

University of Sydney Foundation Program –

Module outline for students commencing July 2024 – December 2025

Academic English

The Academic English module covers a range of topics designed to support the teaching and practice of vocabulary, grammatical structures, and various task types.

The curriculum allocates time to language-related academic skills, allowing students to integrate different skill areas—such as reading into writing or listening into speaking—while maintaining a balanced approach. Language development is embedded to support effective task completion.

In Part 1 of the module, students focus on essential research and presentation skills, equipping them with the ability to gather, evaluate, and communicate information effectively in an academic context.

In Part 2 of the module, students refine their seminar discussion and essay writing skills, enhancing their ability to articulate ideas, engage in academic discourse, and produce well-structured, coherent written work.

Social Research and Inquiry

In this module students learn the research process and develop an understanding of how to apply research methods through investigation into contemporary social issues.

Part 1

This module is designed to enhance language ability through the investigation of society and culture.

Students will develop critical thinking skills and draw on self-reflection to justify interactions between human behaviour and course concepts.

Students will investigate a depth study: Social Inclusion and excluding on First Nations People in Australia.

Part 2

Following on from Module 1 students will undertake research in an area of personal interest with their peers and present data in a Research Project.

Students will explore and analyse a variety of media forms and research methods and utilize creative formats to express their ideas.

Students will develop skills to think critically through the analysis and interpretation of data collected using primary research methods and secondary research.

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| | Students will assess validity, usefulness, reliability, and bias of sources to make informed decisions during the research process. |
| Core Mathematics | <p>Part 1</p> <p>This unit provides students with an understanding of mathematical functions and their applications as well as the fundamentals of calculus with particular emphasis on applications to problems in Economics and Finance. This unit also introduces students to statistics, probability and applications including probability distributions.</p> <p>Topics:</p> <p>Basic Skills & Algebra Functions & their Graphs Trigonometry Differentiation & its Applications Probability Data & Summary Statistics</p> <p>Part 2</p> <p>This unit provides students with an understanding of mathematical functions and their applications as well as the fundamentals of calculus with particular emphasis on applications to problems in Rates and Trigonometry. This unit also introduces students to statistics, counting techniques, probability and applications including probability distributions.</p> <p>Topics:</p> <p>Basic Skills & Algebra Functions & their Graphs Trigonometry Differentiation & its Applications Probability Data & Summary Statistics</p> |
| Enhanced Mathematics | <p>Part 1</p> <p>This unit provides students with an understanding of mathematical functions and their applications as well as the fundamentals of calculus with particular emphasis on applications to problems in Economics and Finance. This unit also introduces students to statistics, probability and applications including probability distributions.</p> <p>Topics:</p> <p>Integration & its Applications</p> |

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| | <p>Exponential & Logarithmic Functions & Applications of Calculus Rates of Change Applications of Calculus to Humanities Series Financial Mathematics Discrete Probability Distributions Continuous Random Variable The Normal Distribution Part 2</p> <p>This unit provides students with an understanding of mathematical functions and their applications as well as the fundamentals of calculus with particular emphasis on applications to problems in Rates and Trigonometry. This unit also introduces students to statistics, counting techniques, probability and applications including probability distributions.</p> <p>Topics:</p> <p>Integration & its Applications Further Trigonometry & Inverse Functions (inc. Inverse Trigonometric Functions) Exponential & Logarithmic Functions & Applications of Calculus Applications of Calculus Series Permutations and Combinations and Further Probability Discrete Probability Distributions</p> |
| Accounting and Financial Management | <p>FAFM 1</p> <p>Accounting and Financial Management 1 (FAFM 1) offers students a thorough introduction to fundamental accounting principles and financial management concepts. This module aims to develop basic financial literacy skills, enabling students to analyse financial statements, interpret key financial data, and make informed business decisions.</p> <p>Students will explore various business ownership structures, examining their financial implications and operational characteristics. A basic understanding of the accounting equation, transaction analysis, and the principles of double-entry accounting will underpin financial accuracy and integrity. Through practical applications, students will learn how to record and assess financial transactions, assess profit and loss statements, and analyse an organisation's financial position using balance sheets and cash flow statements.</p> <p>With a strong emphasis on real-world relevance, FAFM 1 also highlights the differences between cash and accrual accounting, providing</p> |

