# LAKE TUGGERANONG COLLEGE

# 2024 PROSPECTUS



## LEARN | THRIVE | CONNECT





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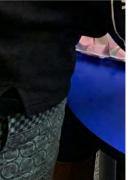
LEARN Thrive Connect



OUR VISION OUR MISSION OUR VALUES OUR PRIORITIES A learning, thriving and connected community equipped to live a meaningful life. Learn, thrive and connect today to meet the challenges of tomorrow.

Learn, Thrive, Connect.

PRIORITY 1: LEARN – Develop critical and creative thinking skills in all students. PRIORITY 2: THRIVE and CONNECT - Increase students' personal and social capability to be active learners.







AT LAKE TUGGERANONG COLLEGE WE BELIEVE IN THE FOLLOWING:

# LEARN THRIVE Connect.

## PRINCIPAL'S WELCOME

Welcome to Lake Tuggeranong College. Welcome to what we believe is an outstanding educational institution. What makes our college an outstanding place to learn? Lake Tuggeranong College has many of the things educational research tells us are required to help equip young people for meaningful, productive and happy lives in the 21st century:

- Teachers who make a difference to the learning and lives of our students. Lake Tuggeranong teachers actively seek to enhance student outcomes. They are experts in their field and are passionate about what and how they teach.
- Future focussed and student-centred curriculum, which builds capability development for life beyond school.
- Broad and flexible pathways for completing the ACT Senior Secondary Certificate. Students can select from over sixty courses, including tertiary, accredited and vocational offerings.
- Every student develops a personalised Graduate Profile and is supported in planning their pathway through college and beyond.
- A safe and connected learning environment constructed around student agency and whole-of-student care. Every student matters and every student can succeed in our care.
- Well-resourced learning environments. The college boasts specialist teaching areas, equipped to enable students to experience realworld learning.
- Beautifully maintained buildings and grounds, helping make students feel proud of where they learn.
- An active student leadership presence, ensuring the voice of students is heard and informs decision-making at the college.

At Lake Tuggeranong College, our aim is to produce graduates who are good at learning and good at life. In line with our values of Learn Thrive Connect, LTC graduates:

**Learn** – through developing the skills and attributes to be a lifelong learner

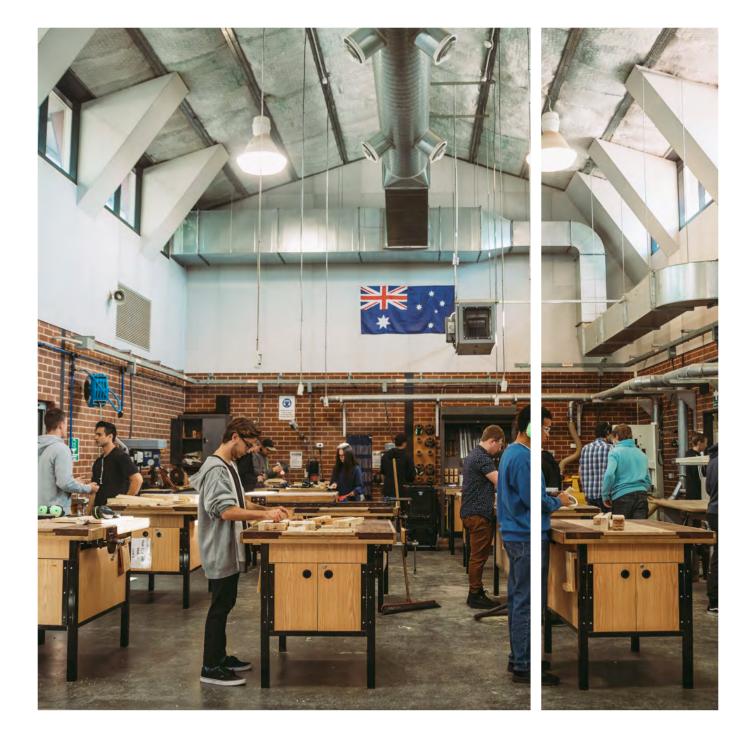
Thrive – through self regulating both learning and wellbeing

**Connect** – through their learning pathway to the world beyond education

I look forward to working with you on the next part of your journey at Lake Tuggeranong College.

David Briggs Principal

WE BELIEVE THAT OUR SUCCESS AS LEARNERS IS INTRINSICALLY LINKED TO OUR SENSE OF WELLBEING AND CONNECTEDNESS.



## **ENROL NOW FOR 2024**

Lake Tuggeranong College invites parents and carers wishing to enrol their young person at LTC for 2024 to visit the LTC website or the ACT Education Directorate website and complete the Online Enrolment Application form.

#### www.ltc.act.edu.au

www.education.act.gov.au/public-school-life/enrolling-in-a-public-school

For more information regarding Priority Enrolment Areas or general enrolment queries, please refer to the websites listed, or call us on (02) 6142 3660.



## HOW TO ENROL/TRANSFER

Applications for enrolment or transfer to Lake Tuggeranong College for 2024 are welcome using the Education Directorate online enrolment/transfer form.

To view the application timeline and enrolment policies, please visit the LTC website or www.education.act.gov.au.

## **CONNECTING WITH LTC**

The college has a dedicated Outreach and Communications team which works closely with the Principal to provide a strategic and an operational approach to the way we connect with our families.

In addition to key events focused on providing families with information and contact time with college staff, we make the most of social media in our communications.

### ONLINE AND DIGITAL COMMUNICATIONS WEB SITE

The public online 'face' of Lake Tuggeranong College can be accessed at www.ltc.act.edu.au – this site comprises broad information about the college with links to important forms including the LTC timetable and semester planners

#### **SOCIAL MEDIA**

Our community can stay in touch with news, updates and success stories as they happen through our social media channels. Search for Lake Tuggeranong College on Facebook or Instagram

#### LIVE BLOG

Instead of a newsletter the college hosts a blog. This provides in-the-now updates and student success stories as they happen. You can find the blog at

www.laketuggeranongcollege.wordpress.com Please follow us to receive notifications and news.

### **EVENTS**

Our Events calendar includes formal activities organised by the college for the purpose of connecting with our families and partners. Events are advertised on our blog and via regular notices to families. Events include:

- Family Meet'n'Greet
- Course Selection Evenings
- Parent-Teacher Evenings (one per semester)
- Enrolment Information Night
- Careers and transition information
- Information on the ACT Scaling Test for students completing an ATAR package
- Success Assemblies (parents invited) throughout the year
- Year 12 Brunch
- College Graduation
- Year 12 Formal
- The Arts Festival
- Drama Productions
- Careers Expo







LTC 2024 Prospectus Wellbeing At LTC

## COLLEGE LIFE — "CONNECTED, PROTECTED, RESPECTED"

OUR WELLBEING AND ACADEMIC SUPPORT SERVICES

Wellbeing and working towards achieving a Senior Secondary Certificate or equivalent, drives the work of our 'College Life' team. The College Life Team has four parts which work to support students in a holistic structure. These include Wellbeing, Academic Progress, Careers and Transition, and Diversity and Inclusion.

Our College Life structures are as follows:

The college population (staff and students) is arranged across the two year groups; Year 11 and Year 12. Each group is supported by the following:

- Student Advisor (and a member of the Executive)
- School Psychologist
- Youth Support Worker.

### FULL-SCHOOL AND YEAR MEETINGS

- Full-school and year meetings are held at regular intervals throughout the year. Year meetings are held either during TRaC or Line 0.
- The meetings are coordinated by the College Life staff, with input from students. Most teaching staff have a TRaC group (Transitions, Relationships and Careers) and students will work with these teachers during critical times for targeted wellbeing and academic tracking.
- Meetings provide an opportunity to drive communication about important college events, processes and initiatives. They also provide a platform for student voice. Students are required at these meetings to support their outcomes and generally, to keep abreast of information around the college.

## LINE O, COLLEGE CONNECT PROGRAMS AND ACTIVITIES

- Each Tuesday from 12:00pm to 1:00pm on campus. No classes run at this time allowing maximum participation.
- Students and staff with an interest in common use this time to pursue leisure and recreational activities on offer. Sport, technology, arts and crafts, gaming, care for the environment are but a small sample of offerings.
- Students who would like to suggest a college connect program or activity should approach their TRaC teacher.

