SPI 2025

created on June 2025

SYDNEY POLYTECHNIC INSTITUTE
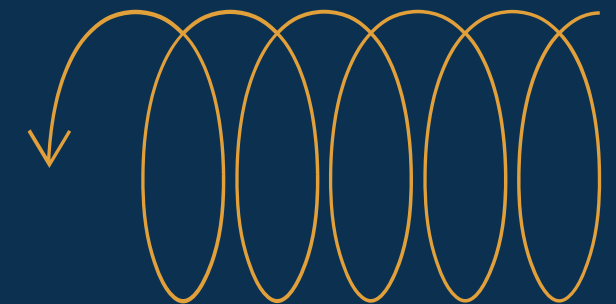
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SPI at a Glance

#1

First Private Provider: Leading the way with **Master of Data Science and AI programs.**

#1

First Private Provider: Leading the way with **Bachelor of Computing**

+90%

Students succeed on their first attempt.
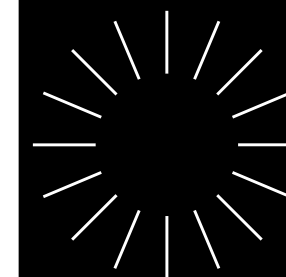
4.9

Student Satisfaction Google Rating

85%

Got their students visa from offshore

30+

Diversity of Student Nationalities

Our people

Chair of Council
The Hon Geoffery Lee

The Hon Dr Geoff Lee was appointed Minister for Corrections (2021-2023), Minister for Skills and Tertiary Education (2019-2021) and acting Minister for Sport, Multiculturalism, Seniors and Veterans (2019-2021).
He has published over 25 peer-reviewed journal and conference papers and raised significant external research grants.

Chair of Academic Board
David Lowe

Since 2012, David Lowe has been a professor of software engineering and the Deputy Dean of the Faculty of Engineering at the University of Sydney. From 2002-2008 David was the Associate Dean (Teaching & Learning) for the Faculty of Engineering, UTS and a former Director, Centre for Real-Time Information Networks from 2008 to 2012.

CEO
Dr Rob Forage

Before this role, he served as Director and CEO of UNSW Global for 10 years, establishing a robust business platform in pre-university education and assessments. He fostered a collegiate corporate culture and a personalized, high-quality learning environment for students with his executive team.
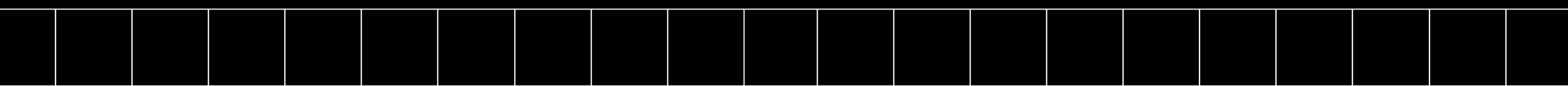
Campus and Students

→ **10mins from Central station**
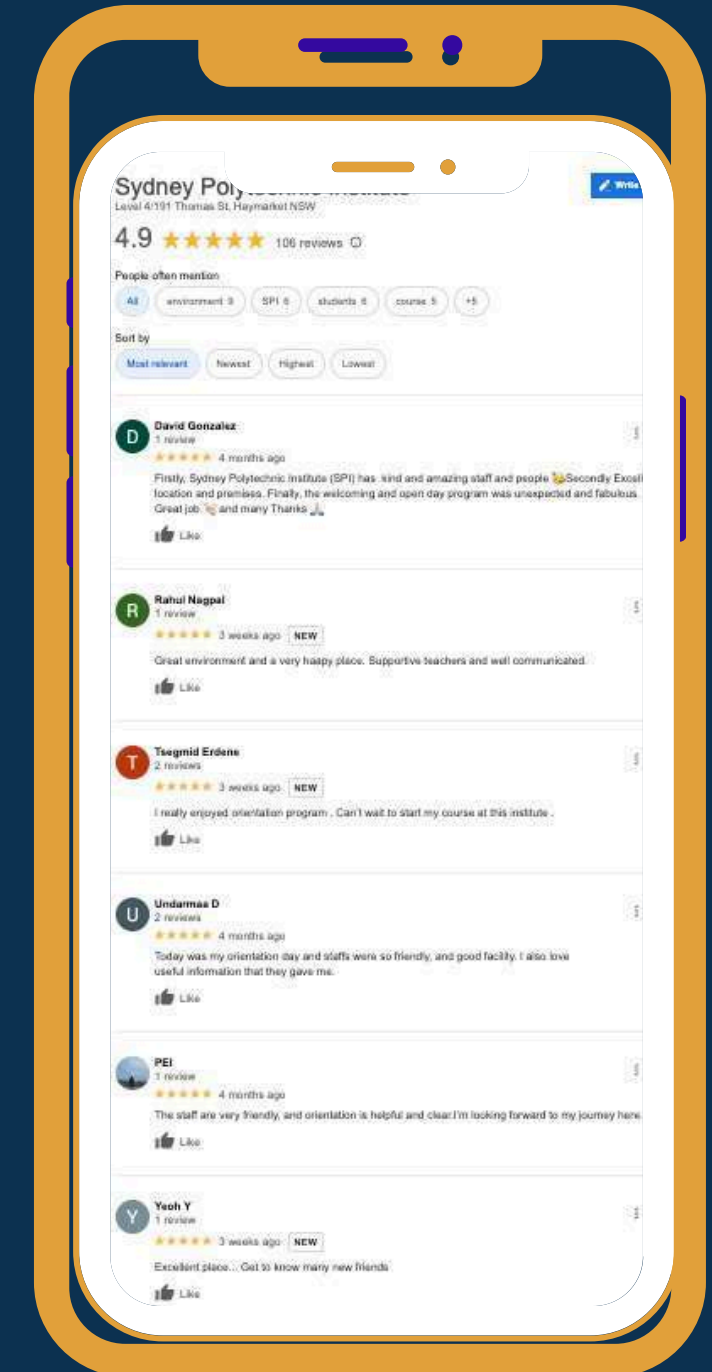
→ **Breakfast Club and Fuel Station**

We prioritize and cherish the well-being of every student. Each month, we host a free breakfast day and provide a recharge station to support everyone during final exams.