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| | <p>essential insights into how businesses manage revenue recognition, expenses, and financial sustainability. By the end of this module, students will have developed a foundational expertise in accounting and financial management, preparing them for more advanced studies and professional applications in business and finance.</p> <p>FAFM 2</p> <p>Accounting and Financial Management 2 (FAFM 2) builds on foundational accounting principles, providing students with essential advanced financial analysis skills for evaluating business performance and making strategic decisions. The module covers financial report analysis, budgeting, and financial planning, helping students understand financial stability, profitability, and forecasting.</p> <p>Students will engage in ratio analysis, including liquidity, efficiency, and solvency ratios, to assess a company's financial health. They will also learn key performance indicators like stock turnover and debt-to-equity ratios to evaluate financial efficiency and solvency.</p> <p>A major focus is on budgeting and financial control, where students will prepare cash budgets, analyse financial performance through variance reports, and apply break-even analysis for decision-making.</p> <p>By the end of the module, students will be adept at analysing financial data, interpreting business performance, and applying financial strategies—crucial skills for success in finance, accounting, and business management.</p> |
| Applied Computing | <p>Part 1</p> <p>The course provides a comprehensive overview of various aspects of digital design and production, with a focus on video game development. Students will delve into the fundamentals of video game production and design, gaining insights into the entire process from concept to execution.</p> <p>Additionally, the curriculum covers essential skills such as logo design, image editing, and website creation specifically tailored for marketing games. Participants can expect to acquire a well-rounded skill set that combines creative design elements with practical knowledge for effectively promoting and showcasing video games in the digital landscape.</p> <p>In this course you study the following topics:</p> <p>Computing Fundamentals File Management</p> |

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| | <p>AI Literacy and Ethics Design for Communication Vector and Bitmap Graphics Business Marketing Financial Analysis Website Design Part 2</p> <p>The course provides a comprehensive overview of various aspects of digital design and production, with a focus on video game development. Students will delve into the fundamentals of video game production and design, gaining insights into the entire process from concept to execution.</p> <p>Additionally, the curriculum covers essential skills such as logo design, image editing, and website creation specifically tailored for marketing games. Participants can expect to acquire a well-rounded skill set that combines creative design elements with practical knowledge for effectively promoting and showcasing video games in the digital landscape.</p> <p>In this course you study the following topics:</p> <p>Information and New Media Technologies Narrative Design Game Asset Production Game Character Development Game Actions and Design Programming</p> |
| Art and Design | <p>Part 1</p> <p>In this module students will use a range of drawing, painting, and mixed media to develop an original concept to be resolved in artworks, one resolved artwork will explore the theme “The Human Condition”, and a second resolved artwork exploring “The World from My Window”.</p> <p>Students learn to develop ideas beyond the obvious. They are challenged to “avoid the cliché” and develop innovative and imaginative “uncommon solutions” to creative briefs. Students will develop confidence and skills in communicating ideas visually to audiences.</p> <p>Students will be introduced to the role of the Digital Visual Arts Process Diary (DVAPD) which will support their exploration of different concepts developing Material and Conceptual Practice.</p> <p>Part 2</p> |

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| | <p>Following on from Module 1 students will explore traditional and/or contemporary material and techniques of their choosing to begin forming their individual Bodies of Work.</p> <p>To assist their development of ideas, students will engage in a series of Art critical and historical research that explore the practice of a variety of modern and contemporary artists.</p> <p>Research, reflection and experiments are documented in their Digital Visual Arts Process Diaries supporting the development of their artworks.</p> |
| Biology | <p>Part 1</p> <p>Biology course is an introduction to the fundamental concepts and processes of living organisms and a study of modern biology in the context of the world around us. Develops practical, research, analysis, and presentation skills.</p> <p>Topics:</p> <p>Biological skills and Molecules Cells & Processes Classification Genetics and Gen Technology Plants & Animal Systems Diseases</p> <p>Part 2</p> <p>Biology course is an introduction to the fundamental concepts and processes of living organisms and a study of modern biology in the context of the world around us. Develops practical, research, analysis, and presentation skills.</p> <p>Topics:</p> <p>Plants & Animal Systems Diseases</p> |
| Chemistry | <p>Part 1</p> <p>The chemistry course is an introduction to the fundamental concepts. Develops practical, research, analysis, and critical thinking skills.</p> <p>Topics:</p> <p>What is Chemistry? Chemical Reactions Organic Compounds</p> |

