

Sunshine Coast Future Careers+2025



Information Technology



Sunshine Coast Council is embarking on a strong and prosperous future which includes a progressive approach to sustainable economic growth and opportunities that are unrivalled anywhere in Australia. Council's Regional Economic Development Strategy is a blueprint for sustainable economic growth until 2033. The Strategy will help to ensure the region actively participates in the global economy and delivers an enviable lifestyle and opportunities for local residents and businesses. The Strategy also seeks to ensure the region realises its full potential through support of high value industry sectors. Two of these sectors, Education and Research and Knowledge and Professional Services, directly support the IT industry.

Industry Snapshot

The Sunshine Coast IT industry is in its early stages of development with a number of small to medium enterprises supporting specific activities:

- **Schoolzine** – a digital newsletter pioneer, having built over 25,000 eNewsletters which service hundreds of schools across Australia, that now exports internationally.
- **Atmail** – an email platform now a world leading messaging expert in the industry. Atmail provides software solutions for email inboxes to thousands of users ranging from government agencies to global corporations and the majority of Australia's largest Internet Service Providers.

Game Changers on the Sunshine Coast

New and expanding infrastructure projects which will enable the Sunshine Coast's economy to grow and provide new sources of employment and industry, and will directly influence the expansion of the IT industry.

SunCentral Maroochydore

SunCentral Maroochydore will be a vibrant and sustainable 21st Century city centre that will create an estimated 15,000 new jobs by 2025 and include smart technology to assist with city guides climate-controlled buildings, open data initiatives to monitor usage of facilities, public transport, surveillance systems, traffic management, waste management, and Wi-Fi hotspots. SunCentral is expected to create a wealth of employment opportunities over the next 20 years for:

- *App, web or software developers* who will write computer programs, design websites and provide functionality.
- *Data analysts* who will make observations from data, provide solutions and information.
- *IT system designers* who will plan the technologies needed, how data will be collected, user interaction and the process of implementation.
- *IT support staff* who will provide technical advice, maintenance and support.
- *Graphic designers* who will design and create images, multimedia, logos, videos, interactive media and other content.

International Submarine Broadband Cable

By linking the Sunshine Coast directly to global communications systems in Asia and beyond, Council will position the region as a major player in the digital economy. The cable will provide milliseconds of advantage, which is high priority for banking and finance operators, digital solutions developers, and other users of online transactions. The cable will have a positive and long-lasting outcome for those employed within the IT sector – directly and indirectly.

Sunshine Coast Health and Medical Precinct

The Health and Wellbeing industry is booming on the Sunshine Coast propelled by a multi billion dollar commitment to the development of the new Health and Medical Precinct incorporating the \$1.8 billion Sunshine Coast University Hospital co-located with the Sunshine Coast University Private Hospital.

This development will require IT professionals such as software engineers, data analysts, programmers and technical support experts to assist in streamlining the medical services. IT positions will be in demand for the delivery of e-Health, education and training, and e-commerce business through telecommunications and the internet.

Aura - the City of Colour

As one of Australia's largest city-building projects and the only 6 Star Green Star community in the nation, Aura will be a city of the future – with business innovation and economic prosperity as its cornerstones. The project will provide an estimated 20,000 onsite and 20,000 offsite jobs over the next 30 years. Aura will also provide ongoing construction and associated employment opportunities for the next 30 years.

Other Projects

The Sunshine Coast Airport Expansion, the Sunshine Coast Solar Farm, the Sunshine Plaza expansion, and the Bruce Highway expansion will require IT workers to plan, execute and maintain the technology aspects of these major projects being undertaken on the Sunshine Coast.



- **Sunshine Coast Council** – a leader in providing innovative and sustainable services to the community. More than 100 employees deliver agile and transformative IT across all disciplines.

computing continues to increase. Greater internet capabilities will provide the right atmosphere to attract investment and new technologies from outside the region.

Due to the scale of the proposed projects and population increase across the Sunshine Coast region, it is foreseeable that the number of IT jobs could triple by 2025.

Projected Growth Snapshot

Sunshine Coast Council and companies such as Atmail have a vision for an expanding digital economy in the region: an environmentally friendly hotspot for technology, innovation and start-ups which will lead to the creation of Australia's own Silicon Beach.

The rollout of the National Broadband Network (NBN) will provide greater bandwidth and internet speeds vastly improving the industry as dependence on cloud



Future Careers 2025

In 2025, potential careers in IT on the Sunshine Coast will come from the areas of informatics, programming, technology solutions, and creative design.

