

From the Head of Careers



Many students are currently contemplating their future pathways – visits to *Open Days* and subject selections continue to elicit wonderful conversations and questions.

One of the most important things to keep in mind is that 'change is constant'.

We continue to be told that jobs and careers in the future are going to require resilience and the ability to embrace change.

But alongside this is the necessity to realise and accept that there are many paths to achieve personal success and sometimes the easiest and quickest way there, is not necessarily the most rewarding; it is not the 'end of the world' to make a choice that is different from the one originally planned.

Having the tenacity to re-group and ask more questions from those around can help clarify just exactly what it is you want to do and the best way to actually get there for you. 'Same size fits' no longer exists for all students planning their post Year 12 paths – job/university/TAFE/gap year, nothing is forever anymore.

Our students can select one option for now, knowing that this is just a first step on the ladder of their working life – and where it will take them is anyone's guess!

One important element when planning future goals, is to be open to ideas and learn from experiences encountered along the way even if they are not what was originally planned!

Mrs Deb Cumming
Head of Careers



OPEN DAY DATES

Saturday 19 August

- Macquarie University, Sydney, <http://bit.ly/1tOcYSh>
- University of Newcastle, <http://bit.ly/2uCdKJi>
- University of Wollongong, <http://bit.ly/2qGxjdl>

Sunday 20 August

- Deakin University, Geelong Campuses, <http://bit.ly/1N0i0kr>
- The University of Melbourne, <http://bit.ly/1LUTq30>
- Monash University, Parkville, <http://bit.ly/2aVcXJc>
- Victoria University, <http://bit.ly/2uwcMd3>
- Melbourne Polytechnic, <http://bit.ly/2venKFR>
- Box Hill Institute, Lilydale, <http://bit.ly/2vHo2s4>
- Footscray City Films, <http://bit.ly/1eL37HN>

Saturday 26 August

- Australian Catholic University, Canberra, <http://bit.ly/2qLXb7d>
- Australian National University, Canberra, <http://bit.ly/2p3nmWc>
- University of Canberra, <http://bit.ly/2favDZ7>
- Australian Defence Force Academy, Canberra, <http://bit.ly/2w2Qsga>
- University of Sydney, <http://bit.ly/2hZRB22>
- University of Technology Sydney, <http://bit.ly/1Dwieuu>



OPEN DAY DATES

Sunday 27 August

- Deakin University, Burwood Campus, <http://bit.ly/1N0i0kr>
- La Trobe University, Bendigo, <http://bit.ly/1BGrG35>
- Australian Catholic University, Ballarat, <http://bit.ly/2qLXb7d>
- Federation University, Ballarat, Berwick, Gippsland, <http://bit.ly/2vB80Ns>
- Western Sydney University, <http://bit.ly/2rKQsPI>
- The Hotel School Melbourne, <http://bit.ly/2hYEOGI>
- Box Hill Institute, Box Hill, <http://bit.ly/2vHo2s4>

FOCUS ON CAREERS OF THE FUTURE

By the time you graduate from a degree or an apprenticeship, there will be many new jobs that have not even been invented yet.

Technology expansion is rapid and who knows what jobs will be advertised in ten years' time, let alone fifty years' time?

According to a La Trobe University video featuring their Bachelor of Arts degree, by 2030 two billion jobs will be obsolete, <http://bit.ly/1MBqTWO>

They will be replaced by ones that don't exist yet. The video also suggests you will have approximately ten careers in your lifetime.

This doesn't mean changing employers ten times, this means different occupations. So, you may start out as a builder and then move on to teaching and then to nursing.

FOCUS ON CAREERS OF THE FUTURE

The message of the video is that you must be able to **adapt as the world changes**. You will need to continually work on developing your personal skills such as communication, team work and problem solving.

You will also need to commit to lifelong learning to have up to date skills and to be competitive in the job market. So, you may complete a university degree, then a TAFE qualification, then short courses, then a graduate university course and then more short courses.

There is no right or wrong way of doing things, but you need to be flexible and adaptable when it comes to change, because if there is one thing you can be 100 per cent sure of, there will be lots of it.

