examines the regulatory framework of the tourism industry.
		ST1507	**English Study Writing** Students have the opportunity to develop skills in academic reading and writing. Equips students with the appropriate knowledge and Skills required for types of academic writing they will encounter in degree levels courses.
	2	**ST1501**	**Accounting Principles**

			Introduces students to the fundamental aspects of financial accounting and deals with presentation and interpretation of financial information within the context of making business decisions
		ST1503	**Marketing Principles** Introduces basic marketing principles and concepts to students. The students will have the opportunities to apply this understanding arising in their marketing careers. Provides the underpinning understanding for further development of and practice in the areas of both domestic and international marketing.
		ST1509	**Tourism in Pacific Island States** Explores the introduction of tourism and its development role in the Pacific tourism operating environment. A number of Pacific Island case studies are employed to assist students in evaluating how to deliver a high-quality visitor experience.
	3	**ST1502**	**Management Principles** Explores the four functions of management, their theory and practical implementation within an organization. Examines analytical techniques and contemporary events required for practical applications in assessment and workplace attachment.
		ST1506	**Business Economics for Tourism Industry** Introduces the fundamental principles of economics. Designs to provide opportunities for the students to apply the role of economics in business decision making as well as the role it plays in everyday life and government policy making. Apply relevant examples to economic models.
Program Name	**Semester**	**Code**	**Course Name and Description**
Diploma in Business - Level 5	**1**	**ST1507**	**English Study Writing** Develops skills in academic reading and writing. Equips students with the appropriate knowledge and Skills required for types of academic writing they will encounter in degree levels courses.
		ST1504	**Business Communication** Provides a theoretical framework and particular experience as a basis for improving communication skills in the business environment. The students will have the opportunities to demonstrate this theoretical framework in verbal assessment and workplace Attachment.
	2	**ST1501**	**Accounting Principles** Introduces students to the fundamental aspects of financial accounting and deals with presentation and interpretation of financial information within the context of making business decisions
