



IT CAREER INSIGHTS

IFB103 IT SYSTEMS DESIGN

Lecture & Assessment Learning Objectives

1

Understanding employment in the IT sector

2

Identifying skills required of IT graduates

3

Assessing your areas of skill development

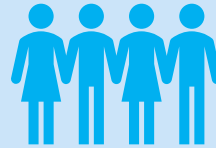
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Develop an action plan for improving your employability

Employment in the Technology Sector



The number of technology workers in Australia: over 1 million in 2024 and continue to grow to almost 1.2 million by 2027



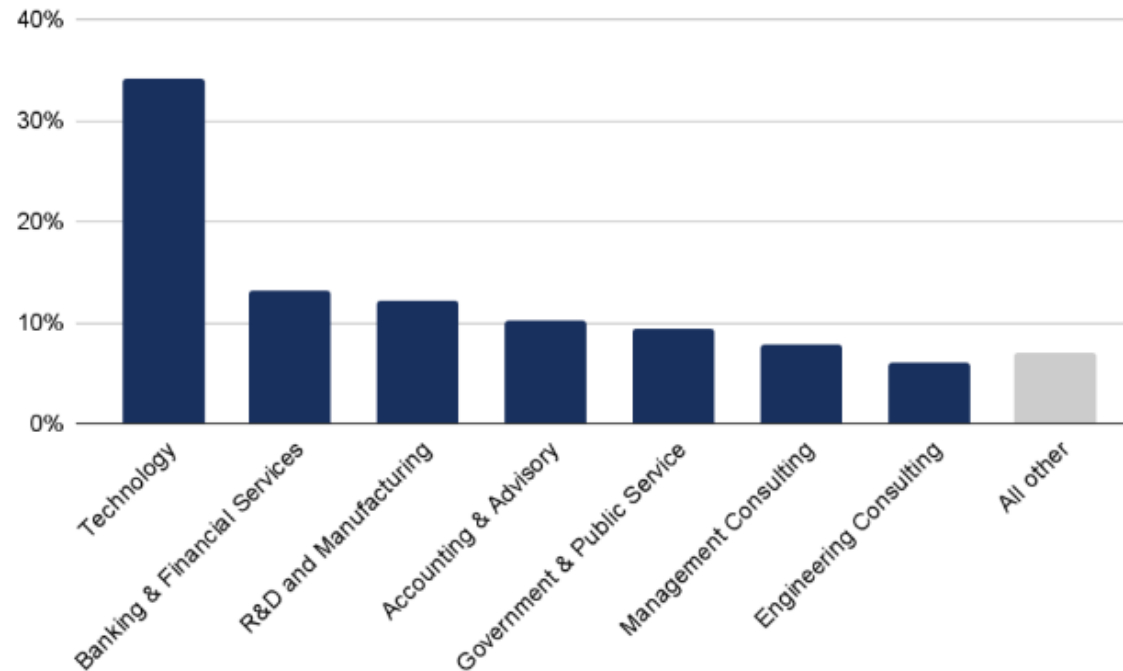
Currently, the technology workforce represents 6.7% of the overall Australian workforce



This proportion is expected to grow to 8.5% in 2027

SOURCE: https://www.deloitte.com/content/dam/assets-zone1/au/en/docs/services/economics/deloitte-economics-digital-pulse2022.pdf?icid=learn_more_content_click?icid=learn_more_content_click

