School of Economics

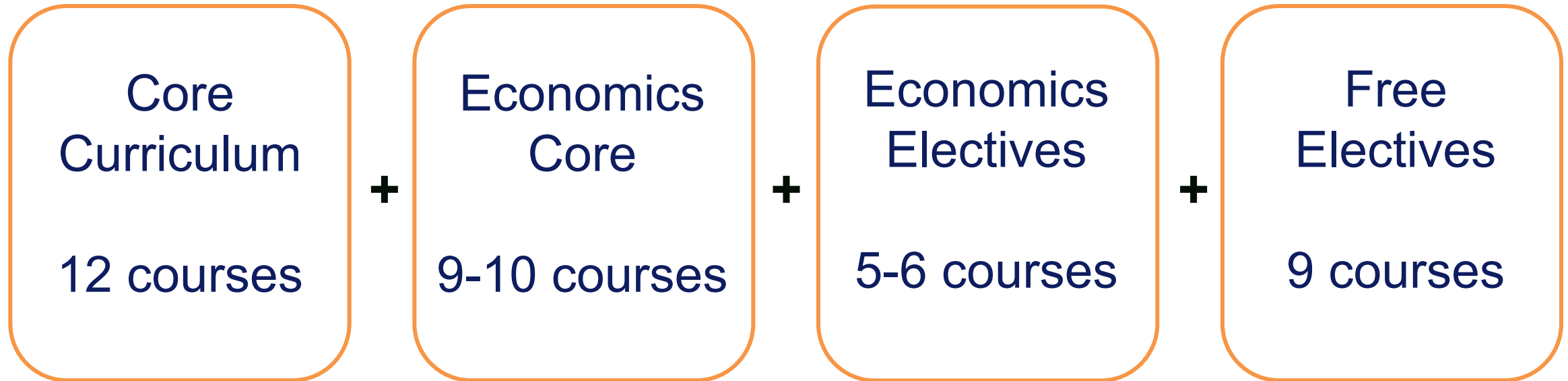# Academic Briefing 2025

UG University Exemptions

BSc (Econ) students may qualify for exemptions from courses in their degree requirements depending on their pre-university academic qualifications. The number of exemptions granted will depend on specific course(s) taken and results obtained for these courses.

Possible exemptions that can be granted include Calculus, Writing and Reasoning, and in other curricular components, such as Major Requirements (including Major Core and Major Electives) and Free Electives.

Pre-university academic qualifications	No. of possible exemptions
Singapore-Cambridge GCEA-Levels, IB Diploma, NUS High School Diploma and international qualifications	Up to 5 course exemptions
Acceptable Diplomas from Nanyang Poly, Ngee Ann Poly, Singapore Poly, Republic Poly and Temasek Poly	Up to 10 course exemptions, depending on cGPA

The above are indicative guidelines and subject to change from time to time.

Curriculum Structure (36 courses)

Core Curriculum

12 courses

+

Economics Core

9-10 courses

+

Economics Electives

5-6 courses

+

Free Electives

9 courses

Core Curriculum 12 courses	+	Economics Core 9-10 courses	+	Economics Electives 5-6 courses	+	Free Electives 9 courses

The College of Integrative Studies introduces students to a wide and interconnected range of disciplines and perspectives at SMU through the SMU Core Curriculum.

Undergirded by three pillars - Capabilities, Communities and Civilisations, it equips students with the interdisciplinary skills and knowledge to become impactful professionals in today's dynamic world.

The SMU Core Curriculum

- Enables all our graduates to apply themselves to future challenges

- Facilitates multidisciplinary learning and develop our students' integrative intelligence to enhance and complement all learning paths.

- Unleashes the **CAPABILITIES** of our students, engages them with their **COMMUNITIES**, and the questions that attend to our **CIVILISATIONS**.

Core Curriculum 12 courses	+	Economics Core 9-10 courses	+	Economics Electives 5-6 courses	+	Free Electives 9 courses

Core Curriculum Courses

Core Curriculum (12 courses)

Capabilities (6 courses)	Communities (4 courses)	Civilisations (2 courses)
• Managing (2 courses) • Modes of Thinking (1 course) • Numeracy (1 course) : **Calculus** • Writing and Reasoning (1 course) • Internship (1 course)	• Economics and Society (1 course) • Technology, Science and Society (1 course) • Cultures of the Modern World (1 course) • Community Service (1 course)	• Ethics and Social Responsibility (1 course) • Big Questions (1 course)

Digital Technology/Data Analytics
Singapore and Asia Studies
Sustainability
Global Exposure