		ST1503	**Marketing Principles** Introduces basic marketing principles and concepts to apply this understanding arising in their marketing careers. Provides the underpinning understanding for further development of and practice in the areas of both domestic and international marketing.
		ST1505	**Information Technology Concepts** Introduces students to how global businesses use current and emerging information technologies to manage their daily operations. Placing information technology in the context of business. The students have the opportunity to grasp the concepts presents in the lectures.
	3	**ST1502**	**Management Principles**

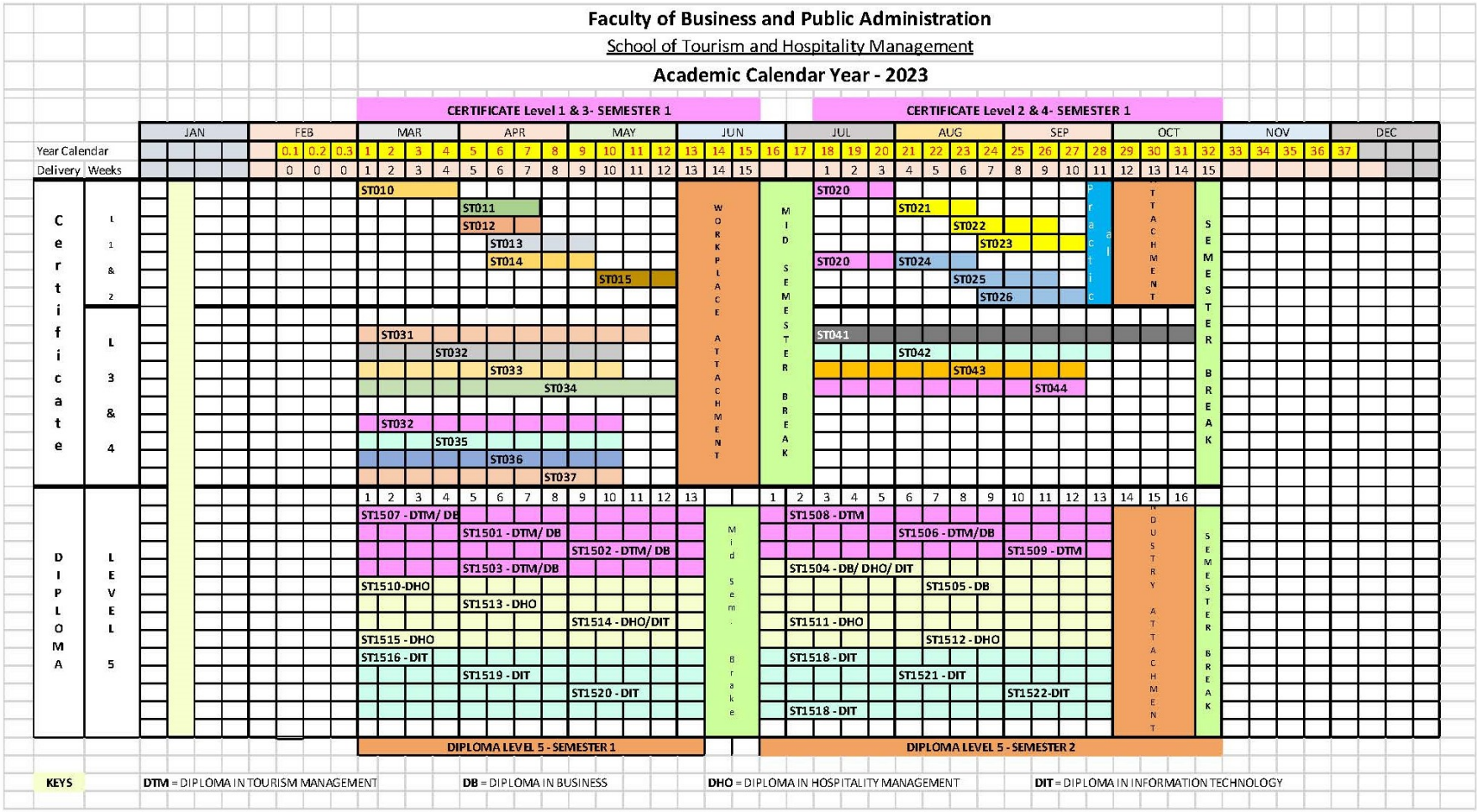
			Explores the four functions of management, their theory and practical implementation within an organization. Examines analytical techniques and contemporary events required for practical applications in assessment and workplace attachment.
		ST1506	**Business Economics for Tourism Industry** Introduces the fundamental principles of economics. Designs to provide opportunities for the students to apply the role of economics in business decision making as well as the role it plays in everyday life and government policy making. Apply relevant examples to economic models.
Program Name	**Semester**	**Code**	**Course Name and Description**
Diploma in Hospitality Operation - Level 5	**1**	**ST1504**	**Business Communication** Designs to provide a theoretical framework and practical experience as a basis for improving communication skills in the business environment.
		ST1510	**Principles of Hospitality Management** Introduces students to the hospitality industry, both globally and within New Zealand. The course provides a thorough understanding of the characteristics of the hospitality industry and introduces the student to the many sectors which form part of it. This includes the hotel sector, food and beverage operations, accommodation management, managed services, gaming and other attractions. The course introduces the concepts of sustainability and how these may be applied to each sector of the industry.
	2	**ST1513**	**Accounting and finance for Hospitality Industry** Examines selected issues in financial reporting and accounting from both theoretical and practical application perspectives, including current developments in financial reporting in New Zealand and overseas.
		ST1511	**Food Production Operations** Provides students with an introductory knowledge to Food Production Operations in New Zealand and the Pacific Islands. The course introduces the processes and practices involved in preparation and production of food in a commercial operation. The course will introduce food safety, safe working practices and personal food hygiene. There is an emphasis on menu planning, food costing and budgeting for a variety of food production operations.