Top Employment Sectors for IT Graduates

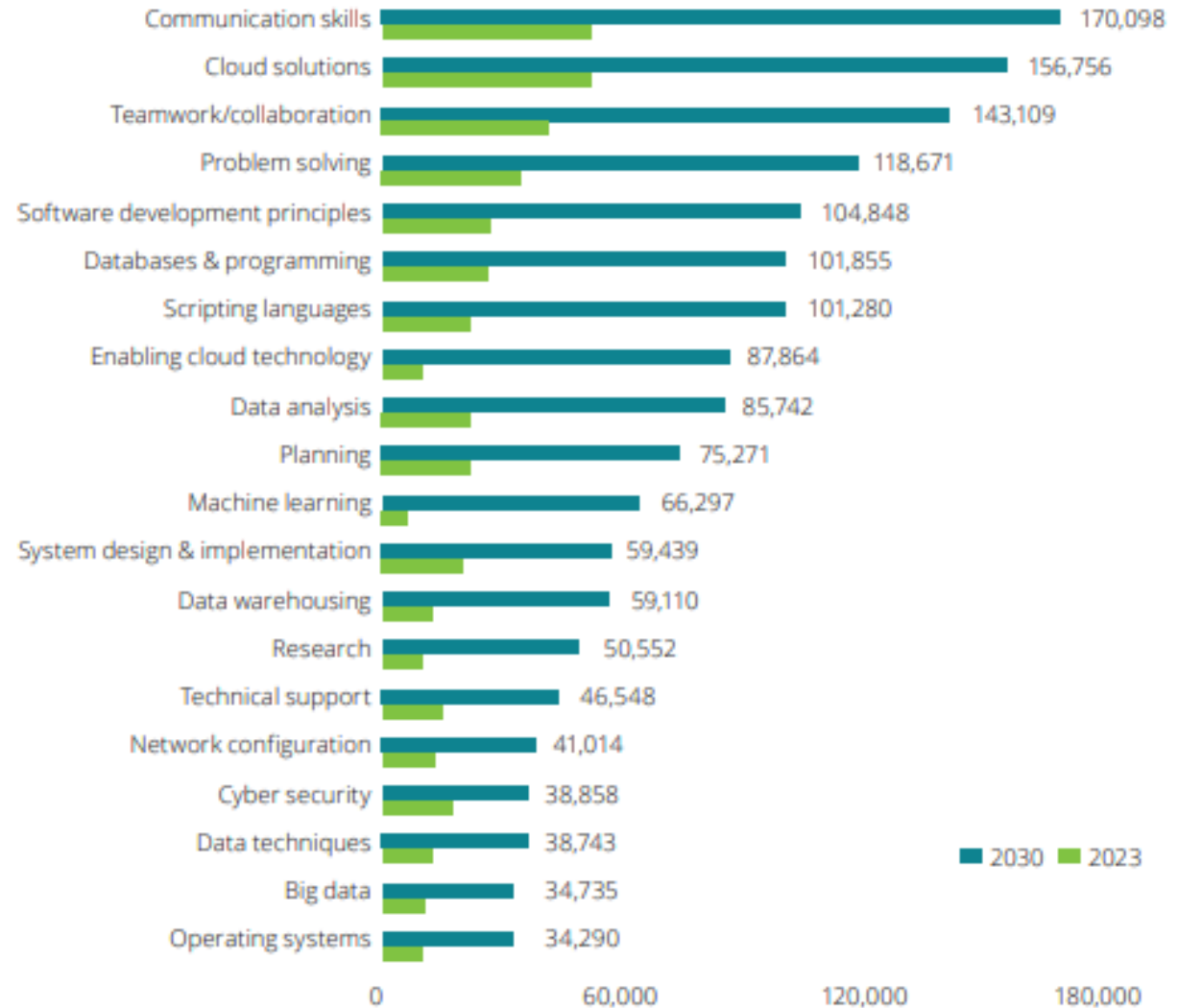


Top employment sectors for graduates with degrees in IT and computer science. Source: Prosple survey of over 800 recent IT and computer science grads from Australian universities.

SORCE: <https://au.prosple.com/career-planning/what-can-i-do-with-my-it-and-computer-science-degree>

Required 'Skills' of Graduates

Number of skills needed for critical technologies, 2023 and 2030



SOURCE: deloitte-economics-digital-pulse-2023-061123.pdf

'Skills' defined



Qualifications: Example - Bachelor of Information Technology



Technical Skills: Example - Proficient in JavaScript, understanding of UI/UX



Transferable Skills: Example - Communications skills, teamwork and problem solving

Transferable Skills



Communication Skills

- Written
- Oral
- Interpersonal (non-verbal)
- Active listening
- Ability to negotiate
- Phone etiquette
- Professional client and customer relations
- Conflict resolution



Teamwork

- Inclusive behaviour
- Cooperation
- Managing expectations
- Accepting authority
- Seeking feedback
- Allowing and supporting mistakes
- Management of personalities and self
- Advocacy on behalf of others

Transferable Skills

Time Management



- Scheduling
- Prioritising tasks
- Multi-tasking
- Meet deadlines
- Work independently
- Flexibility and adaptability