→ **4.9 Google review**

Positive feedback from students underscores its dedication to cultivating well-rounded individuals who are globally conscious.

Students are all set with SPI.

At SPI, we're not just a college;
we're a vibrant community geared up to launch you into the Aussie life and
your dazzling future career!

SYDNEY POLYTECHNIC INSTITUTE

"

GRADUATE CERTIFICATE OF DATA SCIENCE

I had been planning to study in Australia for while and decided to study data science at SPI due to my passion for data. I'm really enjoying the program at SPI because of professional teachers, friendly classmates and warm atmosphere at the school. Our teachers are very professional, kind and supportive. For example, they provide us extra consultation time, which made learning much easier for us.

My classmates are very friendly, even though we come from different countries with different ages and personalities and only known each other for a short time we support each other in the classroom and outside class in study groups.

ODGEREL BATMUNKH

Mongolian

www.spi.nsw.edu.au

SYDNEY POLYTECHNIC INSTITUTE

"

MASTER OF DATA SCIENCE

I really love that our college is just minutes' walk away from the central train station and right in the heart of Sydney's CBD. From the moment you step onto campus it's such a welcoming atmosphere and everyone is so friendly.

The administrative support is right at the front and has ensured a smooth journey for me throughout my student journey and academic endeavours. I like to spend my study time in the library as there is private study spaces and have access to valuable resources, I can even take them home to study in my own space.

It makes it feel like it's not just a college; but it's a community. I really think other prospective students would love to Join us at Sydney polytechnic Institute in the future.

HRITIKA ADHIKARI

Nepalese

www.spi.nsw.edu.au
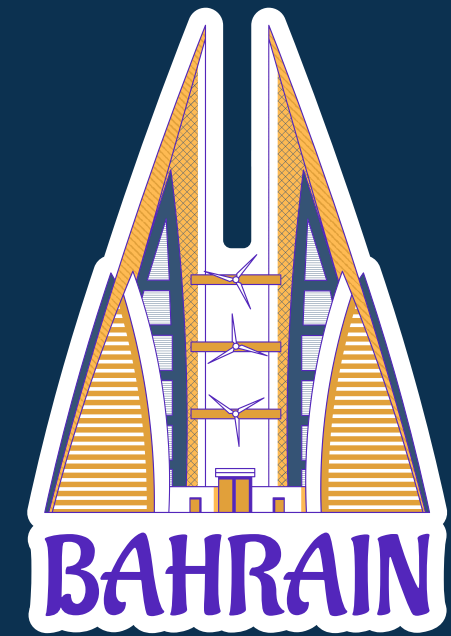
Our programs

01
Package course to Bachelor of Computing

Vocational Diploma of IT and Advanced Diploma of IT

02
Bachelor of Computing

Systems Analyst
DevOps Engineer
UX Designer
Cyber Security Specialist

03
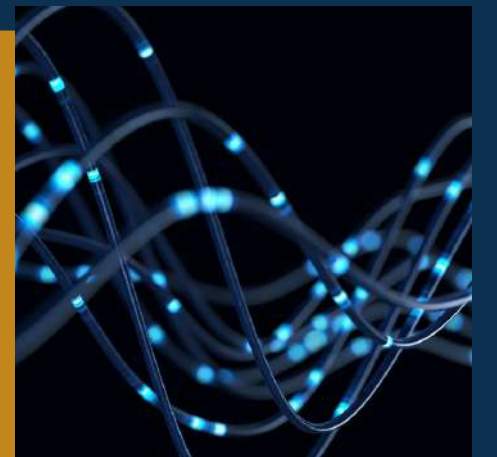Postgraduate Qualifying Program (PQP)

04
Master of Data science (AI)

05
Master of Data science

06
Studay aboard

17 weeks
34 weeks
52 weeks

01 Package program to Bachelor

Link your IT career course to a bachelor's degree and enhance your qualifications at a more affordable price!

Direct Admission to the SPI Bachelor of Computing

You can gain direct entry into the SPI Bachelor of Computing program by completing a relevant diploma from a registered vocational college.

- IELTS Requirement:** 5.5 or another equivalent score
- Tuition Fees:** Possible adjustments depending on the program
- Preparation Time:** Extended period to prepare for undergraduate courses

Credit Information:

Diploma in Information Technology:** 32 credits (8 courses)

Advanced Diploma in Information Technology:** 48 credits (12 courses)

AUSTRALASIA TECHNOLOGY INSTITUTE

Other registered training institutions

ICT50220 Diploma of Information Technology

ICT60220 Advanced Diploma in Information Technology
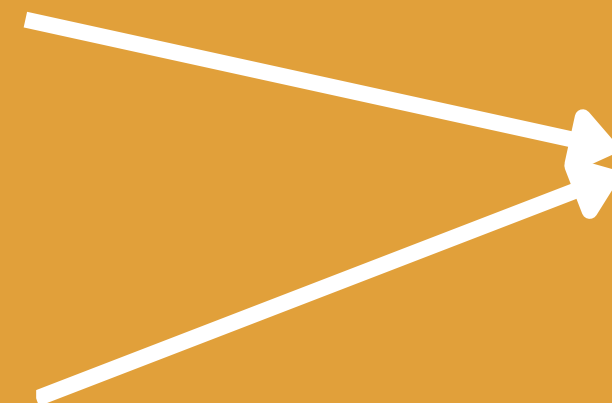
SYDNEY POLYTECHNIC INSTITUTE
PRV 14354 CRICOS 04090E

Bachelor of Computering

02 Bachelor of Computing

1. Our innovative three year program is comprised of **two** "streams" running in parallel and is designed to provide a clear pathway into an IT based profession.