		ST1512	**Food and Beverage Service Operations** Provides students with the knowledge and skills required to serve food and beverages within commercial operations. It will focus on understanding components of the meal experience in particular the food and beverage menu, customer service and the expectations of different customers. Learners will develop an understanding of the styles of food served in different types of food and beverage operations and develop skills to design and produce menus.
	3	**ST1514**	**Business Environment** Introduces Business and business Environment to the students enrolled in the IT programming. Introduces the internal and external business organisations, explore all the issues which are critical to understanding the business environment and learn how these impacts on organisations of all types and sizes.
		ST1515	**Tourism and Hospitality Business Information Systems**

			Designs to enable the student to understand the management practices of the front office and its interrelationship with other departments in an accommodation establishment.
		ST1504	**Business Communication** Designs to provide a theoretical framework and particular experience as a basis for improving communication skills in the business environment.
Program Name	**Semester**	**Code**	**Course Name and Description**
Diploma in Information Technology - Level 5	**1**	**ST1505**	**Fundamentals of Information Technology** Develops a basic understanding of computer concepts and the components of information Technology system including system software application software installation and testing software through practical tasks and workplace Attachment. Demonstrate IS Security threats and ways to protect prevent and mitigate potential threats. Lays a solid foundation for further studies in the Bachelor in Information Technology programme.
		ST1520	**Fundamentals of Computer Networking** Introduces students to the concepts of basic networking technology networking monitoring availability and security. Students will have the opportunities to demonstrate the OSI Model the functionalities and protocols involve in each layer through practical tasks.
		ST1517	**Essentials of Mathematics and Statistics** Equips students with application of Mathematical knowledge and skills relevant to their interests and produce a foundation for modules in subsequent years of study. It consists two components a field common to IT and IB. This is an elective course.
	2	**ST1519**	**Fundamentals of Computer Database** Introduces the concepts and fundamental database systems [DB] and database management systems DBMS through [MS SQL] Server. Apply skills with some basic elements of database design and implementation includes data modelling logical and physical database design and structured query language [SQL]
		ST1516	**Fundamentals of Computer Programming** Introduces the fundamental principles of computing logic and the development of problem solving skills using structured programming techniques. Acquire basic competency in the chosen programming language and will apply this language to simple tasks using good programming techniques. Required for problem solving using given tools steps and strategies problem
		ST1514	**Business Environment** Introduces Business and business Environment to the students enrolled in the IT programming. The students have the opportunities to understand today's business environment [national and International at the basic level, the internal and external business organisations, explore all the issues which are critical to understanding the business environment and learn how these impacts on organisations of all types and sizes.

	3	**ST1521**	**Computer System Testing** Applies IT process of internal control governance and risk management. Critically evaluate existing network services and processes. Makes well-informed and justify recommendations for their improvement.
		ST1522	**Requirements Modelling** Develops the fundamental steps to establish requirements by building business analysis skills strategies and techniques. Apply the necessary skills to study information system impacts on an organization with the advanced techniques and processes for eliciting modelling and documenting requirements in context of business and Information system scenarios through assessment and workplace Attachment.
Program Name	**Semester**	**Code**	**Course Name and Description**
National Certificate in Front Office-Level 4	**2 (only)**	**ST041**	**Front Office Operations** Designs for people in a supervisory or junior management role in the front office of an organization. At the end of this unit, students will be able to plan and oversee the services in a front office operation in any organization, commercial or otherwise.
National Certificate in Front Office-Level 4 **National Certificate in Customer Service Level 3**	**2 (only)** **1 (only)**	**ST042**	**Knowledge in Yield Management** Develops and demonstrates knowledge in yield management.