- College Connect, as the name suggests, connects people, builds friendships and exposes students to a wide range of learning that is fun and interactive, and sits outside traditional classroom environments.
- Attendance is recorded and the hours of participation go toward a point accrual and a Registered Unit.
- If students would like to help run a College Connect activity, this provides an opportunity for them to have a leadership profile in the college. This is also a great addition to applications for University, CIT or employment.

### **TRAC GROUPS**

- Each Monday from 12:00 to 12:30pm students meet in TRaC groups with their TRaC teacher.
- This is an opportunity to get to know the teacher and students in your group.
- Important academic and wellbeing information is shared.
- School competitions, opportunities and events are promoted.
- Attendance is recorded and time accrues towards a Registered Unit for participation.

### **STUDENT ADVISORS**

- Student Advisors work to support the social-emotional wellbeing and academic health of all students. Attendance, participation, and academic progress are monitored, and follow-up is conducted when there are concerns.
- Students experiencing challenges that make achieving their goals more difficult are offered support through a multi-disciplinary team. Student Advisors will advocate for individuals within the college and, where appropriate, with external services as well.
- Much of the work of College Life staff is forming a partnership with a student's parents/caregivers. The team strongly encourages early communication from home. Student Advisors make links for students to other services, both inside and outside of the college to meet the wellbeing needs of students, in partnership with parents/caregivers.
- Student Advisors work within the BSSS (Board of Senior Secondary Studies) policy framework to ensure the integrity of the academic package of each student. They track this over the two years of enrollment, providing advice regarding course selection and changes.



## STUDENT VOICE AND LEADERSHIP

### **OPPORTUNITIES**

LTC students have access to a range of leadership opportunities, which include the Board of Senior Secondary Studies Student Forum, Tuggeranong Community Council, Girls • in Engineering Maths and Science and LTC Board.

A range of industries and organisations regularly reach out to provide LTC students valuable leadership learning experiences.

In addition, students are supported to develop their own leadership skills through assisting in college events - Market Day, Productions, lunchtime concerts, feature days.

TRaC Groups provide an important forum for student voice and each term our students provide important feedback on how life at Lake Tuggeranong is going. This information is used to develop ongoing improvement approaches. students are invited to meet with the college Senior Executive as part of a focus group to guide this process.

### SCHOOL PSYCHOLOGISTS

The college has a full-time school psychologist to provide high quality counselling on a wide range of issues. Students (and families) are able to make appointments via the College Life Help Desk.

## THE CAREERS SPACE CAREERS & TRANSITIONS

LTC has a thriving Careers & Transitions hub located at the entrance to College Life in pavilion 6. Experts in career services provide timely advice to students and their families on matters related to pathways through college and beyond. Our careers team hosts a major Careers Expo at the start of each school year, with over 35 representatives from a range of educational and employment industries. Lake Tuggeranong College students are expected to undertake a careers interview in the first semester of Year 11 and a second interview in their final semester in Year 12. In second semester we offer an outreach careers support service to students transitioning to LTC the following year.

Staff in this area assist students with the following:

- Course and unit selections
- Information about jobs and tertiary courses
- Career paths and study package options
- Scholarships

- Job applications, enrolment in further or additional study, resume preparation
- Opportunities to hear guest speakers as well as excursions to Canberra Careers Market, Try-a-Trade and other providers
- Work Experience Program (WEX)
- UAC applications
- Schools Recommendation Scheme (SRS)
- External courses

#### WORK EXPERIENCE (WEX)

Work Experience (WEX) is available to all students across the year and offers a diverse and extensive range of placements. Work Experience is an essential element of college in preparation for work opportunities beyond college. Virtual Work Experience is also made available to our students.

#### AUSTRALIAN SCHOOL BASED APPRENTICESHIPS (ASBA)

An Australian School Based Apprenticeship (ASBA) involves the employment of a young person who is undertaking a traineeship part-time while still attending college and who is enrolled in a program leading to a Senior Secondary Certificate. This program provides students with an excellent opportunity to try an occupation that may be of interest to them. The range of industry areas that offer ASBA traineeships is extensive. Students receive credit towards the Senior Secondary Certificate for the hours undertaken. If students are interested, contact the ASBA coordinator to discuss the process.

#### **CAREERS WEBSITE**

Our aim is to provide you with the latest information that will help you with your future careers and your life beyond school.

To explore the site please use the link below:

https://www.laketuggeranongcollegecareers.com

#### ALUMNI

The college preserves the extensive history and collection of memories and stories from the LTC alumni community. Our alumni are warmly invited to register on our Facebook page https://www.facebook.com/groups/LTCalumni/. Throughout the year, we provide the opportunity for old friends and acquaintances to get together and be involved with special events and programs at the college.

LTC 2024 PROSPECTUS THE LTC ENVIRONMENT

## THE LTC ENVIRONMENT

### **COLLEGE FACILITIES**

For 33 years, Lake Tuggeranong College has been providing high quality Year 11 and Year 12 experiences to the students of southern Canberra. It boasts a fine record of academic, vocational, sporting, cultural and social achievements. Students have the opportunity to take part in a variety of subjects in Tertiary (T), Accredited (A) and Modified (M) courses as well as Vocational (V) and Registered Units (R).

Lake Tuggeranong College is situated 20 km south of Canberra City, the capital of Australia. It overlooks picturesque Lake Tuggeranong and has tree-lined suburbs to the east and the bustling Tuggeranong Town Centre to the west. Lake Tuggeranong College makes an immediate impression on visitors with stunning architecture, taking full advantage of the lakeside setting. Incorporated in a modern complex of tastefully finished buildings are facilities unrivalled in Australia.

#### **STUDENT FACILITIES**

- Student kitchenettes and amenities for self-catering
- A large student Learning Commons area
- Student lockers
- College radio room
- Pods of furnished spaces throughout the buildings where students can study and socialise.

#### LIBRARY

The Tuggeranong Library is designed and managed as a shared-use facility of Libraries ACT and Lake Tuggeranong College. It caters for the college community and the general public. The shared-use arrangement provides students with significant and unique learning advantages over stand-alone school libraries with:

- Increased access to expertise from teacher librarians and public library staff
- Access to the entire collections of all Libraries ACT branches for books, journals, CDs, DVDs and videos
- Online access to an impressive range of databases, catalogues and electronic resources
- Longer opening hours compared to stand-alone school libraries.

Further information about LTC Library on p. 12.

#### **COLLEGE LIFE**

- The wellbeing and academic progress centre of the College, located in Pavilion 6
- School leaders, Student Advisors, Youth Support Worker, Careers & Transitions Officers and on-site School Psychologist can all be found in this area of the College.



### LTC 2024 PROSPECTUS THE LTC ENVIRONMENT

### THE ARTS

- Drama Theatre for 240+ patrons
- Dance and Music studios
- Computer labs supporting Photography, Media and Graphic Design using industry standard Adobe software packages
- Recording studio with industry standard Protools software.

### **BUSINESS/SOCIAL SCIENCES/IT**

- Large newly refurbished Lecture Theatre
- Flexible and industry-focused learning labs
- Specialist virtual reality, robotics and cyber security labs.

### **PHYSICAL EDUCATION**

- Air-conditioned gymnasium
- Outdoor sporting facilities.

### **SCIENCE**

- Well equipped Science laboratories
- A recently refurbished agriculture plot and glass houses.

### TECHNOLOGY

- New food technology facilities
- Specialist design lab with industry-standard software packages
- Industry-equivalent metal, wood, and automotive technology workshops supporting Cert II VET Training.

## TRADE TRAINING CENTRE (TTC)

LTC is part of the Tuggeranong VET Network of schools which also includes Erindale College, Caroline Chisholm School, Wanniassa School, Calwell High School, Lanyon High School and Namadgi School. Together, these partnering schools provide a range of nationally certified vocational education and training opportunities to students. Both colleges are also part of the Tuggeranong Sustainable Living Trade Training Centre (the TTC) – a Commonwealth-Funded program designed to provide school-aged students with access to trade quality facilities.