Critical Thinking



- Analytical skills
- Problem solving
- Open mindedness
- Inductive and deductive reasoning
- Research capabilities
- Creating/inventing/
experimenting

Transferable Skills

Innovation and Creativity



- Imagination
- Thoughtful risk-taking
- Natural curiosity
- Versatility
- Creative experimentation
- Innovative application of processes and technology

Values and Ethics



- Empathy
- Professional integrity
- Discernment
- Presentation
- Compliance
- Patience
- Honesty

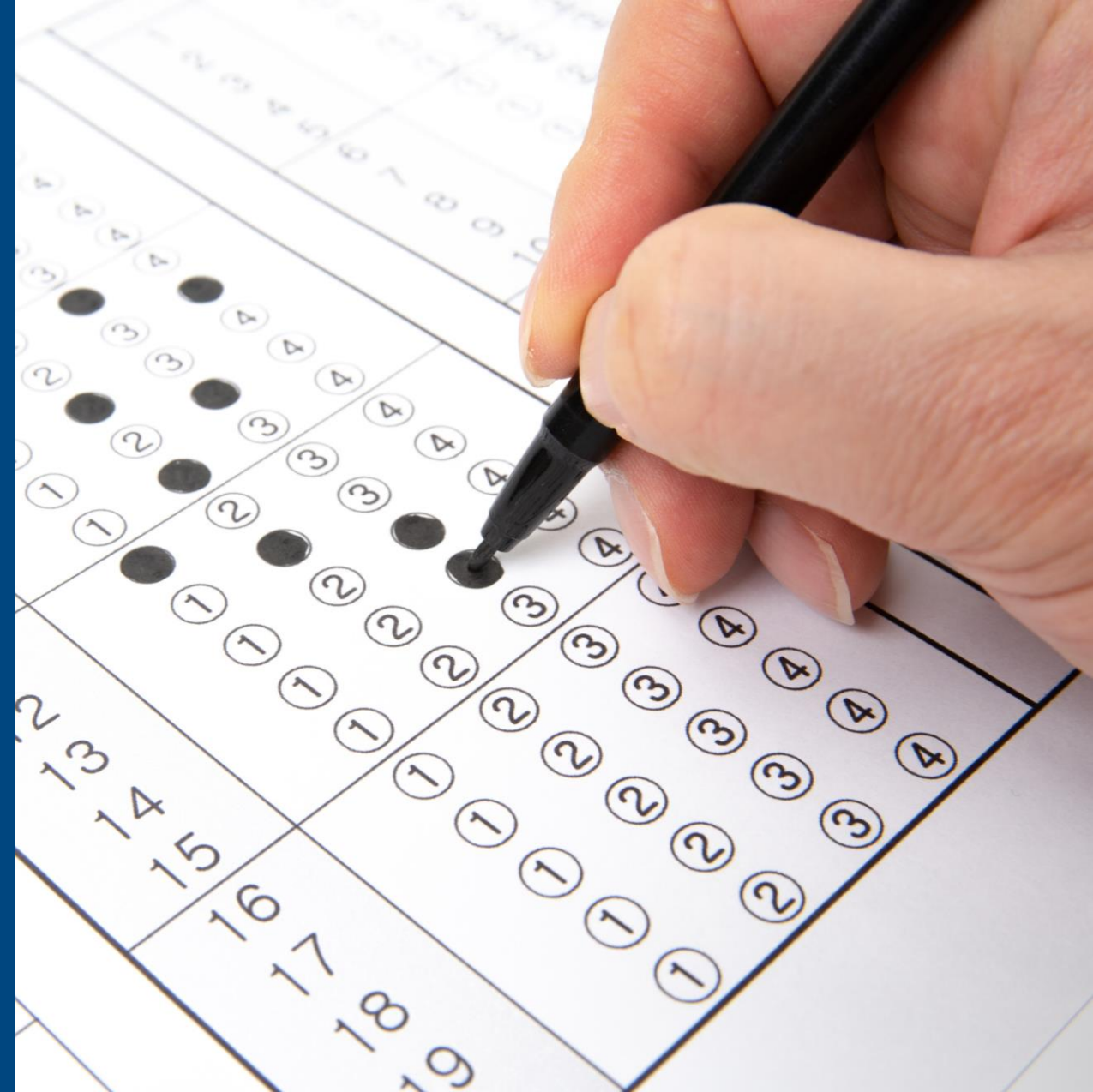
The importance of developing your whole self



- A student who has planned study and work-related experiences throughout their degree, can draw from these experiences in an interview setting.
- It gives you more life experience.
- It could be the defining factor that sets you apart from other candidates.
- It demonstrates that you are organised, motivated, and able to manage your time.
- It demonstrates your love of learning!

