



WENTWORTH
COMPUTER SCIENCE COLLEGE
— AUCKLAND —

A SCHOOL FOR THE FUTURE

An exciting, innovative, co-educational, private secondary school specialising in Information and Communication Technologies (ICT), Computer Science, and the traditional STEM subjects of Science, Technology, Engineering and Mathematics, alongside English and Economics/Commerce.

www.wentworthcomputerscience.school.nz

Message from the **Executive Principal**

Welcome to Wentworth Computer Science College located in Newmarket, Auckland. As the founding Principal of Wentworth College (opened in Gulf Harbour in 2003) I am proud to establish and lead our first satellite campus. Offering an innovative and specialist programme for Years 9 to 13 students, the curriculum focuses on Digital Technologies as well as the more traditional STEM subjects of Science, Technology, Engineering and Mathematics.



These subjects are complemented with Economics, Business and English, as well as a specialist course that fosters the 'soft skills' that are so important in our students' future personal lives and careers.

Wentworth Computer Science College (WCSC) offers an individualised education pathway where students with an interest and passion for the traditional Sciences (Chemistry, Physics and Biology) and Computer/Digital Technologies, can focus their study in a knowledge-rich curriculum in subjects they enjoy.

Wentworth's Gulf Harbour campus has developed a culture and reputation for academic excellence in achievement and this provides an outstanding foundation for our Newmarket campus. We combine the best of the traditional Cambridge International Education (CIE) curriculum framework with the opportunity to study industry-recognised IT qualifications. This creates a progressive and relevant future-focused educational environment. We embrace technological innovation, creativity, critical thinking and problem-solving skills – all key skills and competencies which our students need to acquire to be successful.

Small class sizes, combined with our highly skilled and dedicated teachers, help to prepare our students to achieve to the best of their abilities. Our low teacher to student ratio allows us to create a detailed, individualised academic pathway that assists students to maximise their learning in a positive and supportive teacher/student environment.

At Wentworth Computer Science College, we can provide exceptional learning opportunities for your child. We invite and welcome you to tour the campus, meet our teaching faculty and discuss your child's educational future with us.

Bruce Tong
M.Ed.Admin, B.Ed, Dip Tchg
Executive Principal -
Wentworth Schools

Wentworth College was founded in 2003 and is one of the leading co-educational private schools in Auckland catering for students from new entrants through to Year 13.



The Wentworth main campus in Gulf Harbour, Whangaparaoa

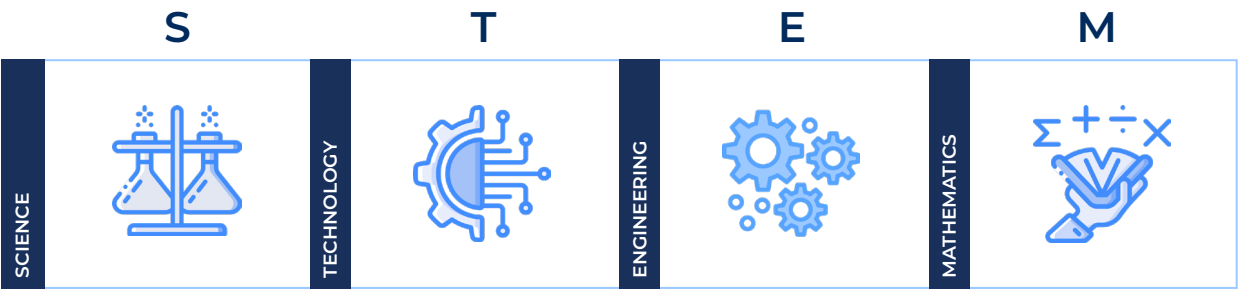
“A school for the future”



Wentworth Computer Science College recognises that preparing students for the world into which they will graduate is one of the most important roles that a school can play in a student’s life. As careers change, a greater understanding and competence across different digital technologies and sciences will be needed.

A report published by Dell Technologies and authored by the Institute For The Future (ITFF) and a panel of 20 tech, business and academic experts from around the world noted that 85 per cent of the jobs that will exist in 2030 have yet to be invented. Our school aims to prepare students for these future careers.

From horticulture to medical science, from engineering to programming, technology continues to play a growing role across all industries and a strong digital education will provide our students with ever increasing career opportunities.





