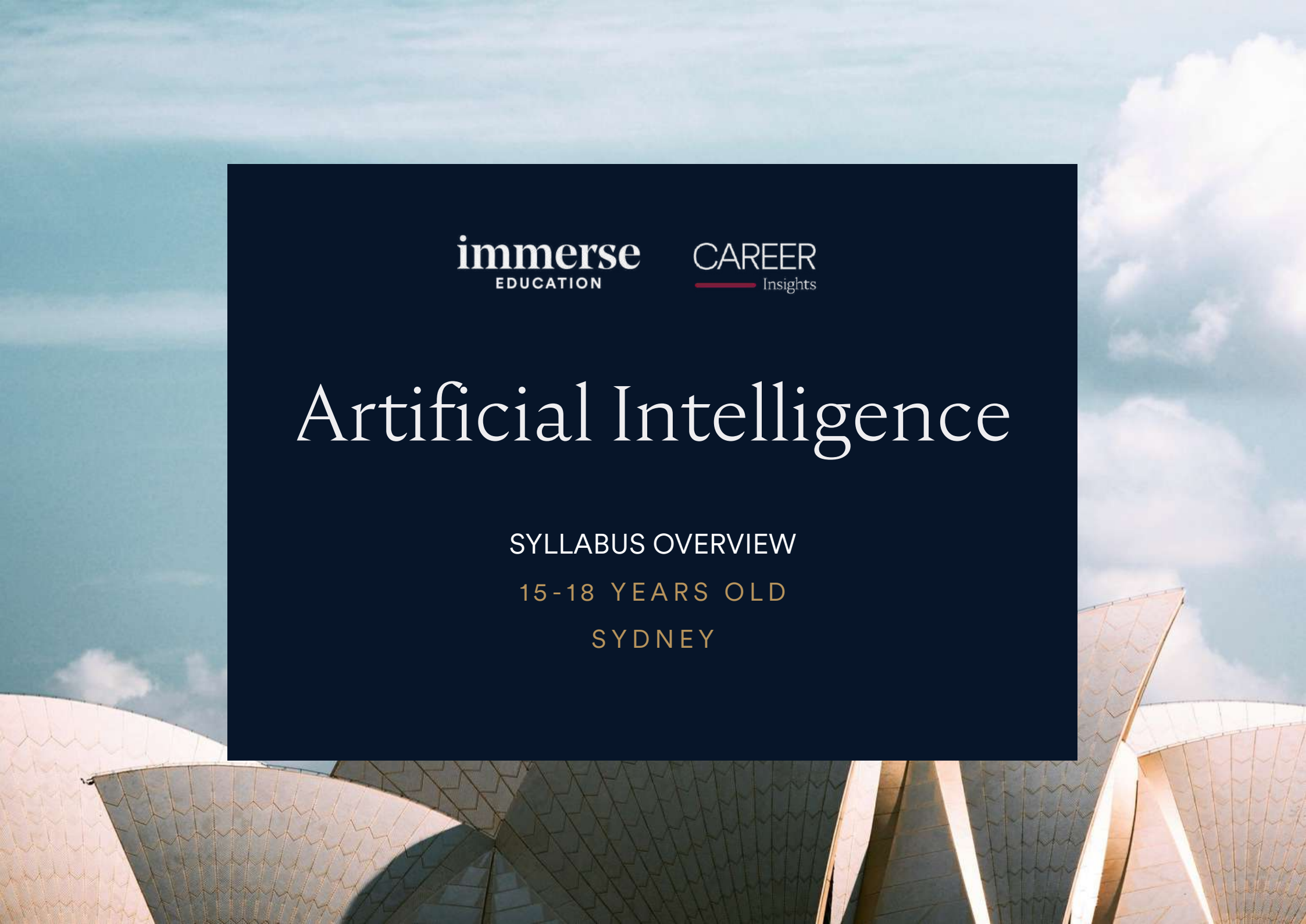




immerse
EDUCATION

CAREER
— Insights

Artificial Intelligence

SYLLABUS OVERVIEW

15-18 YEARS OLD

SYDNEY

About the Programme

Immerse Education is an award-winning provider of summer experiences offering academic and career-focused programmes for high school students worldwide, in such locations as Boston, Cambridge, London, New York, Oxford, San Francisco, Singapore, Sydney, Tokyo, and Toronto. Our programmes aim to deliver engaging, academically challenging content within a university-style classroom environment.

The Career Insights programmes bring together industry professionals in a unique learning model grounded in project-based learning. Students gain valuable insight into what it is like to study their chosen subject at an advanced level and apply their skills in real-world contexts through interactive sessions, career skills workshops, and industry visits.