Amy Zuckerman is a journalist. Amy developed futuristic job advertisements for several technology careers, including:

- Personal virtual-presence agent
- Automotive hybrid and fuel-cell-vehicle research engineer
- Exobiologist to study alien life-forms
- Senior Biocomputing engineer
- Digital matchmaker
- Gene diagnostician

Read the advertisements here, <http://bit.ly/1RlxuMa>



If you think they sound far fetched, just remember that it was not so long ago that Facebook didn't exist, we couldn't access the internet via our phone, and Bluetooth and cloud computing did not exist.

We now have courses that focus on:

- Global security and terrorism
- Genetic counselling
- Geomatics
- Human interface technology
- Renewable and 'green' energies
- iPhone and iPad app development
- Social analytics and data science

FOCUS ON CAREERS OF THE FUTURE

Apprenticeship, TAFE and university courses will evolve and develop as technology and our society evolves. The future is very bright and the world is certainly your oyster!

The Canadian Scholarship Trust Plan and foresight strategists recently came up with descriptions for jobs that may exist in 2030. Apart from jobs that have not been invented yet, they have predicted what jobs may be like for occupations such as teaching, plumbing and more, <http://careers2030.cst.org/jobs/>

Interesting job titles include:

- Nostalgist
- Telesurgeon
- Rewilder
- Simplicity expert
- End of life therapist

Futurist Morris Miselowski predicts that by 2050, 60 per cent of people will be doing jobs that do not currently exist. He predicts we could be working in jobs such as:

- Transhumanist designer/engineer
- Nano medic
- Memory augmentation surgeon
- Ethics lawyer
- Weather controller
- Spaceport traffic control

He believes that many jobs will focus on technology and the human body, improving health and extending human life, <http://bit.ly/RN7wip>

Whilst many of these jobs focus on science and technology, all jobs will be affected and will either become obsolete or undergo significant changes.

Whilst in school, it is crucial that you engage in your studies and keep an open mind about the future. What you aim to be doing in even five years, may not be what you will actually be doing.

Just remember the mantra 'change is constant' and access your allies to assist you to navigate through your career.

FOCUS ON CAREERS OF THE FUTURE

According to the Foundation for Young Australians the world of work will look vastly different to the world of work you currently experience. Robotics, automation, artificial intelligence, working remotely and increase in digital work...many things will change, even within the next ten years.

According to their recent New Work Smarts report, you can expect the following to occur by 2030:

- Automation and globalisation will change what we do in every job.
- Within the next ten years, many jobs will no longer exist.
- Teenagers can expect to work for an average of seventeen employers over their lifetime across five different careers.
- Workers will spend 100 per cent more time solving problems, 30 per cent more time learning and 77 per cent more time using STEM skills (Science, Technology, Math, Engineering) than the same jobs demand now.
- Workers will spend more time getting value out of technology and use more digital skills (for example updating websites).
- Workers will be more flexible and independent in the workplace.
- With globalisation, more workers will collaborate with people around the world.
- Workers will spend less time on routine and manual tasks due to automation and more time focused on people, solving strategic problems and thinking creatively.

You can download the report at this link, <http://bit.ly/2uE1V2e>



CHOOSING THE RIGHT PATH FOR YOU

Did you know?

- Between 20 and 30 per cent of first year students drop out of or change their university course.
- About 50 per cent of trainees drop out of their apprenticeship/traineeship.

Do not become a statistic, make sure you do not just fall into a course or job. You still have plenty of time to make the right decisions and put in the groundwork.

You will be making the wrong career choice if you base your decision-making solely on any of the following:

It looks cool on TV (For example: Boston Legal, Suits, CSI, Criminal Minds). This is NOT reality. People do not walk around crime scenes wearing the latest fashions, or work in labs with their hair out. Nor do they receive crime scene test results overnight. If you want to watch a good program, watch an Australian reality series like:

- Border Security, <https://yhoo.it/2uGn1fn>
- Recruits, <http://bit.ly/2uUTyh3>
- Testing Teachers, <http://bit.ly/2uGmien>
- Or read autobiographies of people working in the industry you are interested in.

Your parents expect you to do it. This is a tricky one. You want to study history, but your parents expect you to study law, medicine or dentistry because in their eyes it is 'more respectable', 'earns more money', or simply it is just an expectation in your family that you will study a certain course. Following your parents' guidance will make them happy, but considering you will probably work until you are seventy years old and will be an independent adult, it is important that you are happy and fulfilled in your life.