Student Activity

- Download the **Transferable Skills Checklist** and save it to your files.
- Read through the document and rate yourself on each descriptor.
- Pause the lecture recording while you do this.

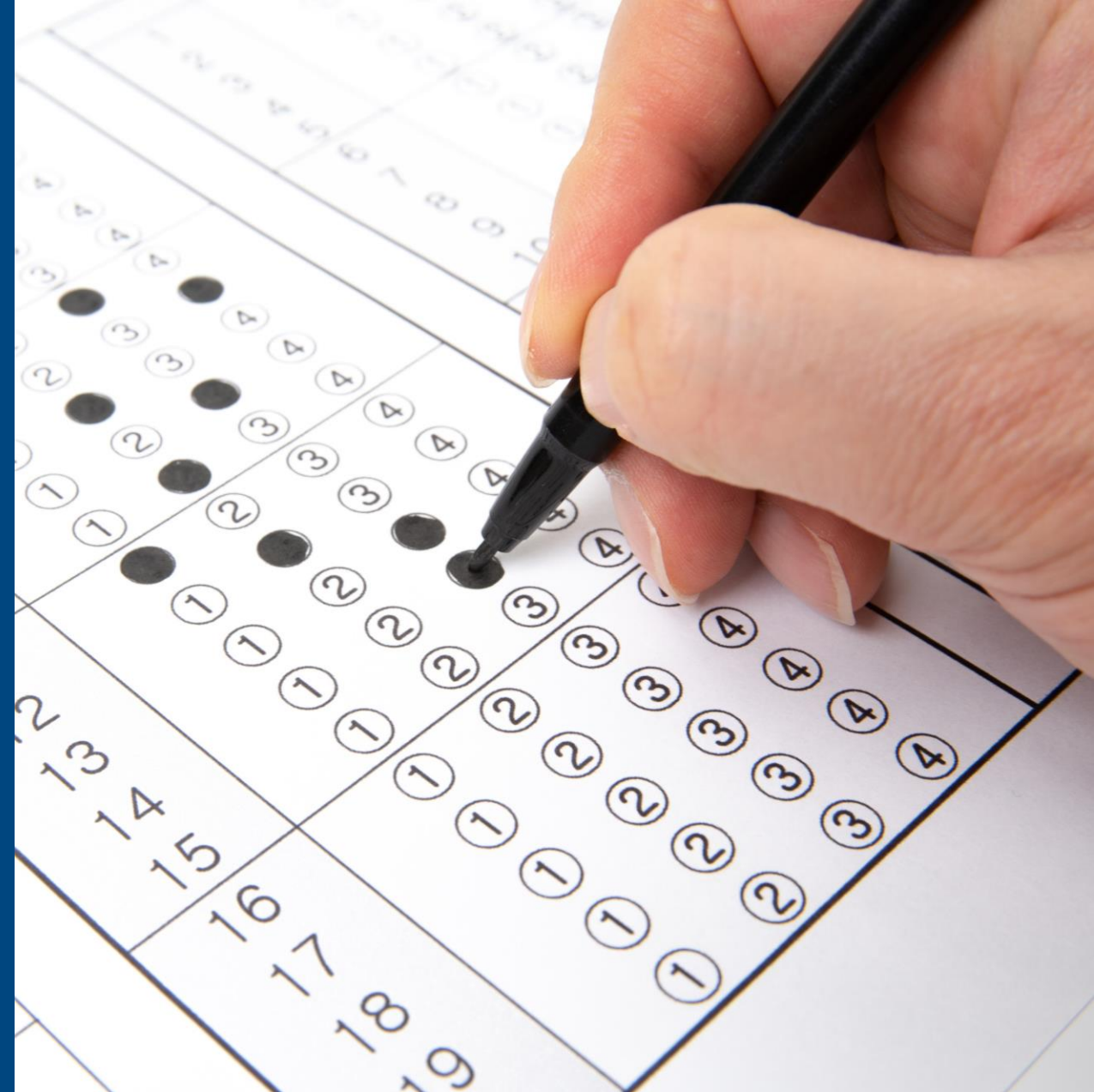


Student Activity

How did you go with the checklist?