PLEASE NOTE:

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SYDNEY



15-18



CAREER INSIGHTS

Explore Future Careers

Sydney is rapidly establishing itself as a hub for research, innovation, and emerging technologies. This programme introduces you to the fundamentals of AI while showing how it is applied across industries, from environmental science and healthcare to financial services and media. You will see how careers are evolving alongside AI and develop the skills that will help you navigate a world where technology and work are closely connected.



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SYDNEY



15-18



CAREER INSIGHTS



Project Based Sessions

Sessions are designed to give you practical experience. You will work with data, experiment with real tasks, and explore how algorithms underpin the digital systems used every day. This hands-on approach builds both technical knowledge and critical thinking, skills that are increasingly valuable for students considering careers in technology-driven sectors.

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Industry Visits

Sydney's ecosystem of research centres, universities, and technology firms makes it an ideal location to explore AI in action. Industry visits provide a chance to see how organisations are applying AI to areas such as environmental monitoring, smart cities, and health research. Meeting professionals in these spaces will broaden your understanding of how AI careers develop in different sectors.



Why Get Career Ready?

Every young person needs high-quality career guidance to make informed decisions about their future. Relevant and informative career guidance is necessary for social mobility. Despite the need for quality careers guidance for young people, it is one of the most lacking areas in schools around the world. In 2013, Gatsby introduced the Gatsby Benchmarks which offer useful insight into effective academic models that prepare students for future careers. Immerse Education's Career Insights programme is dedicated to delivering programmes that meet the eight important pillars that make up the Gatsby Benchmarks as outlined below.



A stable careers programme



Encounters with employers and employees



Learning from career and labour market information



Experiences of workplaces



Addressing the needs of each student



Encounters with further and higher education



Linking curriculum learning to careers



Personal guidance



Aim of the Artificial Intelligence Programme

The Sydney Artificial Intelligence Career Insights programme is designed to show how artificial intelligence shapes both local and global industries. You will gain an understanding of how AI drives innovation, explore ethical and societal implications, and see how careers in technology evolve as AI becomes more advanced.

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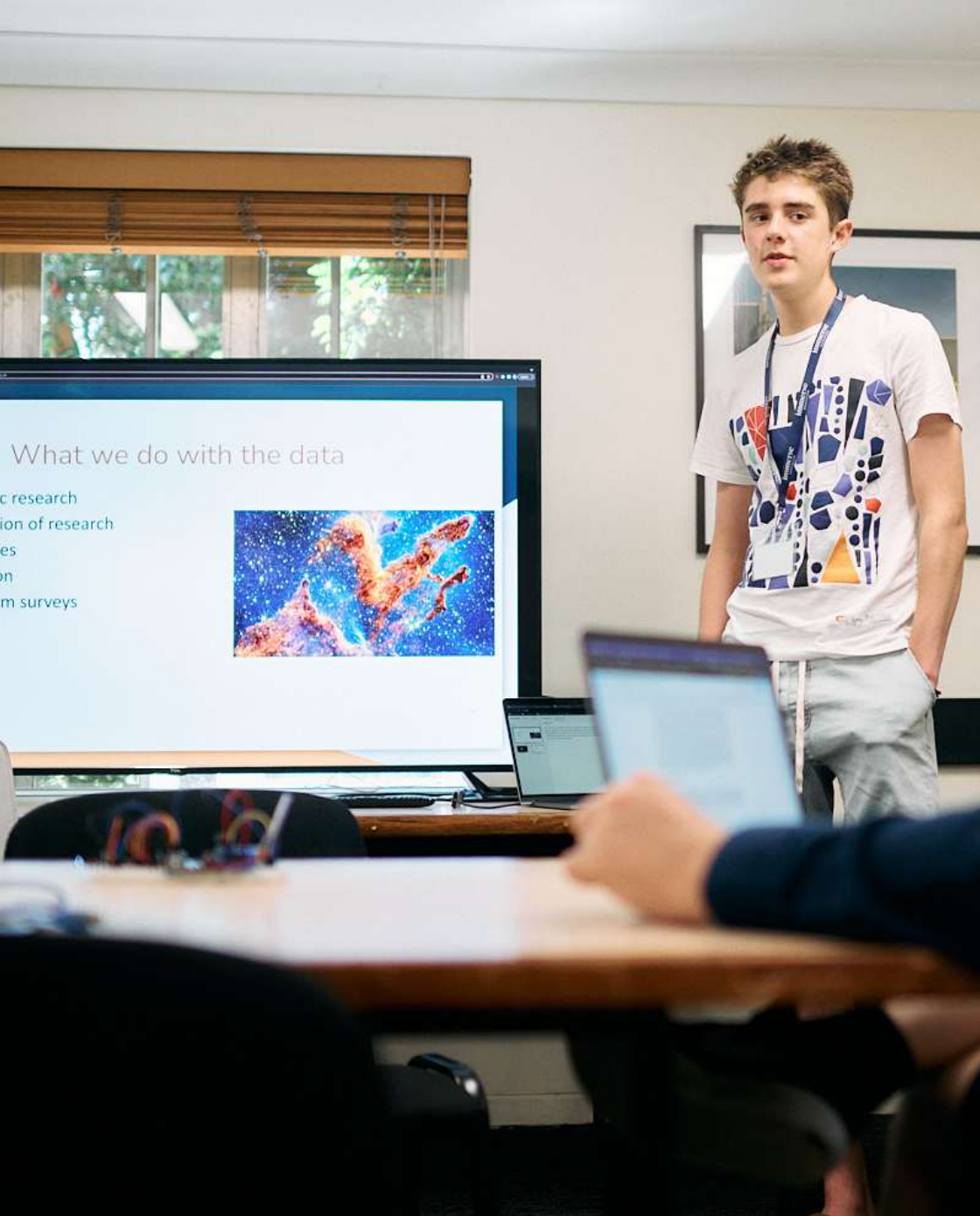
Introduction to AI and Machine Learning