#### WHAT IS ON OFFER THROUGH THE TTC?

Students enrolling at Lake Tuggeranong College or Erindale College can enrol in TTC courses at either college. Lake Tuggeranong College delivers nationally-recognised qualifications at the Certificate II level with pathways into Certificate III in:

- Automotive
- Building Construction
- Furniture Construction

TTC funding has provided an additional purpose-built building for the delivery of Building Construction and Furniture Making. Additionally, the program has provided significantly refurbished workshops in support of Automotive and Metal. Both learning spaces boast industry-leading equipment in support of the best possible qualification outcomes. LTC 2024 Prospectus Value Adding

## LEARNING PROGRAMS FOR EXTENSION AND INCLUSION

Specific curriculum support programs operate at Lake Tuggeranong College designed to meet the individual needs of students. This suite of programs is coordinated by a School Leader C, and the work is supported by a range of staff both teachers and Learning Support Assistants.

### **KEYS TO SUCCESS**

The Keys to Success program is an R Unit offered to all LTC students. Delivered by LTC's teacher librarians, the program provides students with the key skills required to achieve their best outcomes while studying. Examples of content are: referencing, taking and making notes, curation, effective search strategies, evaluating websites and tackling assignments. The sessions allow for a consistent and deep delivery of information and digital literacy skills which will be needed for all courses at Lake Tuggeranong College and for life beyond college.

### **AST PREPARATION PROGRAM**

The ACT Scaling Test (AST) Preparation Program runs throughout the college years for all tertiary-aspiring students. The program covers strategies for the Writing Task, Multiple Choice and Short Response tests which are components of the AST. The program involves formal workshops, online activities and practice exams, and is supported by explicit and practical application in all subject areas. The preparation program is a compulsory R Unit for tertiary students.

### **ANU EXTENSION**

ANU Extension is the Australian National University's extension program for senior secondary students. The program offers courses in sciences, engineering, mathematics, Asian languages and music. Students who successfully undertake studies in ANU Extension can receive an early offer of entry into an ANU bachelor degree program and receive credit towards the bachelor degree for the studies successfully completed.

ANU Extension courses are accredited with the BSSS (as 'H' courses on the Senior Secondary Certificate). The programs have been developed by expert senior secondary teachers and ANU academics and are presented by ANU educators and expert senior secondary teachers.

Applications to join the program open at the start of each school year, with classes commencing Week 1 of Term 2 each year. Students are selected by a panel comprising an ANU, government, independent sector and Catholic sector representative. Selection is based on selection test results, applications and information from schools.

At Lake Tuggeranong College, the ANU Extension is coordinated in the Careers area in College Life.

# UNIVERSITY OF CANBERRA'S ACCELERATED PROGRAM

UC's Accelerated Pathways Program allows ACT Year 11 students to study on-campus and earn credit towards a UC degree. This unique opportunity provides the chance to experience what University study is really like and get a step ahead of the pack. Students take a course after school hours, which starts in term 2 until the end of the year. For more information, please seek help from careers.

### **RESOURCE ROOM**

The Resource Room provides support for students experiencing difficulties in learning in classroom environments. Staff support students to achieve to the best of their ability: this may include support with their classwork and/or assignments, as well as supporting students who may experience a range of issues which affect their capacity to learn or participate in college life.

Students can request support by making contact with staff in the College Life (pavilion 6) or through teacher referral. The Resource Room is open from 8.30am – 3.30pm each day.

### **SMALL GROUP PROGRAM - THE HUB**

Lake Tuggeranong College hosts a small group program for identified students who meet Disability Eligibility criteria. We call our small group program 'The Hub'. Placements in the Hub are coordinated by the Executive teacher for Diversity & Inclusion. The college has a team of exceptional teachers and learning support assistants to deliver a personalised academic and social program. Students and their families play a huge part in the designing of our individualised programs. Students can elect classes of interest from across the curriculum, alongside small group program offerings. As a result, our students have a fully-rounded senior secondary experience, making them ready for life after college.

If you believe your young adult is eligible for this level of support, please contact the Executive Teacher of Diversity & Inclusion.

## LTC ORGANISATION

### **COLLEGE BOARD**

The college encourages and welcomes parental participation in the decision-making associated with our school. One manifestation of this is the College Board.

The Board includes three parent representatives, two student representatives, two staff members, the Principal and a community representative. Meetings are held six times a year, and the Board considers matters such as:

- College financial oversight
- Curriculum offerings (adopting new courses)
- School improvement (strategic and operational plans, monitoring progress, formal reporting)
- Community involvement in the college

Parents are invited to make contact with the Board Chair or their parent representatives via the front office and Business Manager.

### **STUDENT VOICE**

LTC welcomes, encourages, and supports students to be actively involved in their college. We believe this includes speaking up and taking every opportunity to feed back to the college staff about:

- their learning in class (via Unit Evaluations and conversations with teachers)
- the facilities across the college (via Focus Groups, surveys and suggestion boxes)
- the culture of connectedness and care (via Focus Groups, Satisfaction surveys, making a meeting with the Principal
- the governance of the college (via student rep's on the Board)

The Student Leadership Group (SLG) – see page 7 – is a mecca of internal and external events and training to build your voice as a student and a young leader.

### **VOLUNTARY FINANCIAL CONTRIBUTIONS**

Lake Tuggeranong College offers a diverse and relevant curriculum to its students. The College Board requests parents pay a Voluntary Parental Contribution each year to the school to help purchase resources which enhance the teaching-learning environment for all students across the college.

A one-off materials and resources contribution is also requested at the beginning of Year 11. This amount covers administration items such as photographic ID, student printing and internet usage. In addition to this contribution, costs for materials/activities exist in some learning areas. These courses usually have high consumables use or use equipment which are expensive to maintain and replace. There are many alternative courses where there are no consumable costs requested.

Although all contributions are voluntary in accordance with ACT government policy, it is vital that parents support the college through payment of this money as it provides a major component of the budget figure allocated to resourcing the education programs. The Education Act 2004 states that your child will not be refused benefits or services if you do not choose to contribute. Individual records of contributions are confidential.

Parents who elect to pay their voluntary contributions into either of the tax deductible funds (Library Fund and/or Building Fund) are not able to obtain a refund as these funds are governed by rules set by the Australian Tax Office.

At the beginning of the year, when students have settled into all their classes, the college will send home a Voluntary Contribution Request. This includes any relevant course consumable costs, material and resource and voluntary contributions. LTC 2024 Prospectus LTC Library

## WELCOME TO THE LAKE TUGGERANONG COLLEGE LIBRARY

The Lake Tuggeranong College Library is a beautiful, welcoming and very useful place. Our friendly staff will assist you with your research, resourcing, and recreational reading needs.

Our library services will save you time! Some significant and unique benefits include:

- Knowledgeable Staff students access expertise from teacher librarians, LTC library technicians and public library staff.
- Huge Collection students can easily access the collections of the school library and all nine Libraries ACT branches for databases, books, journals, CDs and DVDs.
- 24/7 Resources online access to LTC Library's and Libraries ACT's Virtual Libraries with their impressive range of e-resources and databases.
- Long Opening Hours as both a college library and a public library, we are open every day of the week including weekends.

• Keys to Success Program - This is delivered by LTC's teacher librarians in the LTC Library in Line 0 time. These sessions provide students with the key skills required to achieve their best outcomes while studying.

Teacher librarians are available to help with information needs for all assignments, guiding students to become problem-solvers and discerning, literate users of information.

Staff and students have 24/7 access to college-specific resourcing created and sourced by teacher librarians via the LTC Library website: http://ltclibrary.com/.





LTC 2024 Prospectus 2024 IN Focus

## **2024 IN FOCUS**

Lake Tuggeranong College values the development of transferable skills that will form a key part of our students going on to lead meaningful lives. We provide an array of opportunities to develop communication, collaboration, self-reflection and critical analysis both in classes and as extra curricula activity, all the while, experiencing authentic learning.

### **INTEGRATED LEARNING COURSES**

Lake Tuggeranong College offers a range of interdisciplinary courses that focuses on these skills through project-based learning. Students will have the opportunity to explore their passions while developing core skills for their future and an understanding of the influence of Legal Studies, History, Science, Business, and Sociology work in real world situations.

Examples of projects that are possible in 2024 include:

- Automotive Industry Innovator's Project
- Community Environmental Leadership
- Trades and Business
- Ecological Sustainability
- Pathways to Work and Learning R unit suite of modules contributing to Vocational pathway development

### **INTERNATIONAL OPPORTUNITIES**

Previously, Lake Tuggeranong College has run annual international study tours: we have travelled to China, Japan, Korea, Spain, and the United States. The college will provide updates to families as more of these opportunities become available.