- Did you see any patterns forming?
- Were you surprised with any of the findings?
- Did you identify any areas where you excel, and also where you require some attention to improve a skill?

Please save this checklist as you will use it as part of your IT Careers assessment.





seek IT Business Analyst

About You...

- Bachelor's Degree in Computer Science, Management Information Systems, or related field.
- Understanding of system engineering, object-oriented design, information risk and security guidelines, and architecture standards
- In depth understanding of the various software development lifecycles (e.g. Agile, Waterfall, etc.)
- Understanding of process modelling techniques (UML, BPMN), as well as other mainstream BA techniques.
- Strong analytical and problem-solving skills.
- Excellent attention to detail.
- Ability to prioritise, organise & manage competing priorities.
- Effective written and verbal communication skills.

TEQSA Provider ID PRV12079 Australian University | CRICOS No.00213J



seek IT Business Analyst

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seek

Junior Web Developer/Designer

Who You Are:

- **Eager to Learn:** You see learning as an opportunity to grow.
- **UI/UX is at Your Core:** You're ready to bring creative visions to life through your coding magic.
- **Communication Maestro:** You can articulate your ideas clearly in both written and verbal form.
- **Problem Solver:** You have a knack for tackling challenges and finding innovative solutions.
- **Hawkeye:** You can spot the small details that others might miss.

Required Skills:

- **UI/UX:** Good understanding of user interface and user experience concepts.
- **JavaScript:** Proficiency in both Browser and NodeJS.
- **CSS Proficiency:** You can bend elements to your will using the power of CSS.
- **Design tools:** Experience with Canva, Figma, Adobe Photoshop/Illustrator, or similar applications.
- **Clean Code:** You enjoy writing readable and easy-to-maintain code.

Bonus Points:

- **Git:** You've had experience with Git, GitHub, or similar.
- **Passionate:** You enjoy creating and developing in your free time.



