



University of
Southern
Queensland

Future careers in Surveying

School of Surveying & Built Environment

*Presented at the EIS Workshop Week 5052
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Acknowledgement of Country

UniSQ would like to acknowledge the traditional owners on the land on which we gather.
We would also like to pay our respect to Elders – past, present and emerging.

Introduction



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(Surveying)



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Lecturer
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Career decisions

What makes my life and work meaningful and purposeful?

Values

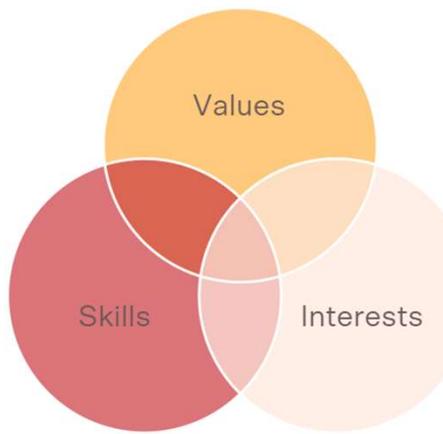
What am I naturally good at?

Skills

Interests

What classes or activities am I most interested in?

About you



I want to make an impact on the world

I want to be innovative

I want to have variety in my work day

I want to be paid well

I am good at problem solving

I am organised

I am practical and pragmatic

I have good attention to detail

I am computer smart

I enjoy sport

I enjoy health and physical education

I am interested in science

I am interested in technology

What is Surveying?

What is it?

Measurement, Mapping, Modelling,
Monitoring & Managing data
All things location & position

How does it work?

Lots of cool tech!
Field & Office



What do Surveyors do?



1. EARTH'S POSITION POINTS
Determine position points of interest on the earth's surface and turn information into digital form.



2. PICTORIAL REPRESENTATIONS
Prepare plans, maps, charts and drawings to create pictorial representations and use geospatial information systems.



3. RESEARCH AND DEVELOPMENT
Undertake R&D of surveying and photogrammetric measurement systems, cadastral systems and land information systems.



4. ADVISE SPECIALISTS
Provide advice to town planners, lawyers, architects, engineers, environmental and other scientists on the technical requirements of surveying, mapping and geospatial systems.



5. GATHER AND INTERPRET DATA
Compile and interpret data, and codes of practice. Write reports on survey measurements, land use and tenure.



6. MAKE SENSE OF GEOSPATIAL DATA
Evaluate, compile and maintain spatial information using a range of digital and graphical materials, including aerial photography, satellite imagery and historical data.



7. ANALYSE
Use geographical information systems to analyse and interpret data to design maps, graphs, plans, drawings and 3D models to create digital twins. Also involves use of AI, VR and AR.



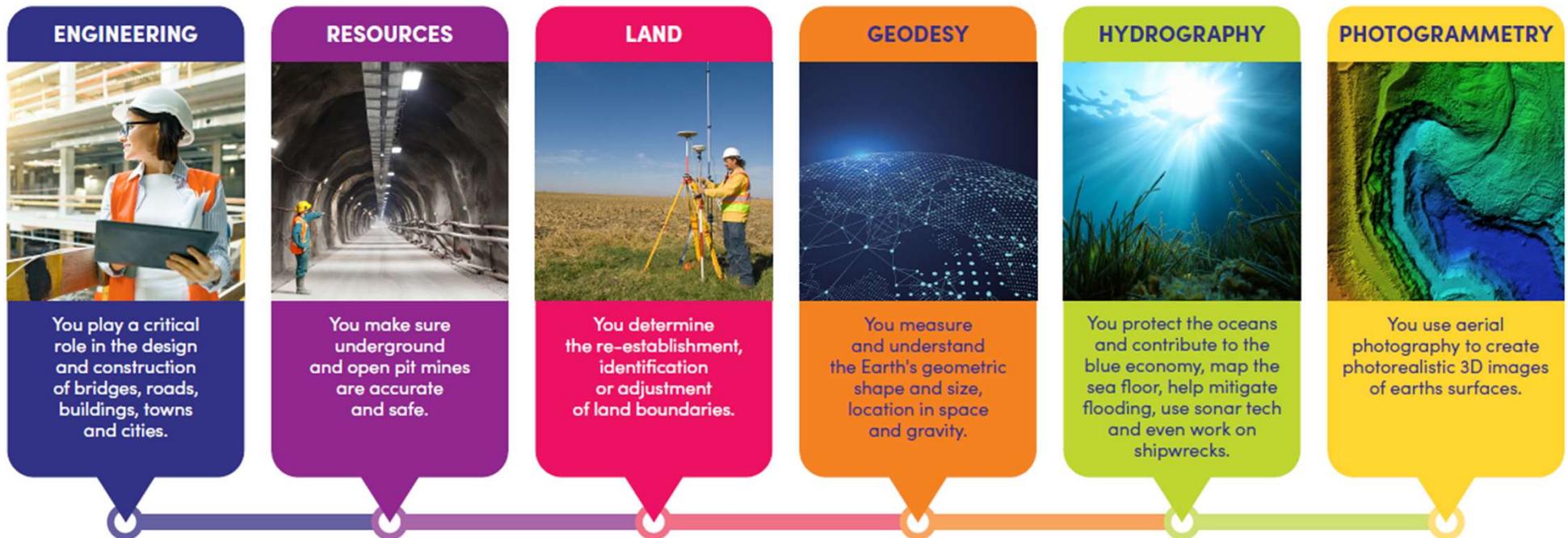
8. SHAPE FUTURE TECHNOLOGY
Develop and trial new technology and software for use in geographic information systems for many user groups such as the space industry, agri-tech and maritime.