The job pays a lot of money. We know occupations like dentistry, law and mathematics pay well. But would you want to sit through four years of law if your heart is not in it and you didn't enjoy things like researching, debating, reading and analysing? And would you want to commit years of study to becoming a dentist or surgeon through taking subject after subject in sciences when your real passion is humanities?

CHOOSING THE RIGHT PATH FOR YOU

Your parents, siblings, second cousin's neighbour does it. Sure, your Auntie likes accounting, but how do you know you will?

If you want to follow the path that will lead you to a satisfying career, there are a few things to think about.

You don't know what you don't know: There is a world of opportunity out there with an enormous range of career options. There are jobs that will suit you that have not even been invented yet!

How would you know that you would like to study biomedical engineering if you have only studied physics and mathematical methods at school? How would you know that you would love anthropology if you have only studied sociology at school?

Network: Do work experience. Worried about missing school? Go for one or two days, you do not have to go for a whole week. You will not be able to build up a realistic picture of what an occupation is like by just reading a brochure.

Be flexible and ready for change: You will probably change your career direction several times throughout your lifetime and you will work for different companies. You may also change your course or apprenticeship, drop out of study, work for a while, go back to study, drop out again, travel, pick up some TAFE study, work in different jobs...you do not know what lies ahead in your future but be prepared to be flexible and resourceful.

Participate in experience days, open days, career events organised by your school: One small thing may spark a new interest, or affirm current career interests.

Use YouTube: Sounds simple, but YouTube is a fantastic tool for researching courses and occupations. Just search 'Careers in Australia' and you will be able to listen to people working in the occupation you are interested in.

Access your allies: For many people of your generation, it is completely normal to not have post school career goals. Most importantly, speak to the people who know you best. They will be able to advise you well and support you throughout your journey.

YEAR 12 INFORMATION

Early Entry at Australian National University:

Please be reminded that if you are eligible for the Spirit of Excellence Entrance Scheme, you will need to apply for this through the School's Recommendation Scheme (via UAC) and upload the required forms, <http://bit.ly/2wX9mRU>

Indigenous Access Scheme, The University of Melbourne: From 2018, a new Access Melbourne guarantee for Indigenous students will be offered. For guaranteed entry, applicants will need to meet the required ATAR for their desired course (listed below) and meet the course prerequisites.

Arts (Extended)	50	Science (Extended)	55
Arts	75	Science	75
Design	70	Commerce	83
Biomedicine	85		

To apply for the program:

- Apply for the course/s via the Victorian Tertiary Admissions Centre (VTAC) website by 28 September.
- Apply for Special Entry Access Scheme (SEAS) Category 1 – Personal Information and location, via your VTAC Account.

Victorian Tertiary Admissions Centre (VTAC)

course deadlines: Double check application dates for the courses you will be applying for via VTAC. Some courses require early applications – including Screenwriting, Animation, Dance, and Film and TV at the University of Melbourne (by 31 August).

Undergraduate Medicine: If you are applying for undergraduate medicine via any state-based Tertiary Admission Centre, ensure you apply for the course/s by the correct closing date. If you accidentally remove the course/s from your preference list after this date, you may not be able to re-add them again.

Some courses will require you to submit application forms direct to the university (in addition to your application via the Tertiary Admission Centre). Please ensure you have recorded all dates and completed all required paper work.

Undergraduate teaching courses in Victoria:

After you apply for courses via VTAC, you will need to complete the CASPer test, which is required for selection purposes. For information, go to this link, <https://takecasper.com/>

CAREERS IN MEDICAL RADIATION SCIENCE

Are you fascinated by the human body? Do you love science? Would you like to work in a job where you can diagnose and treat human diseases? If so, you may enjoy studying one of the following career areas:

- Radiography/Medical Imaging
- Nuclear Medicine
- Radiation Therapy
- Medical Sonography

The following information has been taken from Charles Sturt University and the University of South Australia:

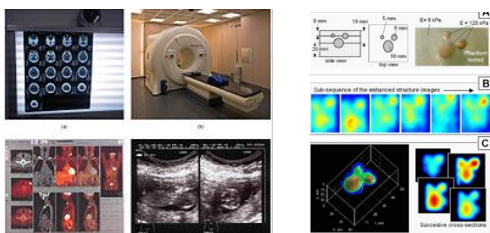
Radiography/Medical Imaging: As a radiographer, you will be concerned with producing high quality medical images of the human body for medical diagnosis through the operation of specialist equipment, such as administering ionising radiation (X-rays) or MRI pulses to the patient.