Capabilities

Numeracy

- Calculus
- Introductory Statistics
- Introduction to Statistical Theory

Modes of Thinking

- Critical Thinking
- Computational Thinking and Programming
- Managing in a VUCA Context

Managing

- Business, Government and Society
- Modelling and Analytics
- Leadership and Team Building
- Management Communication
- Capital Markets in China
- Accounting for Entrepreneurs

Writing & Reasoning
(pre-assigned in first year[1])

- Writing & Reasoning

Internship

- Internship

Communities

Economics and Society
(pre-assigned in first year[2])

- Economics and Society

Technology and Society

- Digital Cultures
- Science, Environment, and Empire
- Technology and World Change
- Climate Change: Past, Present, and Future
- Science and Technology Studies:
  Where Science Meets Society
- Climate, History and Society
- Technological Innovations Enhancing
  Urban Sustainability
- Can Machines Think? AI in History,
  Philosophy, and Fiction

Cultures of the Modern World

- Urban Cultures
- Film in Southeast Asia
- Singapore: Imagining the Next 50 Years
- Politics of South-East Asia
- Sustainable Cities
- Contemporary South Asian Societies
- Global and Transnational Sociology
- Cultural History of the Cold War in Asia
- Foreign Languages
- Constitutions, Cultures, and Context
- Fashioning a Nation
- Redefining the Third Age in Singapore

Community Service

- Community Service

Civilisations

Ethics and Social/Corporate Responsibility

- Ethics and Social/Corporate Responsibility

Big Questions
(pre-assigned in first year)

- Big Questions

Global Exposure

May be fulfilled through university-approved global exposure course/activities.

Additional Graduation Requirements

In addition, all SMU students will benefit from an enriched educational experience that align closely with SMU's strategic priorities:

- Digital Technology/Data Analytics (D/D): This requirement acknowledges the pivotal role that digital technology and data analytics play in today's workplace. By fulfilling this, you will acquire essential skills and knowledge relevant in the digital age.
- Sustainability: Sustainability is a pressing global concern. This requirement will equip you with an intermediate understanding of sustainability issues, contributing to a more sustainable future.
- Singapore and Asia Studies: Singapore is a vibrant global hub and Asia is a region of immense significance in today's global economy. This requirement ensures that you gain a strong understanding of the dynamics of Singapore and the Asian region.

1 Writing & Reasoning is pre-assigned to all freshmen, except those taking BSc(C&L), BSc(CS) and LLB, as well as students who are exempted.
2 Economics and Society is pre-assigned to all freshmen, except those taking BSc(C&L), BSc(CS) and LLB.

Core Curriculum

12 courses

+

Economics Core

9-10 courses

+

Economics Electives

5-6 courses

+

Free Electives

9 courses

Economics Core

9 - 10 compulsory courses
Introduction to Statistical Theory
Mathematics for Economics
Microeconomics 1
Microeconomics 2
Macroeconomics 1
Macroeconomics 2
Introduction to Econometrics
Economic Development in Asia
International Economics **OR** **International Trade AND International Macroeconomics**

Core Curriculum		Economics Core		Economics Electives		Free Electives
12 courses	+	9-10 courses	+	5-6 courses	+	9 courses

Economics Electives

5 – 6 elective courses

1. Advanced Macroeconomics	14. Intermediate Econometrics
2. Advanced Microeconomics	15. Introductory Data Analytics in Healthcare
3. Big Data Analytics with Spark	16. Labour Economics
4. Data Analytics with R	17. Macroeconomics of Income Distribution
5. Demographic and Family Economics	18. Organisational Economics
6. Development Economics	19. Overseas Project Experience (Macro in Asia)
7. Economics of Ageing	20. Public Sector Economics
8. Economics of Globalisation	21. Real Estate Economics
9. Family & Society: Economic Theories & Practices	22. Statistical Inference for Data Science
10. Game Theory	23. Statistical Learning with R
11. Health Economics	24. Strategic Thinking
12. Health Systems and Policy	25. Research Methods in Economics
13. Healthcare Management	26. Urban Economics and Policy

Note: This list is non-exhaustive and subject to change.

Free Electives

9 courses can be from

2nd Majors in SOE

- ❑ Actuarial Science
- ❑ Data Science and Analytics
- ❑ Health Economics and Management

Economics Electives

2nd Major in other schools

- ❑ Accounting
- ❑ Business
- ❑ Computing and Information Systems
- ❑ Law
- ❑ Social Sciences

No pre-entry requirements for all second majors.