Why are Surveyors important?

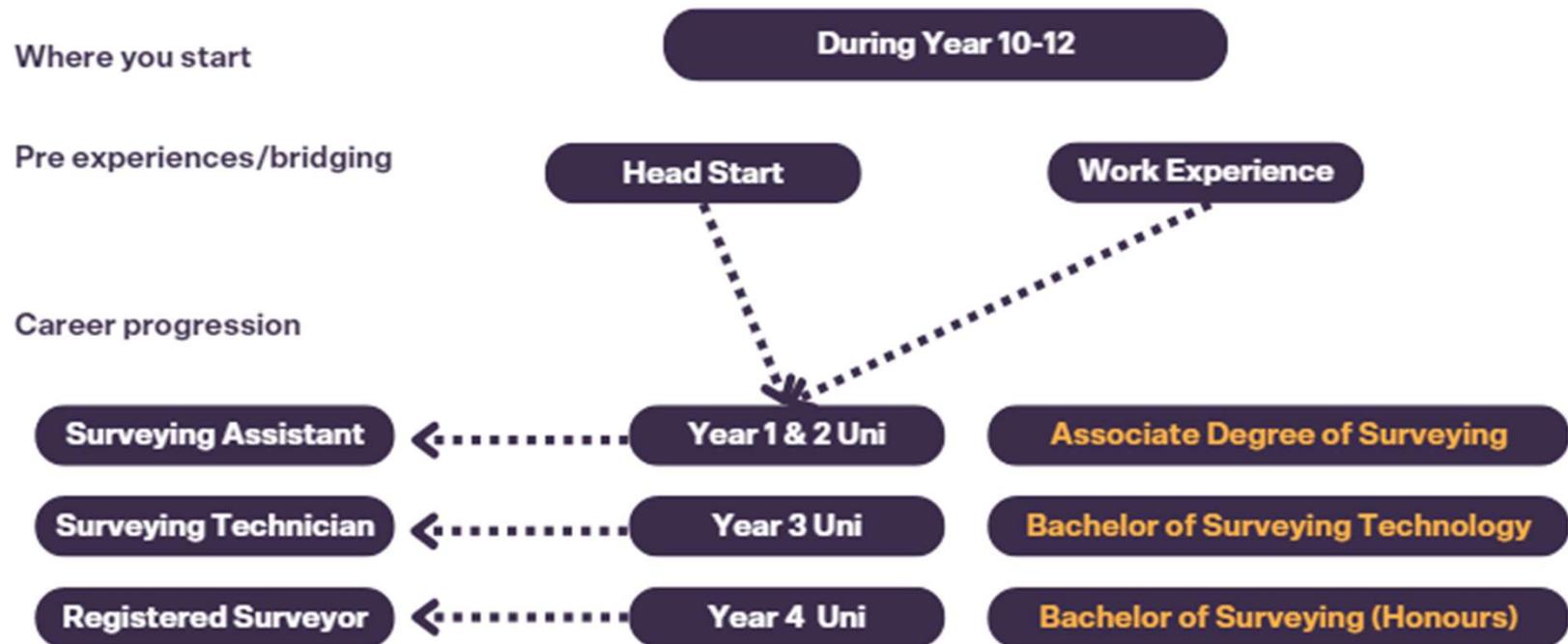
A part of a project from start to finish