Nuclear Medicine: Involves using biological tracers (radiopharmaceuticals) for the diagnosis and treatment of various diseases. The specialisation details the administration and imaging of these radiopharmaceuticals within the patient to detect physiological abnormalities and deliver appropriate treatment.

Radiation Therapy: This involves the design and delivery of radiation treatment plans for people diagnosed with cancer and other pathological conditions.

Medical Sonography: Is the application of medical scanning which uses high frequency ultrasound waves to produce diagnostic images. Sonography assists in the detection of foetal abnormalities, vascular disease and other acute and chronic conditions.

What subjects should I study at school? Physics, Mathematical Methods, Biology and Chemistry are recommended. You should check the prerequisites for each university.



CAREERS IN MEDICAL RADIATION SCIENCE

Where can I study? The following are examples of courses you can explore:

Charles Sturt University: Bachelor of Medical Radiation Science, Wagga Wagga, NSW.

- After the completion of first year, you can choose which specialisation you want to undertake from Medical Imaging, Nuclear Medicine and Radiation Therapy, <http://bit.ly/1JCx8Vu>

Deakin University: Bachelor of Medical Imaging, Geelong.

- This is a new course and has not been accredited yet. Students will undertake 2500 clinical hours of placement, <http://bit.ly/2bH6CTJ>

Monash University: Bachelor of Radiation Sciences, Clayton.

- Students complete the three-year Bachelor Radiation Sciences, <http://bit.ly/2vHtaMx>

Monash University: Bachelor of Radiography and Medical Imaging (Honours), Clayton.

- This four-year course focuses on radiography and medical imaging, and graduates develop the skills to be registered radiographers, <http://bit.ly/1NmAMGA>

RMIT: Bachelor of Applied Science (Medical Radiations), Bundoora.

- You can enrol in one of the following three streams – medical imaging, nuclear medicine, or radiation therapy, <http://bit.ly/1GuuORt>

CQUniversity: Bachelor of Medical Sonography/ Graduate Diploma of Medical Sonography, Melbourne.

- This is the only undergraduate/graduate Medical Sonography course in Australia, <http://bit.ly/1FvexX0>

CAREERS IN MEDICAL RADIATION SCIENCE

Meet Hayley Maggs

Peter McCallum Cancer Centre

Bachelor of Science/Master of Medical Radiations (Radiation Therapy), Monash University.

Radiation therapy is a highly technical field using cutting edge technology to provide the best care possible to cancer patients. We use high energy X-rays to treat all different types of cancer in both the radical and palliative setting.

There are two areas of radiation therapy, which you get to rotate through. Firstly there is planning. This is where we determine how to deliver the radiation to the area we want while sparing all the surrounding healthy tissue and organs. We do this by positioning the patient in a special way depending on what we are going to treat and take a CT scan.

Then using computer programs we determine the different angles the radiation is going to enter the patient's body so that we treat the entire target area. Planning is very technical and new techniques are constantly being developed. It is a very exciting area!

The second part of radiation therapy is treatment. This is where we use huge machines called linear accelerators to deliver the radiation. Patients may be on treatment once or for a number of weeks depending on what we are treating.

This means that you develop real relationships with a wide variety of patients and you really feel like you are making a huge impact on their life. I love treatment for this reason (and it is also not unusual to receive chocolates and cakes from the patients on a daily basis!).

Radiation therapy is an extremely rewarding career and I am learning new things every day. You can travel all over the world working as a Radiation Therapist, from England to the Middle East.

To anyone who was thinking about pursuing a career in radiation therapy I encourage you to contact a radiation therapy centre, they are always more than happy to show people around their department and you really get to see the amazing work that we do.

Bachelor of Radiation Science, Monash University, <http://bit.ly/2vHtaMx>

CAREERS IN MEDICAL RADIATION SCIENCE

Meet Joseph Alvarez

Bachelor of Medical Radiation Science, University of South Australia.