### **AUTHENTIC LEARNING**

Our Interactive Software Development course has a strong production and group work focus where the students work for our fictitious company and publish apps for their Year 12 major project. These go worldwide via iTunes and Google Play and we have had over 10,000 downloads in five years with five apps being published, including The Monster that Ate Canberra game, Augmented Reality, Aussie Icons, AR School Quiz, and Magpie Swoop.

Students in these courses gain further authentic opportunity via our partnership with Services Australia, where students get the opportunity to pitch their augmented and virtual reality skills to the Chief Information Officer of an Australian Government agency.

Lake Tuggeranong College offers students access to exciting cyber competitions and in 2019, our team won through ACT-based heats to the national finals of a major event, where they emerged as runners up – pipped only by a longestablished and specialist IT school from Queensland. These competitions provide students with authentic experiences in 'ethical hacking' and the world of cyber security.





## **COURSE FINDER**

Use this guide to find the *Learning Area and Courses* you may be interested in studying at Lake Tuggeranong College.

For ease of navigation, *Learning Areas* are listed here independent of faculties - please make specific enquiries via the Faculty listed for further information.

DT	Learning Area: Courses: Faculty: Learning Area: Courses:	DESIGN AND TECHNOLOGY Design and Textiles Engineering Studies Graphic Design Industrial Design & Architecture Technology ENGLISH Contemporary English (M) English	PA PE	Learning Area: Courses: Faculty: Learning Area: Courses:	PERFORMING ARTS Dance Drama Music The Arts PHYSICAL EDUCATION Exercise Science Health and Wellbeing Physical Education Studies Sports Development
EN	Faculty:	Essential English English as an Additional Language (EAL) Literature My English (Contemporary) Languages	PS	Faculty: Learning Area: Courses:	Science/PE PROFESSIONAL SERVICES Business Services Business Studies
HU	Learning Area: Courses:	HUMANITIES Ancient History Geography Modern History Pre-Modern History	гъ	Faculty:	Legal Studies Social and Community Work Tourism and Event Management Early Childhood Studies Professional Services/Humanities/IT
_	Faculty: Learning Area: Courses:	Sociology Professional Services/Humanities/IT INFORMATION TECHNOLOGY Interactive Software Development	SC	Learning Area: Courses:	SCIENCE Horticulture Biology Chemistry Flight Human Biology
Π	Faculty:	CISCO Networking and Cyber Security Programming & Cyber Systems Web Development & E-Commerce Professional Services/Humanities/IT		Faculty:	Food Science and Nutrition Interdisciplinary Science Physics Psychology Science/PE
LA	Learning Area: Courses: Faculty:	LANGUAGES Chinese Japanese Spanish Languages	Π	Learning Area: Courses:	TRADES & SERVICES Automotive Technology Construction Pathways Food Studies Furniture Making Metal Products
MA	Learning Area: Courses: Faculty:	MATHEMATICS Contemporary Mathematics Essential Mathematics Mathematical Applications Mathematical Methods Mathematics Tutorials Specialist Methods and Specialist Mathematics Maths	VA	Faculty: Learning Area: Courses: Faculty:	VISUAL ARTS Ceramics Glass Art and Design Media Photography Visual Art The Arts



For more information on Lake Tuggeranong College please call (02) 6142 3660, visit www.ltc.act.edu.au or scan the QR code.

## DESIGN & TECHNOLOGY

#### **DESIGN AND TEXTILES (T/A)**

At college: The Design & Textiles course focuses on design thinking (human centred approach) and design process methodologies to create practical solutions using textiles/ fashion as a medium. Students learn project management skills and explore fundamentals of design such as design theories and good design techniques. Students will study 4 units over two years with the possibility of undertaking 'Negotiated Studies' in the final semester.

- Design for aesthetics
- Design for Purpose
- Design for Futures
- Design for Communication
- Negotiated study (offered after completing 3 units).

**Your career:** Design and Textiles is an interdisciplinary course of study and forms the basis for further education and employment in the design fields such as interior design and decoration, personal styling, fashion design, industrial design, costume design, production manufacture, architecture, landscape architecture and textile technologies.

#### **ENGINEERING STUDIES (T)**

At college: LTC offers Engineering units from various fields - to form a major:

<u>Structural engineering</u> - building and analysing forces in frames, trusses and bridges.

<u>Civil engineering</u> - projects that design buildings using Australian Standards and codes.

<u>Mechanical engineering</u> - including a biomedical project using 3D printing.

<u>Mechatronics engineering</u> - using electronics that integrates software and hardware design.

<u>Major project</u> -Working in semester 2 Year 12 on a major group project with a practicing engineer.

**Your career:** For students who want to pursue further study in technology fields such as engineering, mechatronics, and project management at university, or at CIT/TAFE studying electronics, software, design, CAD, drafting, architecture, building and construction fields.

#### **GRAPHIC DESIGN (A/T/M)**

At college: Learn about the principals and elements of design and how to understand and apply the design process in creative ways to a range of graphic, digital and media solutions. This course offers units that cover the essentials of graphic design and visual media and introduces students to concepts and skills needed to design and create in a digital world.

LTC 2024

LEARNING

**AREAS** 

PROSPECTUS

**Your career:** Design thinking coupled with design knowledge and creative skills are essential in an industry that is constantly changing with new mediums emerging and evolving to apply these skills and ways of thinking. The growing intersection of graphic design with time-based media, information design and associated disciplines such as writing and producing, as well as the blurring of boundaries between fine art and design, graphic design is an exciting discipline to study and emerge yourself in.

#### INDUSTRIAL DESIGN & ARCHITECTURE (A/T/M)

At college: Designers play a vital role in shaping the way we live through the design of the products and environments that surround us. In this course students learn how to understand and apply the design process through using both digital and physical tools to model and produce creative and sustainable solutions. The course offers units that cover the essentials in the areas of industrial design and architecture and provides students with skills using industry-based design and modelling CAD software

**Your career:** Design thinking is a method for approaching problems in a world that is constantly changing. From product designer to architect, the designer makes the world a better place by bringing their clients' ideas to life. There are many career pathways which stem from skill development using design processes.

## **ENGLISH**

English is a compulsory subject and all students need to complete the minimum of a minor (two passing semesters) to obtain an ACT Senior Secondary Certificate. English is offered as an online study option as well as the traditional face to face classes.

#### **CONTEMPORARY ENGLISH (M)**

At college: Contemporary English Modified provides opportunities for students who are eligible for the small group program to develop their reading, writing, speaking and listening skills. The course supports students in developing language skills for life, as well as supporting students to create a wide range of text types.

**Your career:** This course is available to students who are eligible for placement within the Small Group Program or Disability Education Program.

#### ENGLISH (T)

**At college:** English focuses on developing students' analytical, creative, critical thinking and communication skills in all language modes. It encourages students to engage with texts from their contemporary world, with texts from the past and with texts from Australian and other cultures.

**Your career:** English T takes the best of high school English and digs deeper. The course helps students develop a sense of themselves, their world and their place in it. Students explore a greater complexity of literary and academic texts. This course is useful for future tertiary studies and employment.

#### **ESSENTIAL ENGLISH (A)**

At college: Essential English focuses on supporting students to think, communicate, be heard and valued, as an adult. Students consolidate and refine their skills and knowledge needed to become competent, confident and engaged users of English in many contemporary contexts including every day, community, social, further education, training and workplace contexts. This course is also offered online via application. **Your career:** This course is designed to provide students with the skills that will allow them to succeed in a wide range of post-secondary pathways such as CIT and employment.

#### ENGLISH AS AN ADDITIONAL LANGUAGE (EAL) (A/T)

At college: EAL focuses on language learning to support students in their own future career path – either academic or vocational and can be studied at tertiary or accredited level. Students explore how learning in and through English language and literature influences their own and others' personal, social and cultural identities and thoughts. This course integrates the Australian Curriculum English as an Additional Language or Dialect (EALD).

**Your career:** Units 1 to 4 are taught to develop students' academic English skills in order to prepare them for tertiary study. EAL and the bridging Units 1 to 4 provide the linguistic foundation for work, training or further study.

#### LITERATURE (T)

At college: In Literature students will engage and respond creatively and critically to literary texts drawn from the past, the present and from Australia and other cultures. This course moves beyond the explorations of the English T course and looks more closely at how literary texts shape perceptions of the world. The course is rich in literary critique and dialogue about literature.