		ST043	**Managing Workplace Security and Health and Safety** Develops a set of competencies for people who hold supervisory or managerial roles in the front office of an organization. At the end of this unit, students will be able to manage and oversee the security and health and safety of an organization (property, workers, and customers).
		ST044	**Monitor and Maintain Interactions** Develops a set of competencies for people working in a service delivery role. At the end of this unit, students will be able to monitor and maintain interactions to ensure service delivery outcomes are met.
		ST031	**Interpersonal communication** Designs for people entering, or employed in, the service sector who wish to build their customer service skills. People credited with this unit standard are able to: describe customer service in both English and Tongan; provide customer service; respond to a customer complaint and be knowledgeable of health and safety requirement.
		ST032	**Tonga as a tourist destination** Develops and demonstrates knowledge of Tonga as a tourist destination and identify and describe Tongan man-made and natural tourism attractions and products.
National Certificate in Customer Service Level 3 **National Certificate in Tour Guiding - Level 3**	**1 (only)** **1 (only)**	**ST033**	**Visitor Statistics in Tourism and Hospitality** Conducts an evaluation of a wide range of statistically based tourism and hospitality reports and apply knowledge to maximise hospitality sales and service opportunities.
		ST034	**Electronic Reservations** Applies and uses computerised reservation system in accordance with customer requirements, and travel industry workplaces policies and procedures. Related documentation is prepared in accordance with customer requirements through assessment in travel industry workplace policies and procedures.
		ST035	**Plan and deliver and guided interpretation**

			Presents a review a prepared interpretation plan in preparation for a tour; plan the delivery of guided interpretation during a tour; prepare visitors for a tour; deliver guided interpretation during a tour; manage a tour in a professional manner; facilitate visitors' use of an attraction, service, and/or facility on a tour; conclude a tour; gather feedback from interpretive activities and use such feedback to review and improve interpretation plan.
National Certificate in Tour Guiding - Level 3 TNU Certificate in Tourism (Customer Service) Level 2	**2**	**ST036**	**Tongan Culture and Heritage** Prepares a guided interpretation applying knowledge of cultural, factual characteristics and attributes relevant to visitors.
		ST037	**Health and safety in tourism and hospitality** Identifies legal responsibilities of tourism and hospitality business operators in relation to health and safety; demonstrate knowledge of critical incident management; carry out health and safety roles and responsibilities in a tourism and hospitality workplace; and select safe routes for clients.
		ST020	**Participate in environmentally sustainable practices** Introduces the concept of sustainable work practices, the principles of sustainability, and its knowledge bases. Learn its application in classroom teaching and practice in a simulated industry environment to support sustainable work practices, measure sustainable work practices, and seek opportunities to improve workplace practices.
		ST021	**Sell products and services** Gains an understanding of the principles of providing quality customer service to sell products and services to retail customers. Determine customer needs, match products and services to their needs, and facilitate a sale. Acquire skills in problem-solving and use communication skills to demonstrate excellence in industry standards. Learn its application in classroom teaching and practice in a simulated industry environment to establish customer needs, and provide advice on products and services. Select and use appropriate techniques to close sales and provide any required after-sales service according to organisational procedures.
		ST022	**Book supplier products and services** Develops students' understanding and know-how to administer customer bookings for products and services. Identify customer booking requirements. Administer all bookings through to finalization. Learn its application in classroom teaching and practice in a simulated industry environment to interpret existing or create new records of customer booking requirements. Select suppliers according to negotiated arrangements to maximize the profitability of the sale. Use the appropriate method to request products and services from suppliers. Update and finalise bookings.
		ST023	**Process reservations** Develops students' understanding and know how to process reservations manually and using reservation electronic software. Learn its application in classroom teaching and practice in a simulated industry environment to receive reservation requests, and process and record details of reservations. Update reservations and advise others of reservation details.
		ST020	**Participate in environmentally sustainable practices** Introduces the concept of sustainable work practices, the principles of sustainability, and its knowledge bases. Learn its application in

			classroom teaching and practice in a simulated industry environment to support sustainable work practices, measure sustainable work practices, and seek opportunities to improve workplace practices.