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| | <p>Part 2</p> <p>The chemistry course is an introduction to the fundamental concepts. Develops practical, research, analysis, and critical thinking skills.</p> <p>Topics:</p> <p>Stoichiometry Energy Rates Chemical Kinetics and Equilibrium Acids & Bases</p> |
| Cultural Studies | <p>Part 1</p> <p>In this module students study the development of Australia through an inquiry into the historical and geographical context.</p> <p>Students will embark on a journey of exploring Australian history whilst evaluating how these significant events have impacted on the changing nature of Australian environment, landscape, and culture.</p> <p>Students will participate in fieldwork to Taronga Zoo to enhance their study of Unique Australia and Biodiversity.</p> <p>Part 2</p> <p>Following on from Module 1 students will continue to develop a sense of place in Australia through investigation into historical and contemporary case studies and their relevance in an ever-changing world.</p> <p>This module is aimed at continuing to develop a sense of belonging for students in an Australian learning environment.</p> <p>Students will continue to develop skills to think critically, and problem solve through the analysis and interpretation of historical sources and contemporary geographic case studies.</p> <p>Students will participate in fieldwork to the Hyde Park Barracks to enhance their study of the Convict System and Colonisation.</p> |
| Economics and Development | <p>FEC 1</p> <p>Economics and Development 1 (FEC 1) introduces fundamental economic concepts and provides tools to understand market functions and the impact of economic decisions on businesses, governments, and society. The module covers microeconomics, macroeconomics, and development economics, forming a foundation for advanced study.</p> |

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| | <p>Students will analyse scarcity, resource allocation, opportunity costs, specialization, and trade. They will explore market forces such as demand, supply, price elasticity, and market equilibrium to comprehend how prices and quantities are determined.</p> <p>Additionally, the module examines production costs, revenue, and market structures to assess profitability and behaviour. Students will also discuss government intervention, market failures, externalities, and income inequality while evaluating policies that promote economic efficiency and equity.</p> <p>FEC 2</p> <p>The module “Economics and Development 2” (FEC 2) deepens students’ understanding of macroeconomic principles, emphasising the circular flow of income, aggregate demand, and economic growth. It explores the interactions between governments, businesses, and households and how these relationships impact employment, investment, and living standards.</p> <p>Students will analyse aggregate demand components—consumption, savings, investment, government spending, and net exports—and their influence on national income and stability. The course also covers key macroeconomic policies, like monetary and fiscal policy, to manage growth, inflation, and unemployment.</p> <p>Additionally, Economics and Development 2 discusses barriers to economic development, such as reliance on specific commodities, the savings gap, and the role of international trade in promoting growth. Through evaluating these challenges and policy responses, students will develop essential analytical skills to assess real-world economic conditions and policy effectiveness.</p> |
| <p>International and Global Studies</p> | <p>Part 1</p> <p>In this module students will understand the evolution of international relations through an investigation into major political and government issues that have shaped the modern world.</p> <p>Students will decipher the intricate relationships between power, government, institutions, and information within an international and global context.</p> <p>Students will develop their research skills through the investigation of contemporary international and global issues whilst drawing on historical context to inform your decision-making.</p> <p>Part 2</p> |

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| | <p>Following on from Module 1 students shift their perspectives as they develop an understanding of their rights and responsibilities in a global context to become active and informed citizens.</p> <p>Students will examine domestic and international contexts to prepare them for the diverse future challenges and opportunities presented by our interconnected world.</p> <p>Students will develop their research skills through the investigation of contemporary international and global issues whilst drawing on historical context to inform their decision-making.</p> |
| Physics | <p>Part 1</p> <p>This Unit introduces motion, electrostatics, electrodynamics, waves, electromagnetic spectrum and astronomy. The course provides learning experiences that help students develop practical, research and critical thinking skills. Experiments are designed to introduce students to new technology for the study of undergraduate degrees in science, engineering and some health science fields.</p> <p>Topics:</p> <p>Language and Skills in Physics. Vectors Linear, Projectile and Circular Motion. Newtons Laws. Simple Harmonic Motion. Work Energy and Power. Static and Current Electricity.</p> <p>Part 2</p> <p>Topics:</p> <p>Waves, Resonance Light Electromagnetic Spectrum Solar System Gravity and Kepler's Laws. EM absorption by Earth's Atmosphere Energy from Stars and Blackbody Radiation</p> |