**Your career:** For the student who loves words, analysing texts, is passionate about English and/or enjoys reading a variety of different texts from different time periods. This course is useful for future tertiary studies and your lifelong enjoyment of reading.

#### **MYENGLISH (CONTEMPORARY) (A)**

**At college:** MyEnglish provides opportunities for students to engage in the English curriculum through self-directed project-based learning. Students select their own topic of inquiry and design their own major project. This course also has a strong focus on core literacy skills, as students unpack reading strategies, research skills and develop in both oral and written communication.

**Your career:** This course appeals to students who enjoy a more personalised course using the English language in everyday contexts. Students who know where they are headed after college and want to start learning more about English to suit their own area of interest are best catered for in this course.

## HUMANITIES

#### ANCIENT HISTORY (A/T/M)

**At college:** The Ancient History course enables students to study life in early civilisations based on the analysis and interpretation of physical and written remains. The ancient period extends from the development of early human communities to the end of late antiquity 650 CE, with a particular focus on the ancient societies of Europe, the Near East and Asia.

**Your career:** Ancient History opens a world of mystery and wonder, and often allows us to see today's human stories with greater clarity. Students gain valuable evidence-interrogation skills, as well as the ability to present a set of validated interpretations.

#### **GEOGRAPHY (A/T)**

**At college:** Geography explores the physical and human worlds. It focuses on diversity of the world's places and their peoples, cultures and environments. Themes are developed from local, national and global scales and allow students to think about their place, role and responsibilities as a global citizen around each topic.

**Your career:** You will sharpen your investigative skills, and your knowledge of the world around you. Opportunities for fieldwork encourage an enquiry approach to further investigate the physical and human environments.

#### MODERN HISTORY (A/T/M)

At college: The Modern History course studies the forces that have shaped today's world. Students look at the significant events of the 18th century, such as the French and American Revolutions, as well as a broad range of events in the 20th century. This part of the course covers World War 1 and 2, the Great Depression, Nazi Germany, Civil Rights, the Women's Movement, globalisation, and the post-colonial history of Indigenous people.

**Your career:** The aim of Modern History is to provide students with a general understanding of the period, as well as the skills for further study. If you enjoy reading and thinking about the past, and the creativity of working with primary and secondary sources, Modern History is for you.

#### PRE-MODERN HISTORY (A/T/M)

**At college:** Pre- Modern History studies Medieval Europe, as well as the history of Asia, South America, India, the Middle East, and Indigenous Australia. Pre-Modern History covers the years c.400-1750 CE, and includes the Vikings, samurai Japan, the legends of Robin Hood and King Arthur, and Confucian China.

**Your career:** The aim of Pre-Modern History is to provide students with a general understanding of the period, as well as the skills for further study. If you enjoy reading and thinking about the past, and the creativity of working with primary and secondary sources, Pre-Modern history is for you.

#### SOCIOLOGY (A/T)

At college: Sociology explores the interaction between people and the elements of our society. Students explore the power and influence of media, religion, family, the justice system and other social institutions to gain a better understanding of the way society works. This fosters learning to question the status quo.

**Your career:** Students develop problem-solving skills, an understanding of bias, and how to critically question their assumptions and opinions – invaluable skills for any workplace.



For more information on Humanities and other Learning Areas please visit www.ltc.act.edu.au

## INFORMATION TECHNOLOGY

LTC has four IT 'streams'.

These can be studied over years 11 and 12 to form a major.

To build a double major, students can combine two streams, with the exception of the 'Development' units 1 and 2, which cannot be combined.

Students can gain a Certificate III in IT if they complete a double major in Cyber units 3 and 4.

#### INTERACTIVE SOFTWARE DEVELOPMENT (A/T/V/M)

**At college:** This stream integrates software design and programming skills, to produce interactive software solutions. Students work individually in Yr11 designing and coding simple games and in small teams in Year 12 to develop project management skills to create Mobile and VR solutions.

**Your career:** The stream is aimed at producing a variety of skills used in the emerging industries worldwide. Students use their skills in further education including the Academy of Interactive Entertainment (AIE), CIT and Universities to complete interactive software-based IT courses.

#### WEB DEVELOPMENT & E-COMMERCE (A/T/V/M)

**At college:** This stream is intended for students wanting to pursue a career in website design, administering computer-based systems including databases, and develop skills in project management. Students develop and create e-commerce solutions. Students learn transferable programming skills.

**Your career:** The use of e-commerce and database systems has taken over the world. Students graduate and seek further studies at CIT and universities, and can work in the public service and small business setting up and administering websites and databases.

#### PROGRAMMING & CYBER SYSTEMS (A/T/V/M)

**At college:** This stream investigates programming techniques with a focus on robotics, Cyber, AI and electronic technologies. Students build projects that interact with the environment around them, programming Arduino and Raspberry Pis and make these secure to withstand cyber attacks.

**Your career:** Programming, Cyber , Robotics and AI are careers at forefront in the IT industry and students pursue careers studying in these new disciplines at Universities and Industry.

#### CISCO NETWORKING AND CYBER SECURITY (A/T/V)

At college: This stream is a networking course that has cyber security as a focus. Students learn how to set up equipment including routers, switches, and wireless networks. Students work in teams to secure and test network security using cyber forensic skills.

**Your career:** The world has changed and there is a shortfall in skilled IT professionals in the field of cyber security. The course works towards preparing students for the CCNA exam using the CISCO Network Academy program that is run worldwide by our qualified CCNA instructor. Students pursue further studies at CIT and University and enter into graduate programs offered by public service departments.





For more information on IT and other Learning Areas please visit www.ltc.act.edu.au

## LANGUAGES

Three languages, **Chinese, Japanese and Spanish (A/T)**, are offered at Lake Tuggeranong College. Students do not need any experience or prior study to undertake a language course at LTC as they may study languages at beginner, continuer, or advanced level. Students should take into consideration the number of years the language has already been studied (if any), prior to selecting into a particular level of language at college.

Learning another language widens students' horizons, broadens cognitive and cultural experience and develops communicative and intercultural competence. It is useful for those students wanting to study a language at university, seeking employment, or for those wanting to travel.

#### **CHINESE A/T**

At college: In Chinese, students develop an understanding of the nature of the Chinese language including its linguistic and stylistic features. Students learn about Chinese culture and traditions including the study of Chinese literature for those studying it at the advanced level. Students learn how to communicate both in a written and oral form in the Chinese language. In Chinese students will study the following units: The Individual, Society and Community, The Changing World, and Diverse Perspectives.

**Your career:** China's regional and international influence easily reaches us in Australia, and learning this language opens many potential career doors for students. Multicultural Australia also beckons, and students graduating from studying Chinese will become much more adept at interacting with Australians from a Chinese cultural background.

#### JAPANESE A/T

At college: In Japanese, students develop an understanding of the nature of the Japanese language including its linguistic and stylistic features. Students learn about Japanese culture, traditions and literature and how to communicate in a written and oral form in the Japanese language. In Japanese, students will study the following units: The Individual, Society and Community, The Changing World, and Diverse Perspectives.

**Your career:** Japan is a destination of choice for many Australians – both as tourists and as admirers of the culture. As a trading partner and a place of wonder, the possibilities for students studying Japanese are endless and exciting. When possible, the college regularly hosts trips to Japan as part of the course.

#### SPANISH A/T

At college: In Spanish, students develop an understanding of the nature of the Spanish language including its linguistic and stylistic features. Students explore Spanish culture, traditions and literature. They learn how to communicate in a written and oral form in the Spanish language. In Spanish, students will study the following units: The Individual, Society and Community, The Changing World, and Diverse Perspectives.

**Your career:** A hint of European excitement awaits students taking this course: Spain is a classic mix of cultural influences, and any trip to Europe would do well to add it to the itinerary. If you are drawn to Europe, this course is for you. When possible, the college runs an excursion to Spain, as part of the course.

## MATHEMATICS

#### **CONTEMPORARY MATHEMATICS (A/M)**

At college: Contemporary Mathematics provides opportunities for students to gain and practise the skills of communication, teamwork, problem-solving, initiative and enterprise, planning and organising, self-management as well as learning and technology skills.

**Your career:** This course upskills and develops students with the fundamental skills necessary for employment and life beyond college.

#### **ESSENTIAL MATHEMATICS (A)**

At college: Essential Mathematics focuses on enabling students to use mathematics effectively, efficiently and critically to make informed decisions in their daily lives. It provides students with the knowledge, skills and understanding to solve problems in real contexts in a range of workplace, personal, further learning and community settings.