Master of Medical Imaging Science, University of Sydney.

What was your course like? Pretty challenging and tough if you're working part-time during university. It was a four-year course, with the last two years basically working full-time at hospitals and clinics around the state. That said, you do plenty of practical work and it's really enjoyable if you'd like to work with patients and other health professionals.

What did you enjoy about your course? I enjoyed the contact hours at the hospitals and feeling like you were already working in the field. The pathology and anatomy subjects with the cadavers were also interesting.

What are you doing now in your graduate position? I am currently working as an MRI Technologist/Radiographer in Adelaide/Whyalla.

What do you enjoy about your job?

I enjoy:

- Working at a variety of hospitals and clinics.
- Plenty of interactions with patients and doctors give you a really good feeling when you help to diagnose a client's condition/injury.
- Plenty of travelling between regional and city hospitals.
- The on-call rates and travel allowances are very good, so if you're willing to work you can earn quite a bit of cash straight out of university.

The main thing I enjoy though is teaching university students, as you get quite a few during work.

Bachelor of Medical Radiation Science (Medical Imaging), University of South Australia, <http://bit.ly/2wA9bvB>

Key Websites for more information:

- Australian Society of Medical Imaging and Radiation Therapy, <http://bit.ly/2g9h5Z0>
- A Career in Radiation Oncology, <http://bit.ly/1grfEsw>

VOCATIONAL AND HIGHER EDUCATION NEWS

Huge demand for bilingual law graduates:

Top tier employers such as Westpac, and PricewaterhouseCoopers, are increasingly calling for Asia literate graduates to meet the growing demand for global talent in the Asian century. Bilingual law graduates are in short supply and as a result, are far more employable. Reports from online Australian publication 'Lawyers Weekly' suggest that, if law graduates want to gain a competitive edge over their peers, the best way to get ahead is by combining their law degree with an Asian Language. The following two courses are examples of how you can combine an Asian language with a law degree.

Australian National University: Bachelor of Asian Studies/Bachelor of Laws (Honours), <http://bit.ly/1Lhe3G0>

La Trobe University: Bachelor of Arts (majoring in a language such as Chinese or Japanese)/Bachelor of Laws, <http://bit.ly/22jxauG>

Interested in studying music? Collarts is a private College located in Melbourne. The Institute offers the following music courses:

- Entertainment Management
- Entertainment Journalism
- Music Performance
- Music Production
- Content Creation
- Audio Production

From 2018, Collarts will be offering the following double degrees:

- Bachelor of Entertainment Management/Bachelor of Music Performance
- Bachelor of Entertainment Management/Bachelor of Audio Production

These are the only degree combinations of their kind in Victoria. For information, go to <https://collarts.edu.au/>

Passionate about ICT but not sure what careers would suit you? Careers Foundation has developed an interactive 'ICT Career Wheel'. The wheel is broken up into four main career areas and contains videos, key links and career information. To access the wheel, go to <http://bit.ly/2fIU5a3>

VOCATIONAL AND HIGHER EDUCATION NEWS

What careers can engineering lead to? Refraction Media has developed three posters showcasing careers that a degree in engineering can lead to. You can download the posters at this link, <http://bit.ly/2vFadcP>

UPCOMING EVENTS

AUGUST

25, 31: Experience Days, Kangan Institute, Varied workshops, Broadmeadows (11), Health focus, Moonee Ponds (25), Creative focus, Richmond (31), <http://bit.ly/2ttNFRp>

31: Inside Monash Seminars, Monash University, Education and, Science and Careers <http://bit.ly/2ki2NYw>

12 – 20: National Science Week, www.scienceweek.net.au

23: Pathways Information Evening, Monash University, Caulfield, <http://bit.ly/2uUkn73>

28 August – 3 September: National Skills Week, <http://bit.ly/1twdlAx>

30, 31: Pharmacy online information session, Monash University, <http://bit.ly/2vebuYr>

SEPTEMBER

5: Inside Monash, Education, Monash University, <http://bit.ly/2ki2NYw>

16: Careers and Creativity Day, Monash Art, Design and Architecture Faculty, Monash University, Caulfield Campus, <http://bit.ly/2w1ITnR>