seek Junior Web Developer/Designer

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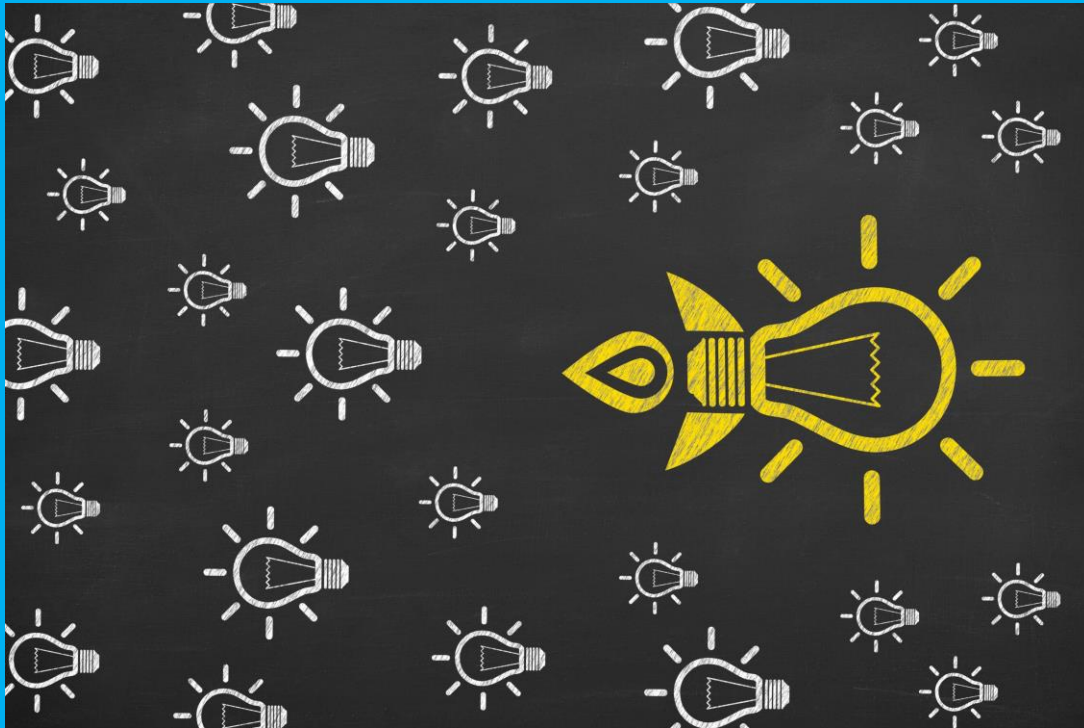
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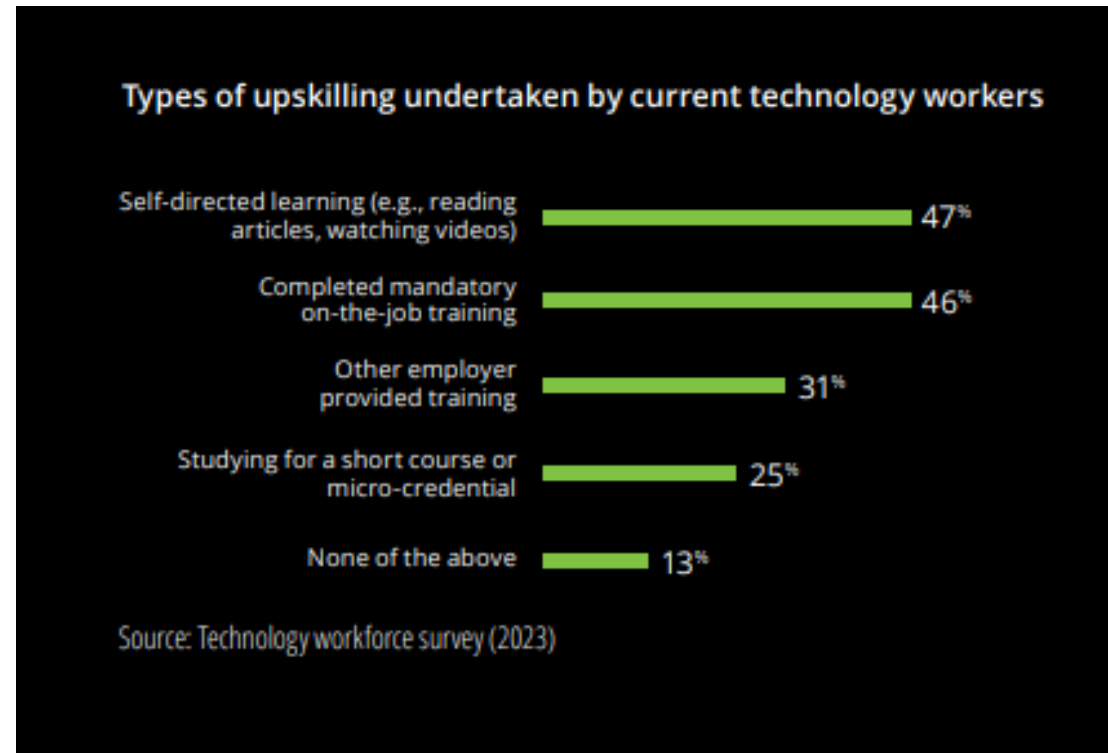
What if you want to have
your own start up?



What if you want to be a
scientist/academic
researcher?



Lifelong Learning is Essential



SOURCE: deloitte-economics-digital-pulse-2023-061123.pdf

Jobs of the Future

Bioprinting engineer

Bioprinting engineers will create viable tissue for human implants, using hardware and software associated with next generation 3D printers.

Click to expand

Automation anomaly analyst

Automation anomaly analysts will help others to understand, improve, and refine solutions generated by AI.

Biomimicry innovator

Biomimicry innovators will seek sustainable solutions to human challenges by emulating nature's engineering processes.

Chief digital augmentation officer

Chief digital augmentation officers will select the AI technology and other technological solutions (such as robotics and augmentations) for organisations.

Smart dust wrangler

Smart dust wranglers will program swarms of 'smart dust' to assist with surveillance, ecology restoration, and pollution control.

Click to expand

Integrated home technology brokers

Integrated home technology brokers will work with households to design home support solutions that include household robots, data management and privacy, body implants for family members, and home controls.