**Your career:** Students are prepared for post school options of employment and further training. Problem solving and reasoning skills are developed in this course.

#### MATHEMATICAL APPLICATIONS (T)

At college: Mathematical Applications develops mastery in topic areas such as numbers, algebra, geometry, trigonometry, graphs, networks and statistics. Problem solving, reasoning and communication skills are developed deeply. A pass in Year 10 Australian Curriculum Mathematics is recommended.

**Your career:** Mathematical Applications is designed for those students who want to extend their mathematics beyond Year 10 but whose future studies or employment pathways do not require knowledge of calculus.

#### **MATHEMATICAL METHODS (T)**

**At college:** Mathematical Methods is a fundamental calculus and statistics course. This course builds on strong algebra skills in areas of functions, graphs and probability, with students mastering how to construct models in these areas. A minimum of a C grade in 10A (Advanced) Mathematics in high school is recommended.

**Your career:** Mathematical Methods is designed for students whose future pathways may involve mathematics and statistics and their applications in a range of disciplines at the tertiary level.

#### SPECIALIST METHODS AND SPECIALIST MATHEMATICS (T)

At college: Specialist Mathematics is a course enabling students to master and extend their knowledge and refine their abstract reasoning ability in all areas of mathematics. They develop rigorous mathematical proofs and apply these to mathematical models. Students may complete a major, major/minor or a double major in Specialist Mathematics.

**Your career:** This course is designed for students with a strong interest in mathematics, including those intending to study mathematics, statistics, physics, economics or engineering at university.

#### MATHEMATICS SUPPORT SESSIONS (R)

**At college:** Mathematics Tutorials are available at designated times each week. A student attending a minimum number of hours of tutorials as an R unit may achieve additional points for their Senior Secondary Certificate.

**Your career:** Tutorials in Term 1 are targeted towards Year 11 Tertiary students and are based on the outcomes of the diagnostic test conducted at the start of the school year. During the rest of the year, any student may attend to get help with their work on a regular basis or only when they need help.

For more information on **Mathematics** and other Learning Areas please visit **www.ltc.act.edu.au** 

## **PERFORMING ARTS**

Lake Tuggeranong College has a long and proud history of high-quality performing arts programs. We deliver creative practical and theoretical interpersonal courses that develop social and academic communication skills in all students. Units studied explore historical contexts practically and are assessed through creating, performing and analytical research tasks.

#### DANCE (A/T/M)

At college: Dance styles studied will vary depending on the focus of the unit being studied and include contemporary, jazz, hip hop, and ballet. Similarly, theory topics will vary according to the unit and range from historical developments, the role of dance in society, human anatomy and physiology for dancers, composition concepts, movement analysis, and the impact of media on dance.

**Your career:** This course is offered to students who aspire for a career in dance or in a related industry, as well as to those with an interest in and commitment to dance for recreation and fitness. Previous dance experience is not necessary for enrolment into this course and students with a range of experience and skill level can be catered for. Opportunities exist for students who wish to extend their dance studies beyond the BSSS course.

#### DRAMA (A/T/M)

At college: In Drama, we explore theatre texts from different times and places. We also learn techniques for voice and movement, how to improvise. A lot of our learning is done through play, but underneath that, we are serious about communicating ideas to an audience. Drama draws together different creative disciplines to create an experience for others. Whether we are presenting a Shakespeare play or devising a piece of theatre about issues that matter to us, our goal is to communicate something to our audience. **Your career**: We develop our confidence through acting, learning to perform in front of others, to try new things and step outside our comfort zone. We collaborate a great deal in the acting space, and learn to be part of an ensemble team, supporting each other and working with our different strengths to create something together. Reading and interpreting a script or learning lines can be challenging and involves understanding a text incredibly well: this develops our critical thinking, vocabulary, and creativity. We gain knowledge of different acting theories, lives in different periods of history, and the world. We learn about other people by standing in their shoes as an actor.

#### MUSIC (A/T/M)

At college: Music is delivered through the study of traditional and contemporary music units. This course enables students to expand their knowledge of music, explore numerous styles as a performer, and master skills through theoretical, analytical, historical, creative, and practical experiences in music. Students will study and develop skills through Composition, Solo and Ensemble Performance and Music Analysis activities. The course is designed to develop intercultural understanding, creative thinking, skills in technology and music production, and communication in constantly changing global contexts.

**Your career:** Students develop personal capability and confidence in music performance, public speaking, creative analytical thinking, project management and collaboration. These skills are highly valued by tertiary institutions and all employers. There are opportunities for students to also be involved in external enrichment programs of study at CIT and ANU, school and community public performances, and school musical productions.

For more information on **Performing Arts** and other Learning Areas please visit **www.ltc.act.edu.au** 

## **PHYSICAL EDUCATION**

#### **EXERCISE SCIENCE (A/T/M)**

**At college:** Exercise Science is a theory-based course which examines biological, physiological and biomechanical knowledge and their practical applications in the science of physical activity and human movement. This course has a focus on how the human body works, human performance, fitness and physical activity.

**Your career:** It is highly recommended for those who wish to enter into further studies in the fields of teaching, nursing, physiotherapy, sports studies, paramedics, medicine, coaching, recreational, chiropractor and other allied health careers.

#### HEALTH AND WELLBEING (A/T/M)

**At college:** Health and Wellbeing is a theory-based course focusing on the understanding of health in the context of social and cultural influences on the broader community wellbeing. It examines the theories and mechanisms necessary to develop and promote healthy values and behaviours for individuals, groups, communities and nations.

**Your career:** This course prepares students for career and employment pathways in a range of professional and allied health and community service sectors including social work, physiotherapy, audiology, nutrition, counselling, and a range of community and international development.

#### PHYSICAL EDUCATION STUDIES (A/M)

**At college:** Physical Education Studies provides students with skills, values, positive attitudes and knowledge to learn about and practice ways of maintaining active healthy lifestyles. It focuses on working with others to improve physical and team skills through theory and practical activities. It assists students in preparing for lifelong physical well-being.

**Your career:** This course is open to students of all skill levels and physical abilities and aims to enhance students own health and well-being through physical activity. The study of Physical Education Studies provides possible pathways to further study in vocational areas for employment as a trainer, coach or in voluntary community coaching as well as providing foundations for life-long health.

#### **SPORTS DEVELOPMENT (A/T/M)**

At college: The course includes focuses on specialised sports development for the individual. Students learn about principles of high performance, self-awareness and understanding of their prowess in an individual sport. They learn about and practice ways of maintaining elite performance. This course prepares students aspiring to participate in elite sport through tailored physical training (strength and conditioning) components at Club Lime with a focus on the individual athlete's sport. Entry to this course is based on participants being competitive sports people in regular community competition.

**Your career:** Sports Development is an integral area of study for the elite and competitive sports person, official or administrator. This course actively engages students in understanding the intellectual, social, emotional and physical development within their sport.

#### SPORT, RECREATION AND LEADERSHIP (A/T)

**At college:** This course studies forms of recreation include social sport, fitness programs and outdoor and community based recreational pursuits. Sports, Fitness & Leadership focuses on the significance that the Sports and Recreation Industry has in the life of individuals and communities. It is a subject that provides students with the opportunities to learn in, through and about health wellbeing activities.

**Your career:** This course can provide the pathways for students to gain competencies and knowledge to pursue a career in the sport and recreation industry.

## **PROFESSIONAL SERVICES**

#### **BUSINESS SERVICES (A/V/M)**

**At college:** Business Services provides students with the knowledge, skills and understanding of business practices, procedures and concepts relevant to working in a business service and/or business industry environment.

**Your career:** Students can achieve a Certificate II in Workplace Skills and a Certificate III in Business (Statement of Attainment). They learn to analyse, problem solve, make decisions and develop interpersonal and intrapersonal skills which are highly suitable for employment and further training in a wide variety of industries.

#### **BUSINESS STUDIES (A/T/M)**

At college: Business Studies focuses on the study of the essential planning requirements involved in operating a business. The course covers skills ranging from a small business to the broader roles of management, finance, human resource management, marketing, e-business, ethical practices, sustainability and the impacts of implications of the future business environment.

**Your career:** Students gain an understanding of the structure and operation of businesses, and prepare a business plan, which prepares them for the real world of work. The Business course provides continuity with many pathways into tertiary and industry studies.