Informatics	Programming	Tech Solutions	Creative
Data Analyst	Software Engineer	Cloud Capacity Managers	Web Design
Big Data Architects	Hadoop Professional	Drone Engineer	Animation
Chief Analytics Officer	Application Programmer	Chief Digital Officer	Game Design
Chief Data Officer	Web Programmer	Hardware Experts	Photoshop Expert
Data Engineer	Utility Programmer	Software Experts	Media Creation
Data Architects	Game Programmer	Robotics Experts	Multimedia Artist
Analytics Experts	Quality Assurance Engineer	Security Experts	3D Modelling
Data Scientist	Database Engineer	Intellectual Property Experts	Virtual Reality
System Administrator	Frontend Developer	Electronic Engineer	User Experience Designer
Research Assistant	User Interface Developer	Integration Experts	Special Effects (SFX)
Data Collection Expert	Network Engineer	Support Technicians	Website Designer
Software Customisation Expert	Backend Developer	Sales Professionals	Augmented Reality
Open Source Data Expert	Firmware Engineer	Telecommunications Engineer	Serious Game Designers
Data Systems Expert	Mobile Engineer	Software Tester	Graphic and Web Designer

The Top 3 Careers

The game changer projects and the continuation of the expanding digital economy will increase employment prospects in the IT industry on the Sunshine Coast by 2025 with the following top three careers:

- **Data Scientist** – analyses big data to understand and predict consumer behaviour. May involve specialisations such as mathematics, statistics, modelling, medical science and engineering. Large demand for this career will be found within the Sunshine Coast University Hospital and the surrounding health precinct.
- **Computer Systems Analyst** - computer systems analysts ensure that organisation's technological needs are met and are constantly improving with the advancements and demands of the increasingly connected world. Demand for this career should be present with the SunCentral Maroochydore, Aura and Oceanside developments.
- **Software and App Developer** – designers and programmers who create software applications, programs, websites, apps, augmented reality, virtual reality for clients. Demand for this career should be found within all of the game changer projects, startups, international firms and local businesses and organisations.

Career Pathways and Education

Throughout their school years, students will have various pathways available to them in order to find work within the IT industry:

Subjects to look for at High School				
Information technology	Mathematics	English	Programming	Graphic design
Networks and communication	Electronics technology	Media and advertising	Web design	Science
Databases	Work experience	Art and design		

Tertiary / University Education Pathway at the University of the Sunshine Coast		
Bachelor of Information and Communication Technology	Headstart Program	Tertiary Preparation Pathway
Integrated Learning Pathway	Bachelor of Serious Games	

TAFE Education Pathway		
Certificate IV in Information Technology Networking - Traineeship	Diploma of Information Technology Networking	Certificate IV in Web-Based Technologies
Diploma of Website Development	Certificate III in Information, Digital Media and Technology	Certificate II in Information, Digital Media and Technology
Diploma of Interactive Digital Media		

Online Courses + Career Colleges + Work Based Learning		
Lynda.com www.lynda.com	Skillsoft IT Courses www.seeklearning.com.au	Dynamic Web Training www.dynamicwebtraining.com.au
Open Universities		

Crossover Industries

The nature of technology allows implementation into all other fields and industries. All workplaces use or could use computers, mobiles, tablets, wearables or other technologies of some kind. All have the potential to have creative, innovative and advanced technology solutions that can change the industry for the better. Below are some examples in areas focused on the Sunshine Coast that will have a heavy reliance on IT.

Aviation and Aerospace - The Sunshine Coast Airport Expansion and the developing drone technology industry will require IT professionals who have cross platform knowledge as well as the ability to work with data generated by these organisations.

Clean Technologies - The Sunshine Coast Solar Farm and others being progressed by Council are ensuring an innovative, green and sustainable region which will require IT professionals with skills in developing computer-based technologies.

Education - New technologies such as Oculus Rift, Microsoft HoloLens and other VR headsets, wearables and computers are placed to change how we are educated.

Food and Agriculture - Data collection, modelling and forecasting will have a greater role in these industries as they

aim to be more competitive through efficiency and meeting the demands of their markets.

Health - The Sunshine Coast University Hospital and the surrounding health precinct will rely on IT to store and manage patient records and hospital information. E-health will provide many opportunities for IT professionals to design, execute and maintain IT-based technologies.

Tourism - Data collection and newer methods of advertising, entertaining and attracting visitors to the Sunshine Coast will also provide opportunities for the IT sector.

Further Information

Study Sunshine Coast promotes the region as the ultimate destination for education and provides students with everything they need to know about studying on the Sunshine Coast. From educational facilities to the best places to eat (and save your dollars), Study Sunshine Coast is your go-to student guide, 24/7!

For more information go to
www.studysunshinecoast.com.au.