Ethical hacker

Ethical hackers will identify weaknesses in cybersecurity systems to find and fix potential security risks and fight off attackers.

SOURCE: [Browse: 100 jobs of the future](#)

How do employers choose the best candidate?

- Measure job applications against key competencies
- Rank and shortlist job applications
- Conduct interviews – candidates will be required to expand on their job application, answering questions about their experience. The employer is also cross-checking your suitability for their business.
- Candidates will be ranked – Referees contacted for desired candidate
- Job offer

Employers consider:

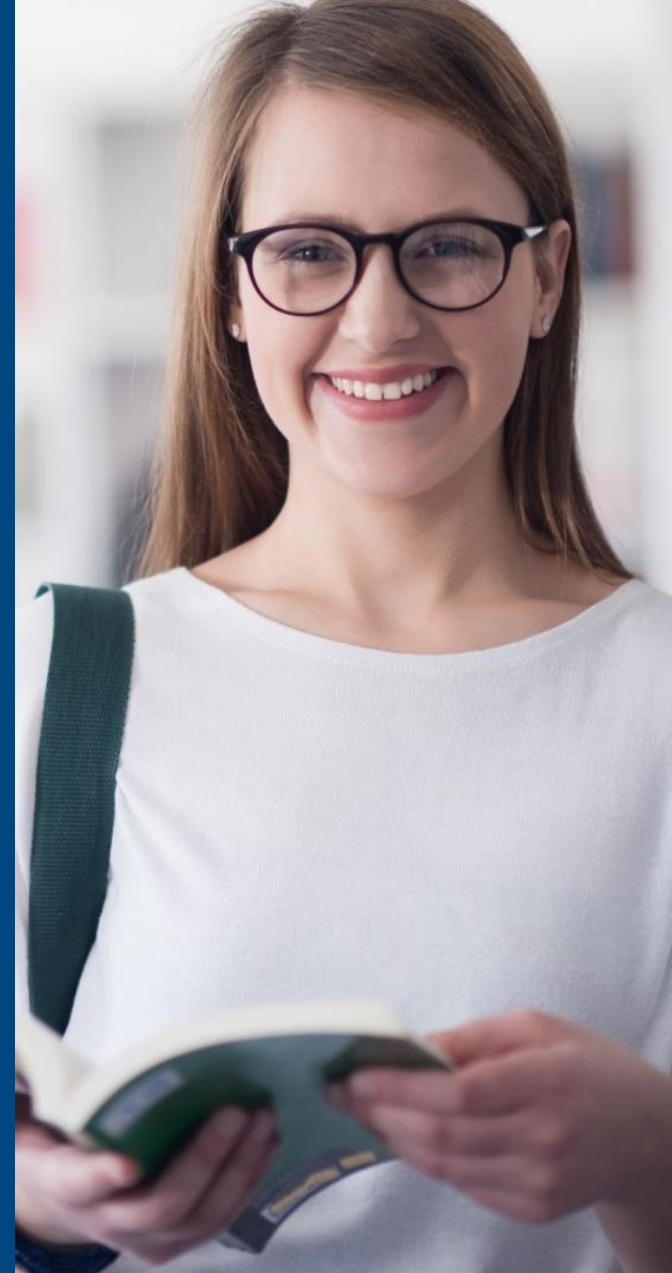
- Will this person add value to my operation?
- Are they a good fit to the existing team?
- Will they represent our business/company values and ethos with distinction?

What can you do to get a step ahead?

- Research what employers are seeking
- Audit your current capabilities
- Identify areas to work on
- Set goals to increase employability - commence this year, re-evaluate each semester/year, set new goals
- Hold yourself accountable

Additionally, gain experience and build your professional identity

- Join QUT Clubs and Societies
- Join professional associations
- Attend networking events
- Volunteer or participate in work experience or a WIL placement
- Set up a profile on LinkedIn – connect with like-minded people and people with different perspectives



Assessment Task 1: IT Career Insights

- Assessment Task Sheet and instructions found on Canvas
- A template has been provided to complete the task
- Tutors will explain the assessment task during tutorials (but the lecture and the assessment task sheet are the main sources. Use the tutorial time as an opportunity to ask your questions from your tutor.)
- Assessment is submitted via Canvas
- Deadline: 11.59pm on day that assessment is due