2. It combines a mix of solid computing fundamentals with the development of strong professional skills through integrating theoretical knowledge with practical, real-world applications.

3. **Mock Consultancy Stream T**he Mock Consultancy stream embeds students into a simulated professional IT consulting company, where students progress through a sequence of roles from intern to junior consultant to senior consultant and carry out real-world projects
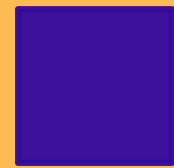
4. **Career Pathway units** are year-long and require students to complete a specified number of hours in elective modules, chosen to support the projects being undertaken in the mock consultancy and based on theirinterests and career goals.

Beginner-Friendly
Our Bachelor of Computing emphasizes practical skills for beginners, contrasting with traditional Computer Science degrees that focus on theory. You'll learn through hands-on experience relevant to today's tech industry.

50% Practical, Project-Based Learning
Students will be involved in real-world projects and gain the most up-to-date industry knowledge and practice through Mock Consultancy and Career Pathways streams, which prepare you for the demands of the tech industry.

Career-Focused with Competitive Salaries:
Our Computing course focuses on practical skills in areas such as Computer Organization and Architecture, equipping you for real-world roles in software development and IT.

Course structure

	Core Units Stream 18 x 4cp = 72cp		Career-pathway Stream 9 x 4cp = 36cp		Simulated Consultancy Stream 9 x 4cp = 36cp	
Year 1, Tri 1	COM111	COM112	COM113	4cp	COM114	4cp
Year 1, Tri 2	COM121	COM122	COM123	4cp	COM124	4cp
Year 1, Tri 3	COM131	COM132	COM133	4cp	COM134	4cp
Year 2, Tri 1	COM211	COM212	COM213	4cp	COM214	4cp
Year 2, Tri 2	COM221	COM222	COM223	4cp	COM224	4cp
Year 2, Tri 3	COM231	COM232	COM233	4cp	COM234	4cp
Year 3, Tri 1	COM311 CAP A	COM312	COM313	4cp	COM314	4cp
Year 3, Tri 3	COM321 CAP B	COM322	COM323	4cp	COM324	4cp
Year 3, Tri 3	COM331 CAP C	COM332	COM333	4cp	COM334	4cp

Trimester Study Breakdown	Contact hours per week	Private study per week
Core units	2 hours lecture + 2 hours lab/tutorial	6 hrs
Mock consultancy unit	8 hours of contact (workshop format)	2 hrs
Career Pathway unit	4 hours of contact (workshop format)	6 hrs

Course structure

| Unit Code	Unit Name	Credits	Prerequisites	Major assessment type	Total hours per week
U111	Foundational Computing Skills	4	-	Quiz and Assignment	10
U112	Mathematics for Computing	4	-	Quiz and Exam	10
U121	Programming Fundamentals	4	-	Exam	10
U122	Computer Organization and Architecture	4	-	Exam	10
U131	Object-Oriented Programming	4	-	Exam	10
U132	Data Structures and Algorithms	4	-	Exam	10
U211	Database Systems	4	-	Exam	10
U212	Software Engineering Principles	4	U121	Case study and Exam	10
U221	Statistics and Numerical Methods	4	U112	Exam	10
U222	Computer Networks	4	-	Exam	10
U231	Software Testing and Quality Assurance	4	-	Exam	10
U232	Human Computer Interaction	4	-	Exam	10
U311	Capstone Project A	4	Completed 78 cp study	Project	10
U312	Cybersecurity and Information Assurance	4	-	Programming and Exam	10
U321	Capstone Project B	4	U311	Research	10
U322	Full-stack development	4	-	Programming and Exam	10
U331	Capstone Project C	4	U321	Project and Research	10
U332	Artificial Intelligence and Machine Learning	4	-	Project	10
MC1-3	Mock Consultancy 100 Mock Consultancy 200 Mock Consultancy 300	12 cp per unit	- MC1 MC2	Project	10
CP1-3	Career Pathways 1-3	36	-	The units require completion of individual Career Pathway modules. Each of these modules will have a separate assessment that is used to determine successful completion of the module.	10

Bachelor_of_Computing_vs__Computer_Science_and_Information_Technology

Criteria	Bachelor of Computing	Computer Science	Information Technology
Practical Focus	Emphasizes practical, industry-relevant skills, integrating business processes with computing solutions. Offers exposure to current tech trends such as cloud computing, cybersecurity, and AI.	Theoretical focus on algorithms, computing theory, and complex problem-solving. Limited industry-oriented applications.	Focuses on the implementation and management of IT systems and services. More hands-on and tech support oriented.
Level of Difficulty	**Moderate.** Focuses on solving real-world business and tech problems, making it more accessible for students with practical mindsets.	**High.** Requires strong mathematical and analytical skills.	**Moderate.** More applied than Computer Science but less analytical.
Average Salary Income	AUD 90,000 - 110,000, depending on specialization and industry.	AUD 90,000 - 120,000, often in highly technical roles.	AUD 70,000 - 90,000, especially in IT support, administration, and network roles.
Market Demand	High demand in a wide range of industries, especially with the growing need for IT-business integration and digital transformation.	Strong demand in software development, data science, AI research, and other specialized computing roles.	Consistent demand for IT support, system management, and network roles, though automation is impacting some areas.
Potential Occupations	Business Analyst, Systems Analyst, IT Consultant, Data Analyst, Cloud Architect, Cybersecurity Specialist, AI Specialist,Software Developer	Software Developer, Data Scientist, AI Researcher, Systems Architect, Algorithm Engineer.	IT Support Specialist, Network Administrator, Database Administrator, IT Manager, Systems Administrator.