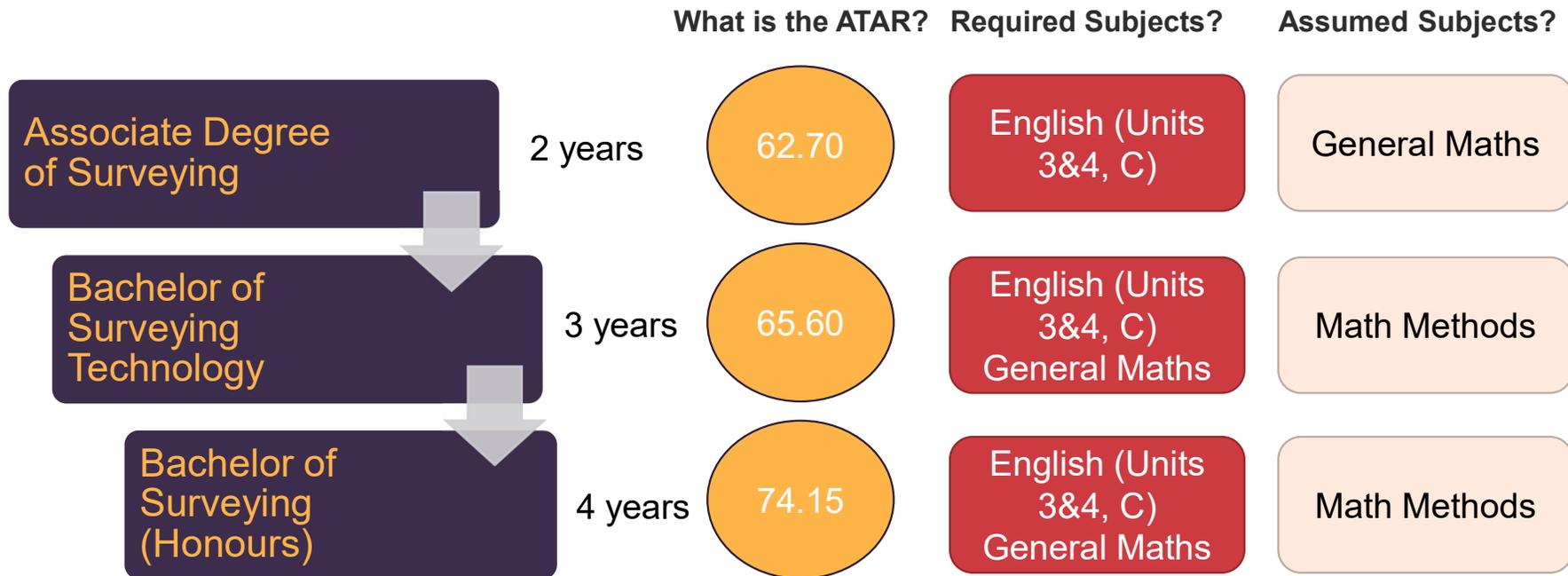
What can you specialise in Surveying?



Pathway into Surveying



Pathway into Surveying



What have our students said about surveying?

“It’s the best! 50/50 office and outdoor work. No two days are the same, it is stimulating, rewarding and challenging.”

“If you love solving problems and being outside, then give it a go.”

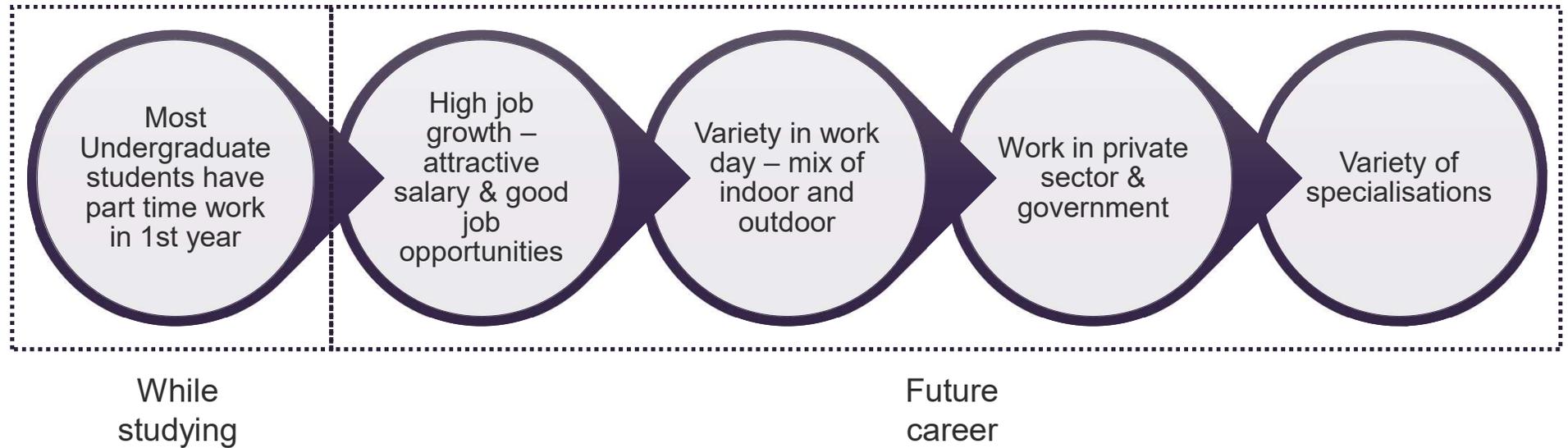
“It’s an opportunity to expand your mind and think spatially. There is so much more than just taking measurements. ”

“Surveying evolves with the current rate of technology, requires thinking and problem-solving skills.”

“It can take you many amazing locations around Australia.”

“Surveying opens your eyes to the landscape and the world we live in.”

Why choose a career in Surveying?



Next Steps?

1 Head Start courses in Surveying

Course	Trimester 1	Trimester 2	Trimester 3
GIS1402 Geographic Information Systems	Yes	-	Yes
SVY1010 Fundamental Metrology for Surveyors	-	Yes	-
SVY1110 Introduction to Global Navigation Satellite Systems	-	-	Yes

2 Work experience in Surveying

- Be connected with a local firm to complete work experience
- Please note, there is a requirement of a white card (\$89)

3 Contact us for more information

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Find out more