Understand what AI and ML are and how they are applied to solve practical challenges. In Sydney, you will look at how AI supports industries such as healthcare and environmental science, from disease modelling to monitoring ecosystems. This broad introduction helps you see how AI connects with careers across disciplines and prepares you to explore how machine intelligence is changing industries worldwide.

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Python for AI

Gain practical experience in Python, the key language for AI development. You will explore programming concepts such as loops, functions, and data structures, and use them to build simple AI applications. In Sydney's growing technology sector, Python is a vital skill for careers in data science, software development, and AI research. This topic helps you develop a toolkit that can be applied both to academic study and to future roles in technology-driven industries.

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Data and AI

Explore how data is at the heart of AI systems. You will learn how to collect, process, and interpret data, and understand its importance in driving predictions and decisions. Examples from Sydney's industries, such as finance and healthcare, will show you how data supports critical work. By working with real datasets, you will see how careers in AI and data science require both technical expertise and the ability to communicate findings clearly and responsibly.



Machine Learning Applications

Dive into supervised and unsupervised learning methods and apply them to real-world challenges. You will study how algorithms recognise patterns, make predictions, and generate insights. Using case studies from industries like logistics and e-commerce, you will understand how machine learning is applied in both business and research. This topic shows you the versatility of AI skills and their value in preparing for a wide range of technology-focused careers.

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Neural Networks and Deep Learning

Examine the advanced systems that allow AI to process complex information and solve sophisticated problems. You will explore how neural networks mimic human thinking to support technologies such as image recognition and natural language processing. In Sydney, you will connect this learning to applications in industries such as robotics, healthcare, or environmental science. By the end, you will understand how deep learning is central to the industries shaping the careers of tomorrow.

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AI in Careers and Society

Consider how AI is transforming the way we work and live. You will explore the opportunities AI creates for careers, from data science and healthcare to law and media. Ethical issues, responsible AI, and social impact will also be discussed, helping you think critically about the future. In Sydney, with its mix of local innovation and global industry links, you will explore how AI is shaping career possibilities both at home and around the world.





Career Development Plan

Throughout the programme, every student will work on an individual project focused on shaping their future career pathway. This project is designed to bring together the knowledge and insights gained during the programme, including an understanding of the subject area, the industry, and the variety of opportunities it offers. Guided by their own interests and passions, students will consider potential directions for study and work. With support from tutors during one-to-one sessions, participants will develop their project into a clear and personalised plan, which they will present at the end of the programme.

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After your course

You will leave with enhanced knowledge, a clearer vision of career pathways, and practical outputs for your portfolio. Every student also receives a detailed evaluation from their tutor, which is personalised to highlight strengths and suggest potential areas for growth. This evaluation can provide valuable support for future academic or career applications.

Step into your future



BOSTON



CAMBRIDGE



LONDON



OXFORD



NEW YORK



SAN
FRANCISCO



SINGAPORE



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+ **3 US college credits**

20,000+
Alumni graduated
Immerse globally

97%
Participants would
recommend Immerse

APPLY TODAY



BOOK A CALL



FAQS