Broader Practical Application:

The Bachelor of Computing combines practical, industry-focused skills to connect business processes with computing technologies. Unlike Computer Science's theoretical approach or Information Technology's system management, it equips students to apply tech solutions in business, enhancing graduates' versatility across industries.
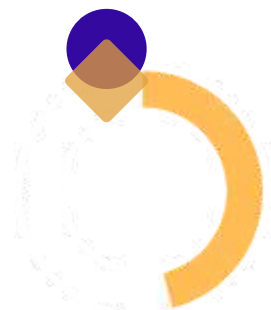
Interdisciplinary Skill Set:

Unlike more specialized degrees, the Bachelor of Computing provides an interdisciplinary skill set that combines technical know-how with business acumen. Graduates are prepared to work in a variety of roles, from technical positions like software development and data analytics, to more strategic roles such as IT consulting or systems management. This combination of skills allows students to adapt to multiple career paths and pivot within the evolving tech landscape, offering more job security and growth potential.

Growing Market Demand and Flexibility:

With the rapid digital transformation across industries, there is a high demand for professionals who can integrate business needs with computing solutions. The Bachelor of Computing equips students with skills in emerging areas such as cloud computing, cybersecurity, and data analysis, providing more flexibility in career options than the more specialized Computer Science or IT fields.

Potential skill assessment

Skill Assessment

If you have a Bachelor of Computing and want to apply for Australia's Skilled Migration Skill Assessment, typically need to go through the Australian Computer Society (ACS) for assessment. Here are some key occupations that can be assessed through ACS (for reference only; please refer to the actual requirements):

- 261111 ICT Business Analyst
- 261112 Systems Analyst
- 261311 Analyst Programmer
- 261312 Developer Programmer
- 261313 Software Engineer
- 262111 Database Administrator
- 262112 ICT Security Specialist
- 263111 Computer Network and Systems Engineer

03 Pathway Program
Postgraduate Qualifying Program (PQP)

Designed specifically for students who don't meet the direct entry requirements for SPI postgraduate study. Successful completion of the SPI PQP will gain you entry into the SPI Postgraduate program.

3 years post high school qualification equivalent to AQF 5 or 6

Postgraduate Qualifying Program (26weeks)

Graduate Diploma of Data science

Master of Data science or Master of Data science (AI)

1 — PQP100 Academic and Intercultural Communications

2 — PQP101 Research Skills for Industry & Postgraduate Study

3 — PQP102 Principles of Quantitative Analysis

4 — PQP103 Principles of Data Analytics

04 Postgraduate degrees

The <u>First and Only</u> private institute of Higher education provider accredited with

- **Master of Data Science and**

- **Master of Data Science (Artificial Intelligence)**

e Name ▼	Provider	Level	Duration (W
or of Computer Science / Master of Data Science	The University of Queensland	Masters Degree (Coursework)	
of Data Science	Edith Cowan University	Masters Degree (Coursework)	
of Data Science	Federation University Australia	Masters Degree (Coursework)	
of Data Science	Flinders University	Masters Degree (Coursework)	
of Data Science	The University of Sydney	Masters Degree (Coursework)	
of Data Science	Charles Darwin University	Masters Degree (Coursework)	
of Data Science	The University of Adelaide (Adelaide)	Masters Degree (Coursework)	
of Data Science	Sydney Polytechnic Institute	Masters Degree (Coursework)	
of Data Science	Monash University (Monash)	Masters Degree (Coursework)	
of Data Science	The University of Sydney	Masters Degree (Coursework)	
of Data Science	Western Sydney University	Masters Degree (Coursework)	
of Data Science	La Trobe University (La Trobe)	Masters Degree (Coursework)	
of Data Science	The University of Queensland	Masters Degree (Coursework)	
of Data Science	The University of Queensland	Masters Degree (Coursework)	
of Data Science	The University of Melbourne (UniMelb)	Masters Degree (Coursework)	
of Data Science	The University of Western Australia (UWA)	Masters Degree (Coursework)	
of Data Science	Royal Melbourne Institute of Technology	Masters Degree (Coursework)	
of Data Science	Charles Darwin University (CDU)	Masters Degree (Coursework)	
of Data Science	University of New England	Masters Degree (Coursework)	
of Data Science	Swinburne University of Technology	Masters Degree (Coursework)	