Cambridge International School

“A top-class Cambridge education prepares students for life, helping them develop an informed curiosity and a lasting passion for learning.”

(Cambridge International)



Since 2009, Wentworth College has been successfully teaching the prestigious Cambridge International Education (CIE) programme. This is an internationally recognised academic syllabus covering a wide range of subjects. Cambridge is the world's largest provider of international qualifications for secondary schools.

Students study towards their IGCSE (International General Certificate of Secondary Education) qualifications in Year 11, followed by AS in Year 12 and A2 in Year 13. This combination of AS and A2 qualifications provides students with their A Levels. Under the CIE programme, students are able to attain University Entrance at the end of Year 12, based on their AS results. CIE's international reputation allows students to apply to top universities worldwide.

YEAR 9 TO YEAR 10

Students develop skills and understanding in a variety of subjects including English, mathematics and science.

- English
- Mathematics
- Science (Physics, Chemistry, Biology)
- Information and Communications Technology
- Computer Science
- Digital Media and Design
- Social Science/Global Perspectives
- Physical Education
- Life Skills (financial literacy, study skills and Duke of Edinburgh)

YEAR 11

Students will study towards their Cambridge **IGCSE** (International General Certificate of Secondary Education).

IGCSE subjects*

- English
- Mathematics
- Physics
- Chemistry
- Biology
- Information and Communications Technology
- Computer Science
- Global Perspectives
- Business Studies
- Economics
- Digital Media and Design

YEAR 12 to YEAR 13

Students will study towards their Cambridge **AS Levels** in Year 12 and **A2 Level** in Year 13 that will give them their full A Levels.

AS and A2 options*

- English
- Mathematics
- Physics
- Chemistry
- Biology
- Computer Science
- Information Technology
- Digital Media and Design
- Business Studies
- Economics
- Chinese

*Other subjects may be offered if requested

Junior Programme – Years 9 & 10




We have developed a curriculum for our Years 9 and 10 students that aims to give them the strongest possible foundation for their senior Cambridge examinations at the College. Our two-year Junior School curriculum aims to provide a base from which students can venture into senior courses and, combined with offered industry qualifications, a springboard into their future careers. The curriculum covers the core learning areas and is compulsory to ensure that all of our students have a wide range of options open to them when they come to select their senior school courses. The core subjects offered are Science, Mathematics, English, Global Perspectives (Social Studies), Life Skills and PE and Health. Wentworth Computer Science College values the study of technology-rich subjects and studying Computer Science, ICT and Digital Media and Design is compulsory at Years 9 and 10.

Students are able to choose which 'elective' they would like to study within Computer Science; from Unity Game Design, HTML, Cyber Security, AI and many more. We aim to challenge our students and encourage them to reach their academic potential. All Years 9 and 10 students participate in our Life Skills programme as part of our commitment to providing the best holistic education. This provides our students with experiences to help advance personal responsibility, health, well-being, community and leadership development.

Junior Computer Science Curriculum


Core Topics

All students learn the following topics




python™


Programming in Python




Data Representation




Cyber Security




Physical Computing




Game development in Unity




Artificial Intelligence / Machine Learning




Virtual and Augmented Reality




Robotics and Automation




Networking & the Internet




Ethics




Emerging Technology




Hardware / Software




Competitive Programming



Cloud Computing




Ethical Hacking & Cybersecurity



Big Data and Data Science
























Elective Topics

Students select one of the following topics each term. Each topic can be studied more thoroughly over many terms



Web Development

Industry Based Qualifications



Specialist Leadership & Management programme - Year 13

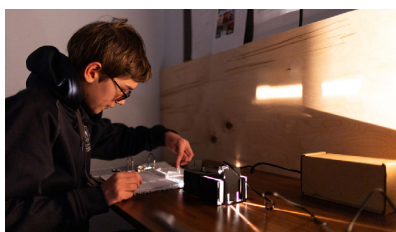


The WCSC curriculum allows students to earn enough 'points' to gain New Zealand University Entrance from their AS (Advanced Subsidiary level) Cambridge International studies in Year 12. Year 13 students study a combination of the higher A2 subjects alongside further AS topics depending on their goals for tertiary study.