Program Name	**Semester**	**Code**	**Course Name and Description**
TNU Certificate in Tourism (Tour Guiding) Level 2	**2**	**ST024**	**Access and interpret product information** Accesses product information on tourism, travel, hospitality, or events products to fulfil sales or operational needs. Learn its application in classroom teaching and practice in a simulated industry environment to identify sources of information and to interpret specific details of the products and the ability and knowledge of how to find the needed information, and to interpret information; that is, to understand what you have found and be able to explain it to the client.
		ST025	**Prepare and present tour commentaries** Builds on students' existing knowledge and skills to construct commentaries and/ or activities to deliver to a group using group communication and presentation techniques. Learn its application in classroom teaching and practice in a simulated industry environment to use effective interpretation and presentation techniques to ensure visitor participation and enjoyment in tours or activities. Prepare commentaries or activities for presentation to visitors. Present commentaries or activities to visitors. Interact with visitors.
		ST026	**Lead tour groups** Develops students' understanding of guiding requirements, and specific skills vital in managing group members and managing a tour itinerary, and leading tour groups. Learn its application in classroom teaching and practice in a simulated industry environment, and/or a commercial environment where tour guide activities are conducted to provide students with an understanding of the principles and practices of planning, operating, guiding, and managing a tour.
		ST010	**Participate in work-safe practices** Introduces the concepts, code of ethical principles, and standards to be able to work safely in the workplace. Learn its application in classroom teaching and practice in a simulated industry environment to follow required work safety practices, understand & report workplace hazards and incidents, interpret workplace safety signs, follow safety procedures, and know how to respond to emergency situations, and complete basic reports about hazards according to workplace procedures.
TNU Certificate in Tourism Level 1	**1**	**ST011**	**Show social and cultural sensitivity** Develop students' understanding to be socially aware when serving customers and working effectively with others. Learn its application in classroom teaching and practice in a simulated industry environment to communicate with people from a range of social and cultural groups with respect and sensitivity, and understand workplace anti-discrimination policies. Discuss cross-cultural misunderstandings and difficulties with others at the workplace. Identify possible strategies to resolve them.
		ST012	**Interact with customers** Practices greeting and serving customers, responding to basic service inquiries, and able to handle basic customer problems.

			Learn its application in classroom teaching and practice in a simulated industry environment to Interpret workplace procedure documents, recognise customer problems and resolve issues. Use active listening skills, and ask questions related to determining customer needs. Discuss customer problems with colleagues and supervisors in a professional manner. Recognise delays in customer service and resolve to customer satisfaction.
		ST013	**Source and use information on tourism and travel industry** Demonstrates ability to source and interpret information on the tourism and travel industry. Learn its application in classroom teaching and practice in a simulated industry environment to use online information systems to access tourism and travel industry information. Engages in sourcing and updating current and emerging information. Prepare notes, and summarise record information in basic documents and travel industry practices and products. Research, sort and use tourism and travel industry information.
		ST014	**Provide visitor information** Accesses general information on facilities, products, and services available in the local area and provide information to visitors. Learn its application in classroom teaching and practice in a simulated industry environment to record simple notes and basic information on local facilities, products, and services. Listen and respond to a range of visitor requests, asking questions to clarify and confirm. Review own knowledge of information required to assist visitors and participate in activities that continuously update information.
		ST015	**Provide briefing or scripted commentary** Presents information and/ or commentary to a group of people where oral communication is required. Learn its application in classroom teaching and practice in a simulated industry environment to interpret information scripts. Presents cohesive and audible group presentations. Interact positively with others. Identify and respond to needs to adjust the presentation. Use technology for briefing and commentary. Address safety issues and not exceed the safe number of participants in a given location.

2023 Calendar for School of Tourism and Hospitality