of 2 (from 34 rows): 1 2

Postgraduate Programs

Graduate Certificate in Data science (GC)
34 wks

Graduate Diploma in Data science (GD)
52 wks

Master of Data Science (MDS)-104wks

Master of Data Science in Artificial intelligence (MDS(AI) -104wks

Postgraduate

Masters

Grad Dip

Grad Cert
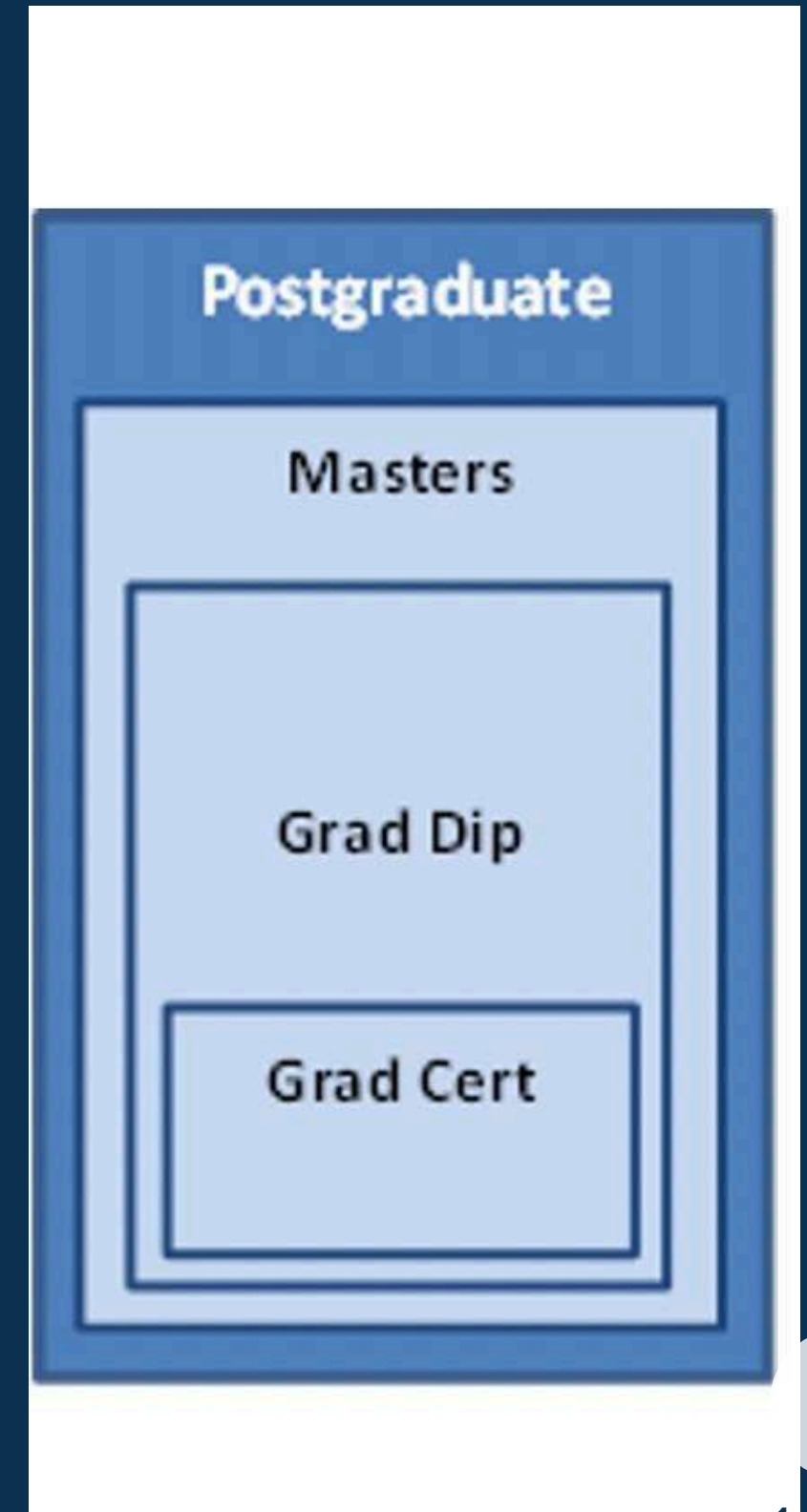
Course Structures

TOTAL 14 SUBJECTS WITH 96 CREDITS

Master of Data science
- Data science
  - 9 Core units
    - 601 Programming Foundations for DS
    - 602 Mathematical foundations
    - 603 Data science Methodology
    - 604 Database system and infrastructure
    - 605 Machine Learning and Data Mining
    - 606 Data science Research and Ethics
    - 607 Artificial Intelligence and Innovation
    - 608 Professional Practice
    - 650/651 Data science capstone / Industrial Experience
  - 3 Specialisations
  - 2 Electives
- Artificial intelligence
  - 9 core units (As above)
  - 3 Specialisations
  - 2 Electives

Graduate certificate (601, 602, 603, 604)

15

Study Pattern

Trimesters
1st yr - 8 subjects
2nd yr – 6 subjects

Intakes: March, July, Oct

In Class Study hours:
9 hours per week

50% credits are non-final exam based

14 subjects in total

Please refer to the final course outline once the student enrolled

This is only a reference, Please refer to the final course outline once the student enrolled

Relevant Occupations

261111 ICT Business Analyst	MDS602	MDS603	MDS605	MDS608	MDS609	MDS610	MDS650/MDS651	
261112 Systems Analyst	MDS601	MDS604	MDS608	MDS607	MDS615	MDS650/MDS651		
261212 Web Developer	MDS601	MDS604	MDS608	MDS615	MDS622	MDS650/MDS651		
261311 Analyst Programmer	MDS601	MDS602	MDS603	MDS604	MDS610	MDS608	MDS612	MDS650/MDS651
261312 Developer Programmer	MDS601	MDS604	MDS608	MDS615	MDS622	MDS650/MDS651		
261313 Software Engineer	MDS601	MDS604	MDS608	MDS615	MDS622	MDS650/MDS651		
261399 Software and Applications Programmers	MDS601	MDS604	MDS608	MDS615	MDS622	MDS650/MDS651		
262111 Database Administrator	MDS601	MDS603	MDS604	MDS608	MDS612	MDS615	MDS650/MDS651	

Our units cover the core knowledge of the relevant occupation list in order to prepare our students for the demands of the job market.   We also emphasize the development of practical skills that are essential for success in the workplace, such as programming, database management, and project management. Our goal is to provide our students with the knowledge and skills they need to excel in their careers and become leaders in their field.