WCSC has created an innovative Leadership and Management programme. The programme focuses on the 'soft' skills that will be the key drivers for success with students' tertiary studies and future careers. The topics covered are outlined below.

This course has been endorsed by universities with the comment that they wish more students had an opportunity to study this programme.

Entrepreneurship	Designed to teach students about the process of taking a product/service from an idea all the way to the marketplace and the skills needed to be a successful entrepreneur
Critical thinking	Improving student's skills in examining, questioning and challenging in order to find solutions including understanding psychometric testing, ethics, philosophy and so on
Leadership & Management	Studying the qualities of effective leaders and what it takes to become one
Internship	Spending time in digital technology industry related businesses
Business presentational skills	Public speaking, working as a team and making a pitch are all valuable skills in the business world and students will be able to learn and practise these in this course
Social Media Marketing	Being an adept social media marketer is essential in the world of today and tomorrow. Studying the skills necessary to achieve effective social media marketing will be the focus of this programme
Special Projects	Some students may already have an idea for a digital technology based business. Time could be spent at school with mentors developing this idea alongside their other studies
University links	Understanding how entry to New Zealand and International universities works and pathways that are available. Students who wish to pursue tertiary study may wish to explore different university short courses or may be permitted to study a university paper while completing their secondary education.
Investment Strategies and Financial literacy	An introduction to business financial literacy and how to pursue good investment strategies
Business social responsibility	An introduction for students into what it means to be a socially responsible business in today's world



Industry Qualifications



Students can also work towards gaining industry-recognised qualifications or certificates from world-leading organisations. The available certificates cover certifications from Microsoft, Adobe, Python Institute, Unity and Amazon Web Services (AWS). We also offer IC3 Digital Literacy and IT Specialist certifications. These are taught in conjunction with our main Cambridge curriculum.

Qualifications:	Students work towards gaining their industry recognised qualifications or certificates from organisations such as Microsoft Technology Associate (MTA) certification examinations, EC-Council, Adobe, Autodesk and more.	
Courses:	IC3 Digital Literacy Certification	Year 9 & 10
	Microsoft Office Specialist	Year 9+
	Adobe Professional	Year 10+
	IT Specialist: Python Programming	Year 9 & 10
	IT Specialist: Cybersecurity	Year 9 & 10
	IT Specialist: Computational Thinking	Year 12-13
	IT Specialist: Software Development	Year 12-13
	Python Institute PCEP & PCAP	Year 9-13
	Unity User (Programmer, Virtual Reality and Artist)	Year 9-10
	Unity Associate (Game Developer, Programmer, Artist)	Year 10-13
	Amazon Web Services Fundamentals Cloud Practitioner	Year 10-13
	ESB Certification in Entrepreneurship and Small Business	Year 13



University pathway and admission counselling



Victor Li

The Cambridge International curriculum prepares students for studying in Australia, the United States, or the United Kingdom, simplifying the extensive process and entry requirements. Wentworth Computer Science College offers individualized academic and university pathway counseling with Victor Li, an experienced university counselor. A Harvard graduate, Victor has been helping students achieve their dream university acceptances for over a decade, providing invaluable advice for those aiming to study abroad.



WCSC is registered with UCAS. UCAS is the system used by all students who wish to apply to universities across the UK. WCSC is also a registered test centre for the ACT, SAT and AP examinations. These examinations are some of the options available to students seeking entry to universities in the USA.

Student Success



Jerry Dai

Jerry, passionate about mathematics, was selected for the New Zealand team at the International Mathematical Olympiad in July 2024 in Bath, UK, a testament to his hard work and exceptional talent. Competing internationally is a remarkable achievement. Additionally, Jerry won the Auckland Mathematical Olympiad in May 2024, beating 120 competitors from Year 9-13.



Zhaozhou (Jimmy) Chen

While at Wentworth Computer Science College, Jimmy excelled in Computer Science and received university counseling from Victor Li. His dream of attending a top university came true with his acceptance to Oxford University for Engineering in October 2023. Since 2021, Wentworth graduates have also been accepted into the University of Auckland, AUT, and universities in China and the US.

FAQs

• Is Wentworth Computer Science College a full New Zealand High School?

Yes. Wentworth Computer Science College is a Ministry of Education approved satellite school (faculty) of Wentworth College (MoE number 484), a successful private school in Gulf Harbour. All students are enrolled as Wentworth College students, but study at the Wentworth Computer Science College in Newmarket.