#### LEGAL STUDIES (A/T/M)

At college: Legal Studies provides students with an insight into the criminal justice and political systems on local, national and global levels. Students explore issues of law and society and evaluate the role of the justice system's role in society.

**Your career:** Legal Studies isn't just about becoming a lawyer. Students studying the course gain a better understanding of their opinions, enhance their skills to develop persuasive, evidence-based arguments and critically evaluate problems and solutions.

#### SOCIAL AND COMMUNITY WORK (A/M)

At college: Social and Community Work provides students with an introduction to working in the various community services and care sectors in our community - children, the elderly, people with disabilities and youth. Students learn about caring for different groups, the issues they face and how we can support and advocate for their needs.

**Your career:** This industry is one of Australia's fastestgrowing employment sectors. Many of our graduates can exit college into full time work because of the skills they gain from the units they studied. Combine study with Work Experience and/or an ASBA in the field, and you are well on your way to securing a post-college career with purpose.

#### **EVENT MANAGEMENT (A/T/M)**

At college: Event Management examines and evaluates the impact of social, cultural and environmental issues from a tourism and hospitality perspective. It covers the industry as a workplace as well as a contributor to our economy. There is a strong link with event planning that has many employment opportunities across Canberra.

**Your career:** This course supports the development of attributes needed for those considering events management industry career, or working in the tourism industry - both areas give you the entry level that are highly desirable employability skills.

#### EARLY CHILDHOOD STUDIES (A/M)

At college: Students explore the experiences, development, needs, rights and education of children. They explore a wide range of approaches to the care and education of children. They develop knowledge and understanding of children through analysing key concepts, theories and learning frameworks.

**Your career:** Supports further study in education and childcare at CIT/TAFE or university. They will be able to access work opportunities in the growing industries of childcare and education as teachers and childcare workers.

## **SCIENCE**

#### BIOLOGY (A/T/M)

At college: Biology is the scientific study of the diversity of living organisms, their evolution and their interactions and functions. The course will enhance your investigative, analytical, communication skills and your understanding of the natural world and the place of people and other organisms within it.

**Your career:** It is perfect for students intending to pursue careers in areas such as physiology, nursing, paramedical or medical sciences, wildlife biology, zoology, botany, genetics, biochemistry, forestry, and natural resources.

#### **CHEMISTRY (T)**

At college: Chemistry is the study of materials and substances and the transformations they undergo through interactions and energy transfer. This course develops students analytical and critical thinking through both theoretical and practical investigation of chemical composition, structure, properties, and reactions of substances.

**Your career:** Chemistry is strongly recommended for those with an interest in pursuing science tertiary studies which in areas include pharmacy, science, chemical engineering, genetics, medical, forensic, environmental, sports or veterinary sciences.

#### FOOD SCIENCE AND NUTRITION (A/T/M)

At college: In Food Science and Nutrition, students integrate scientific method to designing and carrying out investigations that explore the links between food, health, and diet-related diseases. Students examine factors that influence food choices, methods of food production and distribution and consider the ways they have evolved and influenced the health of individuals and communities.

**Your career:** The course provides a foundation for anyone considering food-related courses at university such as nutrition or food chemistry, as well as key skills that are useful for both a career in the hospitality industry as well as everyday life.

#### HORTICULTURE (A/M)

At college: The study of sustainable horticulture enables students to develop an in-depth understanding of plant production through observation, experimentation, discussion, analysis and hands on experience. students will learn how to run a modern horticulture business using methods based on proven scientific principles and practice.

**Your career:** This course provides students with education and training to industry standards. Successful completion of the competencies will result in the student being awarded a Certificate from the Agriculture, Horticulture and Conservation and Land Management Training Package. The achievement of these competencies will provide a natural progression into further training within the Horticulture, Conservation and Land Management industries.

#### HUMAN BIOLOGY (A/T/M)

At college: Human Biology examines the structures and functions of the human body and its interaction with the environment. This course develops students' scientific literacy skills, knowledge and understanding and to communicate understandings in scientific ways relating to human biology, medical treatment and research. Students will study anatomy, physiology, epidemiology and histology.

**Your career:** This course provides skills and knowledge useful in all industries related to health and the allied health fields. Eg. medicine, nursing, midwifery, physiotherapy and pharmacy.

#### INTERDISCIPLINARY SCIENCE - FLIGHT STREAM (A/T/M)

At college: The Flight stream of this course develops students' skills in the application of science, mathematical and technological knowledge and understanding within the aviation context. The course is structured around the theoretical requirements of the commercial pilot's licence, covering the science of flight, meteorology, navigation and commercial aviation and integrates extensive flight simulator training.

**Your career:** This course will provide students with the scientific inquiry skills, capacity for critical thought, and scientific literacy that will assist them in pursuing a career in aviation, aeronautical engineering and other civil or military aviation related fields.

#### **INTERDISCIPLINARY SCIENCE (A/T/M)**

At college: This course uses a STEM approach to learning using problem-based learning, case studies, active inquiry and practical investigations. Interdisciplinary Science develops students' scientific literacy across a range of disciplines including Biology, Chemistry, Physics and Earth and Environmental Sciences through interdisciplinary science topics including Drones, Oceanography, Forensics Science, Animal Science, Horticulture, Consumer Chemistry and Environmental Science and can be tailored to student interests.

**Your career:** The study of Interdisciplinary Science equips students with the skills to be independent thinkers and life-long learners who are confident to pursue a wide range of study pathways and careers in an increasingly globalised society.

#### **PSYCHOLOGY (A/T)**

At college: Psychology provides students with the scientific understanding of the human mind and behaviour. Students develop their understanding of how humans think and feel and why people may make certain decisions. We explore the importance of early childhood factors on lifelong development through to understanding mental health and wellbeing, and the affect groups have on an individual decision making.

**Your career:** The course will provide critical thinking and communication skills valuable for a wide a range of life and work settings. Their understanding of people and multiple perspectives will enable and enrich their interactions with people and groups and will provide a pathway for students interested in Psychology as a profession.

#### PHYSICS (T)

**At college:** Physics investigates the fundamental nature of the physical universe. This mathematical science provides students the with opportunity to make quantifiable predictions about the natural world, and test these through rigorous experimental investigations.

**Your career:** A study of physics develops high levels of analytical and critical thinking which are applicable across a wide range of technologically based careers eg. science, engineering, and medicine. It provides a strong basis for tertiary studies requiring data analysis.

## TRADES TRAINING & Service Industries

#### AUTOMOTIVE TECHNOLOGY (A/V/M)

**At college:** Automotive Technology will provide foundation knowledge and skills especially for those interested in employment in the automotive field. Topics covered include Automotive Principals, Automotive Electrical Systems, Vehicle Components and Systems, Automotive Drive Systems and Independent Study.

**Your career:** The 2023 'Skills Needs List' identified multiple shortages of Automotive Mechanics, Automotive Electricians, Motor vehicle part and accessory fitters, Motor vehicle and vehicle parts salespersons, panel beaters and spray painters. It encompasses a Certificate II in Automotive (Statement of Attainment).

#### **CONSTRUCTION PATHWAYS (A/V/M)**

At college: Construction Pathways provides hands-on learning and helps students develop their skills and knowledge in carpentry and building construction. With a focus on project-based learning, students will learn the processes and practices involved in a variety of construction industry vocations.

**Your career:** This course, taught in our purpose-built training facility, encompasses a Certificate II in Construction Pathways and opens a door to a career pathway in the construction industry.

#### **DESIGN AND TEXTILES (T/A)**

At college: The Design & Textiles course focuses on design thinking (human centred approach) and design process methodologies to create practical solutions using textiles/ fashion as a medium. Students learn project management skills and explore fundamentals of design such as design theories and good design techniques.

**Your career:** Design and Textiles is an interdisciplinary course of study and forms the basis for further education and employment in the design fields such as interior design and decoration, personal styling, fashion design, industrial design, costume design, production manufacture, architecture, landscape architecture and textile technologies.

#### FOOD STUDIES (A/M)

At college: This course offers students a range of practical and theoretical learning experiences related to food preparation, food presentation and strategies for achieving a healthy lifestyle through good nutritional practices. Students will develop communication, teamwork and problem-solving skills as they work with peers on various projects. **Your career:** Students will have increased prospects to be employed in food related occupations such as in the Hospitality and food handling industry, Chef, Food styler and Food Photographer. This course will also provide the basis for further studies in food related CIT courses or university courses.