The Australian Computer Society is the peak body for the technology industry in Australia. SPI data science courses have been designed to align with ACS guidelines and SPI engaged with ACS and gained their input as we developed our courses.

It is ultimately up to the Australian Computer Society (ACS) to evaluate each individual's qualifications and work experience to determine their suitability for skilled migration or employment in Australia.

Master of Data science vs_Master of IT

Criteria	Master of Data Science	Master of IT
Practical Focus	Focuses on data analysis,machine learning, artificial intelligence, and big data technologies. Highly practical with applications in various industries like finance, healthcare, and marketing.	Covers a wide range of IT systems, networks, cybersecurity, and software development. More generalized and system-oriented compared to Data Science.
Level of Difficulty	High. Requires strong analytical, mathematical, and programming skills.	Moderate to High. Requires good technical and management skills, but less math-intensive compared to Data Science.
Average Salary Income	**AUD 110,000 - 140,000,** especially in industries leveraging big data and AI.	**AUD 90,000 - 120,000,** especially in IT management, systems, and network roles.
Market Demand	Very high demand due to the increasing reliance on data-driven decision making in businesses across all sectors.	Consistent demand for IT professionals in system administration, cybersecurity, and network management.
Future Relevance	**Extremely relevant, with continuous growth in data generation, AI, and machine learning applications.**	**Relevant but faces automation challenges** in traditional IT roles. Growth areas in cybersecurity and cloud technologies.
Potential Occupations	Data Scientist, Machine Learning Engineer, AI Specialist, Business Intelligence Analyst, Data Analyst, Data Engineer.	IT Manager, Network Administrator, System Analyst, Cybersecurity Specialist, Software Engineer,IT Consultant.

Wide Range of Applications:

Data Science is a versatile field with applications in multiple sectors, allowing graduates to work in various industries and roles, from healthcare analytics to business intelligence, offering more career flexibility.
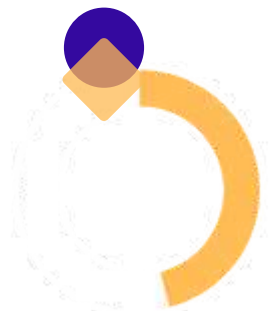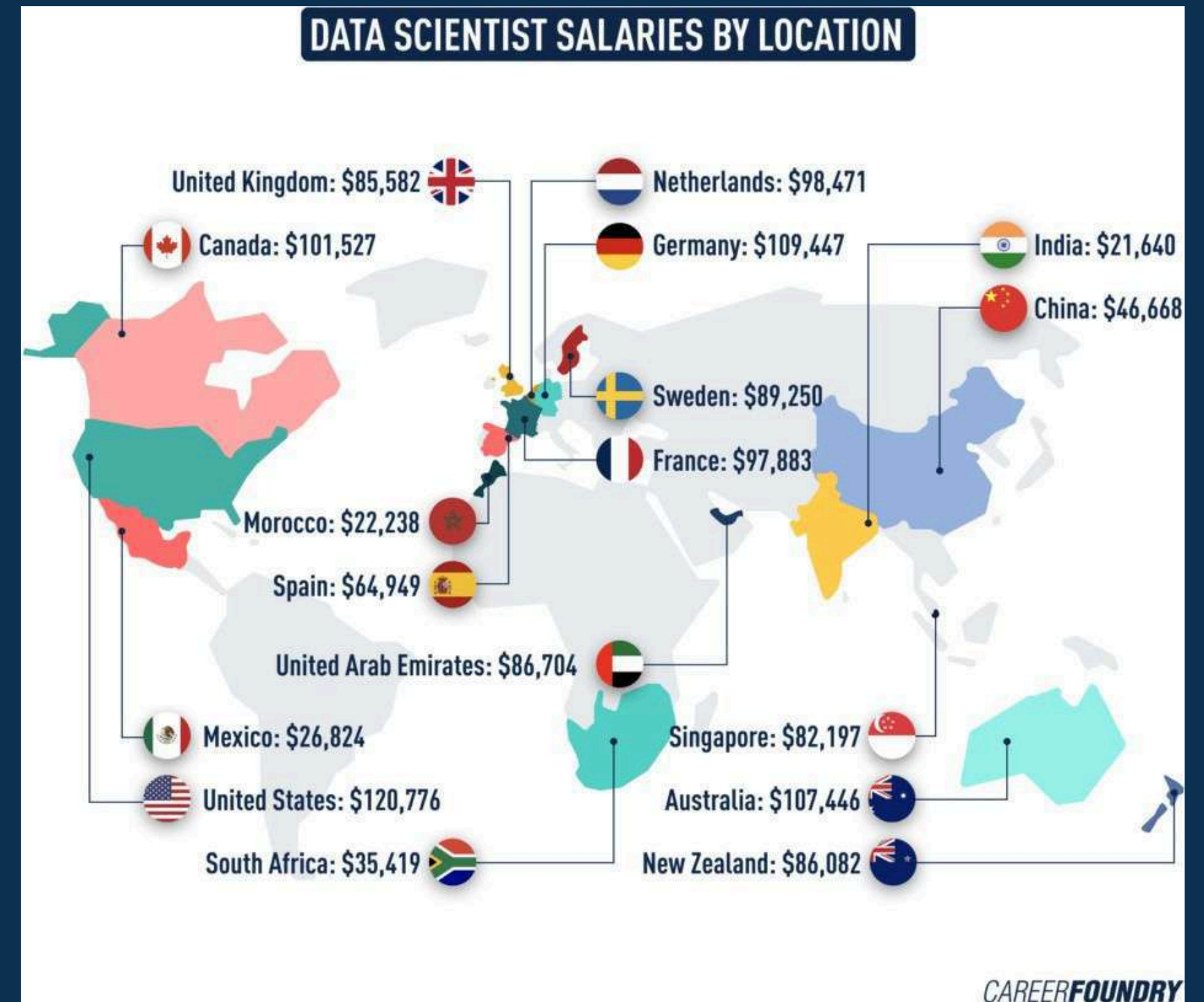
High Earning Potential