• Who is suited to attend Wentworth Computer Science College?

Any student who has a real interest in computers, the computer industry, information technology, the sciences (Physics, Chemistry & Biology) and Business/Economics.



• What if I find that after one year, I haven't got the interest in Digital Technology subjects that I thought I had?

The curriculum is broad enough for you to easily complete your secondary education and gain entrance to a wide variety of courses at university. Due to the academic nature of the CIE curriculum, you will be ahead of many of your peers once you reach tertiary education. Our curriculum is also perfect to prepare students to study Health Science, Engineering, Commerce and Law.

• How is this school different to my current school?

Wentworth Computer Science College has small classes (a maximum of 15 students per class) providing an excellent teacher to student ratio. It is a school for students wanting to study a curriculum of interest to them as well as receiving a quality education which will set them up for success in any future career or studies.



• What if I like Art as well as Digital Technologies and Science?

Your art talent will be encouraged and fostered. Digital Media and Design is a subject that we offer. Students learn and develop creative digital arts. Examples include animation, graphic design, product design, Computer Assisted Design (CAD), photography and film.

**• Are there any Social Science subjects offered at this school?**

Yes. Years 9 and 10 students will study Global Perspectives - a broad social science subject encompassing elements of Geography, History and Economics. This leads on to Business Studies and Economics in their senior years. Other social sciences may be offered under special circumstances.

• If I am not interested in coding/programming or computer science, will this school suit me?

Yes. Wentworth Computer Science College has an equally strong focus on the 'pure' sciences – Physics, Chemistry and Biology. Economics and Business Studies are also important to our curriculum. The digital technology Cambridge subjects are broad in subject matter and cover many disciplines.

• Would I do Physical Education?

Yes. Each week our Years 9 and 10 students enjoy a two hour excursion/activity outside of the classroom. Examples of this include badminton, table tennis, games at the Auckland Domain, visiting exhibitions at Auckland Museum, and climbing some of the local volcanic cones. During Life Skills, the junior students are also encouraged to work through their Duke of Edinburgh award. We already have one student working on their Gold level award.

Testimonials

"Our son commenced at Wentworth College in 2021 as one of the inaugural first year students. He is now in Year 12 and has flourished at WCSC, achieving a 'Top Scholar' award for his IGCSE year.

We chose WCSC because of their vision for much higher-level digital skills for students as well as the innovative opportunities in Year 13 to undertake entrepreneurship programmes or industry placements alongside obtaining University Entrance.

As a small school, students do not get lost in the crowd, with customised learning to support their individual ambitions. The teaching staff are impressive and highly motivated to help every student achieve their best. The interaction between teachers and students is much more peer-to-peer than we have experienced elsewhere which creates an engaged and positive learning environment."

Parent Year 12 student

"We have been more than impressed with Wentworth. It has exceeded our expectations and the quality of education and teachers is outstanding".

Parent, Year 12 student

"Although we are not a big school we have BIG aspirations and BIG dreams. We are determined to achieve BIG. As a foundation student of the school and of the graduating class, I am following my dream to study Chemistry at the University of Auckland. Wentworth helped me achieve this.

For this, I would like to say thank you to Mr Tong, the school Principal, who explained the Wentworth pathway, encouraged me and supported me to take this path. (At my previous school I would have taken an extra year to graduate)."

Michelle, Foundation student and graduate



"The Wentworth syllabus is excellent and your students will be well placed to proceed to the Bachelor of Information Sciences at Massey University. The Wentworth students will be able to select any one of the majors available in Computer Science, Data Science, Information Technology, Information Systems or Software Engineering"

C Scogings - Associate Professor, Computer Science Faculty, Massey University



WENTWORTH

COMPUTER SCIENCE COLLEGE

— AUCKLAND —



If you have further questions or would like to organise a tour of the school or meet with the Principal, please contact **info@wentworth.school.nz**. One of our team will then contact you to arrange a time to meet with the Principal to discuss your enrolment.

Address: 25-27 Crowhurst Street, Newmarket, Auckland

Postal address: PO Box 650, Whangaparaoa 0943

Phone: 09 520 0591

www.wentworthcomputerscience.school.nz