Tracks

Quantitative Economics Track (QET)	Real Estate Economics Track (RET)
Compulsory (3CU)	**Compulsory (3CU)**
Advanced Macroeconomics	Real Estate Economics
Advanced Microeconomics	Real Estate Investment and Finance
Intermediate Econometrics	Risk and Regulations in Real Estate
Elective (2CU)	**Elective (2CU)**
International Trade	Analytics in Finance and Real Estate
International Macroeconomics	Project Financing
Math. Methods for Economic Dynamics	Infrastructure Economics and Policy
Empirical Industrial Economics	Urban Economics and Policy
Time Series Econometrics	Real Estate Valuation and Taxation
Research Methods in Economics	Real Estate Development

Actuarial Science 2ⁿᵈ Major

- Actuarial Science applies rigorous probability models to the analysis and management of various risks in organisations

- By analysing and managing risks, professional actuaries bring financial security to customers, organisations and the public

- Qualified actuary is a well-respected professional who receives world-wide recognition and rewards.

Curriculum Structure (Students are required to complete Economics and Society and the following 10 courses)	
1. Probability Theory and Applications	6. Statistical Learning with R
2. Financial Mathematics	7. Financial Accounting
3. Life Contingent Risks	8. Finance
4. Risk Theory and Loss Models	9. Any two DSA3XX Electives
5. Statistical Inference for Data Science	

Industry Integration (II) Track Requirements

- Time Series Data Analysis (can count towards one of any two DSA3XX Electives)

- Actuarial Science Work-Study Elective

Data Science & Analytics 2nd Major

- Focuses on stochastic modelling, computing, simulation and predictive analysis

- Solid foundation in computational analysis and statistical concepts

- Adopts hands-on pedagogy with extensive training in the R programming language

Curriculum Structure

Core Courses	4 or 5 CUs from the Data Analysis (DA) list or Computing Technology (CT) list, with at least one course from each list.	Data Analysis List:
1. Probability Theory and Applications 2. Statistical Inference for Data Science 3. Statistical Learning with R 4. Data Analytics with R 5. Computational Thinking and Programming	**Computing Technology List:** • Data Mining and Business Analytics or Data Warehousing and Business Analytics • Introduction to Artificial Intelligence • Principles of Machine Learning or Machine Learning and Applications • Modeling and Data Analytics or Data Management or Business Data Management • Reinforcement Learning in Portfolio Optimisation • Text Mining and Language Processing • Visual Analytics for Business Intelligence or Geospatial Analytics and Applications	• Applied Healthcare Analytics • Big Data Analytics or Big Data Analytics with Spark • Data Science with Python • Economic Forecasting or Time Series Data Analysis • Machine Learning with Applications in Economics • Marketing Analytics or Service and Operations Analytics or Forecasting and Forensic Analytics • Panel Data Analysis • Spatial Data Analysis • SQL and NoSQL Databases

Health Economics and Management 2ⁿᵈ Major

What is HEM?

- Multidisciplinary major housed in SOE.

Why HEM?

- Healthcare among the largest and fastest-growing industry both in Singapore and worldwide.

- Unique program in Singapore and rare around the world.

Curriculum Structure		
Core Courses	**Choose 4 Electives from the following:**	• Operations and Supply Chain Management in Healthcare
1. Health Economics	• Applied Healthcare Analytics	• Outbreak: Epidemics and Pandemics in the Modern World
2. Introductory Data Analytics in Healthcare	• Economic of Ageing	• Smart Healthcare in Asia
3. Health Systems and Policy	• Epidemics: Biomedicine and Global Health	• Work Study Elective
4. Healthcare Management	• Financial Accounting	• Six months attachment with SingHealth
	• Health Law and Medical Ethics or Medical Law and Health Policy	• Possibly with other partners
	• Health Psychology	
	• Medical Sociology	
	• Medicine and the Law	

Sample of Course Sequencing

Categories	Compulsory Courses	Year 1	Year 2	Year 3/4
Core Curriculum	Calculus	√		
	Economics and Society	√		
	Writing and Reasoning	√		
	Big Questions	√		
	Ethics & Social Responsibility		√	√

Sample of Course Sequencing

Categories	Compulsory Courses	Year 1	Year 2	Year 3/4
Economics Core	Introduction to Statistical Theory	√		
	Mathematics for Economics	√		
	Microeconomics 1	√	√	
	Microeconomics 2		√	
	Macroeconomics 1		√	
	Macroeconomics 2		√	√
	Introduction to Econometrics [pre-assigned to students in Year 2]		√	
	Economic Development in Asia [pre-assigned to students in Year 2]		√	
	International Economics OR International Trade AND International Macroeconomics			√

Double Degrees

- Students admitted into the Double Degree programme will be taken off the programme if they do not meet the following criteria:

  - Cumulative GPA of 3.40 and above by end of their 4th term

- Students with single degree can apply for enrollment in the Double Degree programme at the end of Year 1 or Year 2 if they meet the following criteria:

  - Cumulative GPA of 3.40 and above, and

  - Fulfillment of certain program-specific requirements

  - Refer to OASIS > Academic > Programmes & Majors > Double Degree Policy

Additional Graduation Requirements

- **Internship**

  - Minimum 10 weeks and carries 1 Credit Unit (CU)

  - Can begin serving after having completed at least one semester of coursework

  - Apply for positions sourced by DKHMCC through OnTRACII or self-source

  - All internships will require a pre-activity, mid-activity and final reflections report
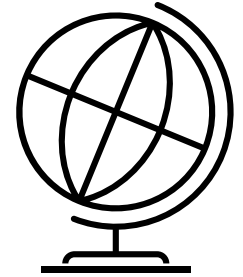

- **Community Service**

  - Minimum 80 hours and carries 1 Credit Unit (CU)

  - Can be undertaken any time during course of study, advisable to complete by end of Year 2

  - Apply or self-propose through OnTRACII

  - All community service projects will require a pre-activity, mid-activity and post-activity and reflection report

Additional Graduation Requirements

- **Global Exposure**

    - Required to embark on at least one global experience before graduating

    - Non-credit bearing graduation requirement

    - Invaluable for international networking and global vision, opening doors to bigger opportunities

    - May fulfil through SMU-endorsed overseas programmes e.g. International Exchange, Short-Term Study, SMU-XO, Overseas Study Mission, Overseas Community Service Projects etc.

- **Digital Technology/Data Analytics, Sustainability, Singapore & Asia Studies**

    - Non-credit bearing graduation requirements

    - May fulfil by enrolling in specific courses, or, in select Schools, through programme or major core courses where the relevant content has already been integrated to meet the graduation requirement e.g. **Digital Technology/Data Analytics** - Applied Healthcare Analytics, **Sustainability** – Economic Development in Asia, **Singapore & Asia Studies** - Economic Development in Asia <u>and</u> Economics and Society/International Economics/International Trade/International Macroeconomics
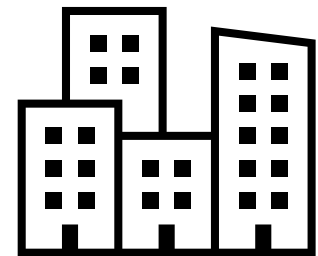
Work-Study Electives (WSE)

What is WSE?

- Minimum 20-week internship attachment

- 2 course units and graded Pass/Fail

- Work for at least four days each week during regular term time and take courses (up to 2 course units) on campus up to one day each week

- May simultaneously fulfil the credit-bearing mandatory internship requirement

What does SOE offer?

- Actuarial Science WSE (AIA, FWD, HSBC etc.)

- Health Economics & Management WSE (SingHealth)

Academic Advisors

- Academic Advisors – Faculty members from SOE who are assigned to you since Year 1 to provide guidance and advice throughout the 4 years of studies.

- Freshmen will be informed on their Academic Advisors via SMU email by Week 4 of their first Term.

- Academic Advisors **can** advise on academic matters in general.

  - Study methods, presentation skills, examination techniques and other aspects of learning, although such assistance may be better provided by the individual professor of the course.

  - Preparation for postgraduate studies afterwards

English Language Support Programme (ELSP)
For First-Year International Students

Are you…
- ✓ a first-year international student?
- ✓ looking for help to
  - write coherently for your assignments
  - speak confidently to your Profs
  - contribute meaningfully in group projects
  - participate in class discussions
  - present clearly in class?

Join ELSP now! Get the support you need to improve **YOUR** communication skills.

Scan the QR code and sign up!

Academic Policies

- **Requirements to graduate with BSc (Econ) degree**

  BSc (Econ) Student Handbook: OASIS > Academic > Advisement & Curriculum > Student Academic Handbook

- **Find out about 2nd majors and check your degree progression**

  Second Major Requirements: OASIS > Academic > Advisement & Curriculum > Second Major Requirements

  Degree Progress Report: OASIS > Academic > Advisement & Curriculum > My Degree Progression

- **Declaration of 2nd major and application of double degree**

  Major Declaration Policy: OASIS > Academic > Programmes & Majors > Major Declaration Policy

  Double Degree Application Policy: OASIS > Academic > Programmes & Majors > Double Degree Policy

- **Conduct of final examinations**

  Examinations Policy: OASIS > Academic > Examinations & Grading > Examinations Policy

- **Effective and responsible use of AI**

  eLearn Units: eLearn > Guide to Learning with AI