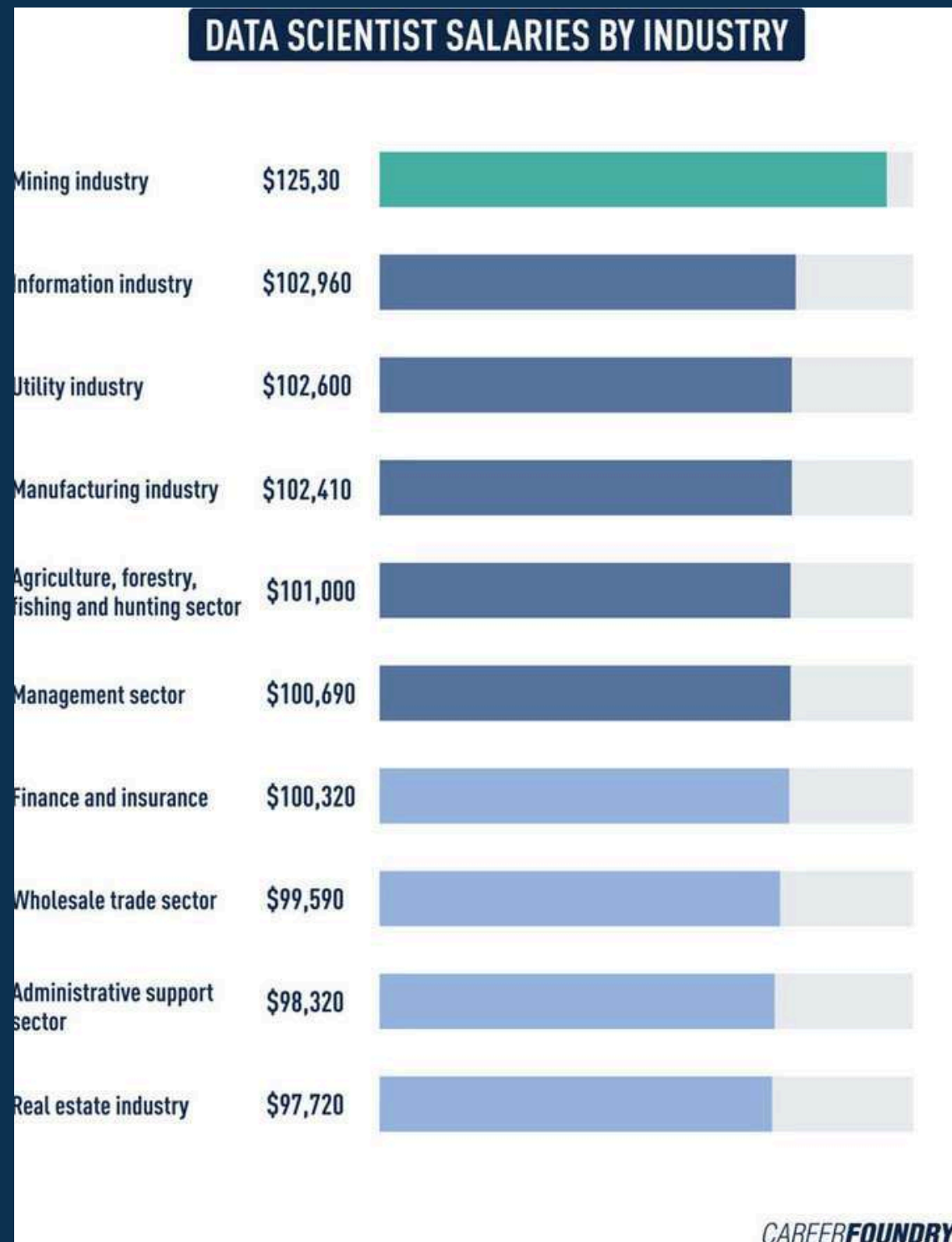Graduates in Data Science typically command high salaries, with average earnings ranging from AUD 110,000 to 140,000, particularly in industries focused on big data and AI, making this a financially attractive career.

Future-Proof Career:

Data Science is at the forefront of technological innovation. With the exponential growth of data and AI technologies, Data Scientists will remain indispensable in the future job market.