LTC 2024

LEARNING

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#### FURNITURE MAKING (A/M)

At college: Furniture Making will provide students with the knowledge, skills and understanding to become skilled in industry practices, processes, procedures and concepts in working with timber for cabinet making, kitchens and joinery trades. This course is delivered in a state-of-the-art workshop with teachers who are industry qualified.

**Your career:** Furniture Making is a trade-focused course that provides a pathway to an apprenticeship in the construction industry or further study.

#### METAL PRODUCTS (A/M)

**At college:** Metal Products is for students with an interest in practical metalworking skills. The course has a large practical component with students developing relevant technical skills to design and make a range of metal products.

**Your career:** This course is intended to meet the needs of students who have a general interest in industrial technology trades as well as those intending to choose a career pathway into traditional metal trades and related service industries such as fitting and machining, light fabrication and boiler making.

#### TIMBER PRODUCTS (A/M)

**At college:** Timber Products provides students with practical woodworking and relevant technical skills to design and make a range of timber products. The course has a design focus using timber and wood products as the design medium.

**Your career:** In Timber Products students learn to safely use tools and timber materials to design and create timber products. They learn skills that are useful for life, for recreation or as a transition to employment or further education.

## **VISUAL ARTS**

This learning area offers dynamic, practical, and theoretical design courses that are responsive to the interests and needs of all students.

#### CERAMICS (A/T/M)

At college: Ceramics offers the students the opportunity to explore a wide range of clay building, turning, glazing techniques, and firing in a kiln. Students learn about the history of ceramics as well as aspects of all types of clays, firing, and glazing as well as exploration of colour. Students can study this unit in conjunction with Glass Art and Visual Arts.

**Your career:** Students develop 3–D drawing skills as they invent, design, then produce quality art pieces for display. The technical skills acquired can open pathways to courses offered by ANU are essential for various creative and construction industry jobs.

#### GLASS ART AND DESIGN (A/T/M)

At college: Students learn about the history of glass as well as safe and responsible use of glass, tools, materials and firing in a kiln. They will be taught how to cut, arrange, construct, and explore the vast ways in which to create fantastic glass works, Students can study this in conjunction with Ceramics and Visual Arts.

**Your career:** This is a subject unique to Lake Tuggeranong College and the course is designed to satisfy the broad demands of students looking to enter work areas which value creativity, self-motivation, and technical expertise. Students gain exposure to experimentation to solve design problems as well as research into the versatility of glass as a creative medium.

#### MEDIA (A/T/M)

**At college:** The Media course offers students the opportunity to study the concepts and theory related to digital technology and produce practical projects using the industry standard facilities at the college. Students examine

the creative process in Media, with a particular focus on television, film, radio, digital sound, print and multimedia.

**Your career:** The Media course prepares students for a career in the Media industry. Our computer platforms host Windows computers that are equipped with the complete Adobe Creative Suite, giving students access to the latest Media industry standard software. Students will create a portfolio of Media work which can be used to enter tertiary institutions or creative industry jobs.

#### PHOTOGRAPHY (A/T/M)

At college: This course is supported by Lake Tuggeranong College's excellent photographic facilities, including two digital photography labs and a photography lighting studio. Units range from introductory digital to more advanced art photography catering for students of all ability levels. Our computer platform hosts Mac computers that are equipped with the complete Adobe Creative Suite giving students the latest software used by the Photographic and Graphic Design industries. Students have opportunities to print images to a professional standard using our large format colour printer.

**Your career:** Students studying this subject can use this portfolio to apply for tertiary courses offered by ANU, UC, CIT, other universities, and creative industry jobs. It also enables them to build skills that could be useful for part time employment opportunities.

#### VISUAL ART (A/T/M)

**At college:** Visual Art provides practical and theoretical experiences to develop core knowledge of art as well as drawing skills, painting skills, and an appreciation of the visual arts whilst working with a broad range of materials. Students can study this in conjunction with Ceramics and Glass Art.

**Your career:** Students develop creative and critical thinking skills as they design and produce a portfolio of work in their visual art diary. Students studying this subject can use this portfolio to apply for visual arts courses offered by ANU, UC, CIT, other universities, and creative industries.

## **EXTRA-CURRICULAR STUDIES**

In addition to the curriculum directly on offer by the college, students may elect to participate in courses from other educational providers – most of which can contribute to their senior secondary certificate.

### LTC 2024 PROSPECTUS Extra-Curricular

#### **COURSES**

#### **REGISTERED (R) UNITS**

Opportunities for students to enrol in programmes, R-units or external courses, separate to their regular class load, occur throughout their two years at college. These can receive recognition of hours spent outside college hours. There are no prerequisites, but course costs may be incurred. Offerings vary from year to year. Examples of areas covered include: College Connect, Gotta Get VET, Community Service, Debating, Dance Festival, Sport, Music Production, Drama Productions, Road Ready, Sustainability, pathways to work, subject-based participation and tutorial support. Students who engage with external leadership opportunities, such as Scouts, Duke of Edinburgh etc, may also receive recognition for this work.

#### **CIT OPPORTUNITIES**

Students can avail themselves of courses offered at the Canberra Institute of Technology (CIT). Courses have included: Spatial and Surveying, Childcare, IT, Library Studies, Business, Travel, Accounting, Bar Service, White Card and Asbestos training and MYOB. Students interested in these options should make an appointment with the Careers team at college to see how this might contribute to their Senior Secondary Certificate.

#### ANU EXTENSION PROGRAM

Admission is by application via ANU processes. There is no entry fee but some course costs. See Careers at LTC and visit http://extension.anu.edu.au/

Courses include: Chemistry, Specialist Maths, Biodiversity, Continuing Japanese, Advanced Japanese, Continuing Chinese, Beginning Korean, Astrophysics, Discovering Engineering, Physics.

#### ACCELERATED PATHWAYS PROGRAM - UC

Studying in the University of Canberra Accelerated Pathways Program will complement your college studies and give you access to the library, computer systems and modern learning and research facilities at UC. There is no entry fees. You will thrive in an environment where innovation, collaboration and hands-on experience unite to expand your horizons and create a pathway to your future.

Courses include: Business Decision Making, System Anatomy and Physiology, Understanding People and Behaviour, Creative Writing and Politics and Democracy.

#### **GEMS – GIRLS IN ENGINEERING, MATHS & SCIENCE**

GEMS is a program that provides opportunities for girls who study technology, IT, maths, Science and those who have STEM related interests to join and work on building their skills for pathways after college. The program is not extra time, it its optional - and can be done as you want or need. The program connects ex-students, university, and industry mentors – that meet and help to plan study programs and pathways into universities and employment. There is a challenge program where you develop your STEM based projects and link with our primary school girls to run them. The GEMS program involves our students mentoring our high school girls on the transition into college.

#### TIGER TEAM / IT ASBAs – STUDENT IT SUPPORT TEAM

The Tiger Team and IT ASBAs - comprised of students who help to support the day-to-day functions of our college computer systems. The team consists of students studying an IT based subject who use a spare line during each week to be on call and support staff and students when they need IT help. The team starts where our year 12 students train year 11 students in term 4. The experience Tiger Team students gain helps build a strong CV and they use their experience in interviews to show how they can work when applying for jobs in the IT sector. Many of our Tiger Team are directly employed straight out of college via the public service digital apprenticeships program.

#### SERVICES AUSTRALIA – CYBER PROGRAM

This is a program that runs during our 'College Programs' timetable. We link with IT professionals from Services Australia to create cyber security-based projects. The program consists of students working with the Services Australia cyber security staff. The students learn about Linux and ethical hacking tools and techniques and apply these to create a solution in their projects. The aim is to ensure our future workforce is skilled in preventing systems being compromised. Our students use the extension program to enhance their CVs when applying to university and for IT related jobs in cyber security.

## **CONTACT US**

#### LAKE TUGGERANONG COLLEGE

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LEARN Thrive Connect



Information in this guide was correct at time of printing. Lake Tuggeranong College reserves the right to change course offerings, arrangements and all other aspects without notice. Up-to-date information can be sourced from the public web site at: www.ltc.act.edu.au Printed April 2024





www.ltc.act.edu.au www.laketuggeranongcollege.wordpress.com