Career Opportunities

DATA SCIENTIST SALARIES BY INDUSTRY

Industry	Salary
Mining industry	$125,30
Information industry	$102,960
Utility industry	$102,600
Manufacturing industry	$102,410
Agriculture, forestry, fishing and hunting sector	$101,000
Management sector	$100,690
Finance and insurance	$100,320
Wholesale trade sector	$99,590
Administrative support sector	$98,320
Real estate industry	$97,720

DATA SCIENTIST SALARIES BY LOCATION

United Kingdom: $85,582
Netherlands: $98,471
Canada: $101,527
Germany: $109,447
India: $21,640
China: $46,668
Sweden: $89,250
France: $97,883
Morocco: $22,238
Spain: $64,949
United Arab Emirates: $86,704
Mexico: $26,824
Singapore: $82,197
United States: $120,776
Australia: $107,446
South Africa: $35,419
New Zealand: $86,082

Admission Requirements

Programs	Academic	English
Bachelor of Computing	- Secondary Education: Completion of a secondary education qualification equivalent to Australian Year 12 is required. - Students will be expected to have studied mathematics at a level equivalent to NSW HSC 2U Maths.	- IELTS Academic 6.5 overall and a minimum result of 6.0 in each subtest; or - PTE result of 58 overall and a minimum result of 50 in each subtest; or - TOEFL IBT result of 79 overall including a minimum result of 21 in Writing, 13 in Reading, 12 in Listening and 18 in Speaking; or - TOEFL PBT result of 550 overall including a minimum result of 4.5 in Writing; or - Other equivalent
Postgraduate Qualifying Program	- Completion of a three-year post-secondary higher education qualification equivalent to AQF 5 or 6 (secondary higher education that is equivalent to completion of Australian Year 12) or higher. - Alternatively, other qualifications with the combination of post-secondary education and relevant work or other experience, assessed on a case-by-case basis.	- IELTS Academic - A minimum result of 6.0 overall and a minimum result of 5.5 in each subtest; or - PTE Academic - A minimum result of 50 overall and a minimum result of 42 in each subtest; or - TOEFL IBT score - A minimum result of 60 overall including a minimum result of 18 in Writing, 8 in Reading, 7 in Listening and Speaking; or - TOEFL PBT score - A minimum result of 530 overall including a minimum result of 4.0 in Writing; or - Other equivalent

Academic Credit and Recognition of Prior Learning (RPL)

- Students may obtain academic credit for up to 50% of units of study in a specified course, provided that the units of study under consideration are deemed as equivalent to the SPI curriculum.
An initial RPL assessment will be conducted by the Academic Dean based on the completed RPL Application Form, and the outcome of this assessment is articulated in the Offer Letter to the student.
  - If international students apply for RPL after their admission to SPI then this may have an impact on the duration specified in their Confirmation of Enrolment resulting in the need to be adjusted in accordance with TEQSA, CRICOS and any other relevant requirements.

Program	Academic	English
Graduate Certificate in Data Science	▪ Completion of an AQF Level 7 qualification such as an approved three-year undergraduate degree which includes some study areas requiring qualitative analysis; or ▪ Other qualifications with the combination of education and relevant work experience will be considered on a case-by-case basis ▪ Student who completes PQP 103 and Completion of AQF level 7 will be considered	▪ IELTS Academic 6.5 overall and a minimum result of 6.0 in each subtest; or ▪ PTE result of 58 overall and a minimum result of 50 in each subtest; or ▪ TOEFL IBT result of 79 overall including a minimum result of 21 in Writing, 13 in Reading, 12 in Listening and 18 in Speaking; or ▪ TOEFL PBT result of 550 overall including a minimum result of 4.5 in Writing; or ▪ Other equivalent
Graduate Diploma of Data science	▪ Same as above, PLUS ▪ Completion of the SPI Graduate Certificate in Data Science. ▪ Units completed in the Graduate Certificate can be credited to the Graduate Diploma	
Master of Data science	▪ Completion of an AQF Level 7 qualification such as an approved three-year undergraduate degree which includes some study areas requiring qualitative reasoning and analysis with a GPA of 4.5 or above; or ▪ Completion of the SPI Graduate Diploma of Data Science or Completion of the SPI Graduate Certificate in Data Science. Units completed in the Graduate Diploma / Graduate Certificate may be able to be credited to the Masters degree in accordance with the Academic Credit and Recognition of Prior Learning Policy. ▪ Other qualifications with the combination of education and relevant work or other experience will be considered on a case-by-case basis.	
Master of Data science(AI)	**Same as above**	

05 Study aboard Program

Program duration: 3 months, 8 months, or 12 months.

We welcome:

🎯 Students: individuals seeking to enhance their data science and AI skills
🎯 Newcomers: individuals aspiring to enter the AI or data industry
🎯 Entrepreneurs: individuals aiming to create AI products or commercial applications

Teaching Mode: In-person instruction + hands-on projects + industry collaborations Location: Central Sydney, Australia

Tuition cost:
3 months, AUD 4,000
8 months, AUD 8,000
12 months AUD $12,000

Entry criteria:

- Fundamental understanding of mathematics and programming.
- English proficiency of IELTS 6.5 or its equivalent (students with a lower level of English proficiency may first enroll in an intensive English course)

Core knowledge areas:

Python, R, data structures, API · Linear algebra, probability, statistics, time series · Data governance, feature engineering, AI deployment · Operating systems, network security, cloud computing ·optimization algorithms, graph theory

Applications of Artificial Intelligence:

·Development of machine learning, data extraction, optimization of AI applications · Prediction through AI, optimization of neural networks, analysis of data

Transforming Data into Wisdom Studying AI provides many opportunities in today's AI-focused world.

- **More affordable**
- **More opportunities**
- **Greater time efficiency**

Welcome

SYDNEY POLYTECHNIC INSTITUTE

ACT TODAY TO SHAPE YOUR FUTURE

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