

OUR SMU SOE DEAN WELCOMES YOU

Welcome to the School of Economics at the Singapore Management University!

The university has been the place to examine the great themes of poverty and wealth – why some nations are poor and others rich – and social and economic justice – how one should think about the trade-offs between efficiency and equity.

At SMU School of Economics, you will be taught the tools of analysis. You can apply these tools to formulate conceptual frameworks to analyse problems that the world will throw at you – climate change, trade wars, and the rapid advances in artificial intelligence, machine learning, and robotics. You can then form your personal value judgement on these problems.

Our faculty are committed to helping you on the learning journey. Because ideas are important to them, they are constantly engaged in inquiry and reasoning in their own areas of specialisation. Our faculty bring this excitement of intellectual discovery into the classroom as they help you blend theory with the real world. While being intellectually stimulated by new challenges thrown up by the present, they are able to draw upon conceptualisations of the past to offer informed judgements about the future. Across the full set of courses offered by the School of Economics and the other Schools, you will also have an exposure to local, regional, and international issues.

SMU offers you an interactive learning environment and a curriculum that provides both rigorous foundations (the "depth") as well as a wide variety of elective courses (the "breadth"). Through classroom interactions with your professors and fellow students, you will develop your analytical skills and ability to communicate effectively. The SMU-X courses, internship, and community service provide you an opportunity to be at ease in the business world and develop a social conscience.

I hope that you will join SMU School of Economics to take advantage of the exceptional opportunities that our University offers to develop a life-long habit of mind to navigate the world you will face.

Best wishes,

Professor Hoon Hian Teck Dean, School of Economics Singapore Management University



WHAT IS DISTINCTIVE ABOUT SMU SOE?



QUANTITATIVE KNOWLEDGE TO SOLVE REAL-LIFE PROBLEMS



BROAD UNDERSTANDING OF SOCIETY AND HUMAN BEHAVIOUR



IMPRESSIVE CAREER PLACEMENTS AND EXCELLENT ADMISSION RECORDS TO POSTGRADUATE PROGRAMMES

The strength of our programme is demonstrated by our graduates' success in their job placements and development in career paths that include banking and finance, consulting, media, communications, retail, real estate, IT, manufacturing, shipping and the public sector.

Our graduates are employed in top local and global organisations that include Goldman Sachs, Credit Suisse, Singapore Stock Exchange, Development Bank of Singapore, Citibank, McKinsey, PricewaterhouseCoopers, Bain, Accenture, Ministry of Finance, Monetary Authority of Singapore, Ministry of Health, Ministry of Trade and Industry, and Singapore Economic Development Board, amongst others.

Our graduates also pursue their postgraduate studies in leading universities around the world, including:

- Carnegie-Mellon University
- Columbia University
- INSEAD
- New York University
- Northwestern University
- The London School of Economics and Political Science
- University College London
- University of Minnesota
- University of Oxford
- University of Pennsylvania The Wharton School
- University of Warwick
- Yale University

With strong foundation courses and elective courses designed for relevance, such as Real Estate Economics, Health Economics, Economics of Ageing, Economics of Politics, Empirical Industrial Economics, and Organisational Economics, which are rarely found in other undergraduate programmes, our students are exposed to a wide range of applications of economic principles to current global issues.

Economics addresses questions in the social world with data and sound logical thinking. This is often facilitated by the use of mathematics or statistics, and we equip students with the technical tools and methods commonly employed. Our rigorous curriculum encompasses all these aspects and prepares our students for their experiential learning through internships, exchange programmes and community service projects.



WHAT IS ECONOMICS?



An Interdisciplinary Science On How Individuals Make Economic Decisions, And Their Implications For Everyone

Economics is a science concerned with human behaviour and it intersects many areas of study and application such as Biology, Business, Climate Sciences, Data Analytics, Engineering, Finance, History, Law, Medical Sciences, Politics, Psychology, Sociology and Urban Planning.

Economics uses a unified approach that allows us to answer a variety of exciting questions. Social systems such as markets, corporations, parliaments and households are analysed under the assumption that individuals forming them are goal-oriented and make calculated decisions. In other words, economics teaches how apparently complex systems become understandable on the basis of the individual incentives that people have.

Examples of economic questions are: What can be done to ensure that the insurance premiums of older workers are not ten times the premium of young workers? When is collusion in auctions more likely to arise? Why do working individuals pay more, for the same good, than seniors or students? Does higher pay attract better politicians? Does democracy cause economic growth or does economic growth foster democracy? How do we explain housing price differences across cities and across different locations within a city?

Economics allows for precise answers, thanks to the use of mathematics and, whenever possible, data, field experiments and policy experiments.

Economic analyses frequently contain policy recommendations that are designed to improve outcomes for society.

Economics is about solving problems and improving people's lives. In this respect it is very relevant to tomorrow's world and it opens broad career opportunities: from policy making to consulting and running your own company.

Studying economics also provides a hedge in our digital revolution era. With the radically improved computation infrastructure and the availability of big data, the discipline has changed. A core part of the training of an economist focuses on the ability to use these data. Such a skill will help companies and decision makers in making better decisions.

The School of Economics faculty are research-active and teaching-focused, and they bring the latest advances in their various fields into the classroom.

BIOLOGY





CLIMATE SCIENCES



DATA ANALYTICS





FINANCE









SOCIOLOGY



HISTORY



LAW



MEDICAL SCIENCES



POLITICS



PSYCHOLOGY

WHAT RESEARCH IMPACT HAS SMU SOE MADE?



Recognised Regionally For Outstanding Economic Research Contributions

The School of Economics is one of Asia's leading research schools with a faculty recognised internationally for their contributions to economic research.

GROWING THE ECONOMIST'S TOOLKIT

Assistant Professor Zhang Yichong conducts research in econometrics, the branch of economics that combines economic theory, statistical inference methods, and mathematics to quantify economic relationships. In particular, he specialises in developing new statistical methods for econometrics. In a study titled 'Extremal Quantile Treatment Effects', Assistant Professor Zhang established a new method and applied it to birth data to examine the effect of maternal smoking on the lower tail of babies' birth weights.

Zhang Yichong Assistant Professor



FINANCIAL RISK CAN LEAD TO GREATER RISKS FOR STOCK INVESTORS

Practice Professor Chow Hwee Kwan conducts research on cross-border linkages between stock markets. This is particularly important and relevant in the light of freer flows of global capital. In recent research, she showed that the susceptibility of individual Asian stock markets to volatility transmitted from other markets is linked to its degree of openness. She also found that equity markets in the region are becoming more important emitters of financial shocks since the 2009 Global Financial Crisis.

Chow Hwee KwanPractice Professor



DESIGNING FAMILY POLICIES

Associate Professor Christine Ho conducts research at the intersection of family issues and public policy. Her research has shown how childcare needs may generate important trade-offs for multiple family members such that the design of tax and childcare policies may be an important key for preserving work incentives. Her paper titled, "Efficient Child Care Subsidies", demonstrates how access to affordable childcare may improve welfare by boosting maternal employment without compromising childcare needs. This in turn results in higher financial income for the individual family and a larger workforce for the nation.





TELL ME MORE ABOUT

STUDENT LIFE

Balance Work And Play By Joining A SMU SOE Student Club And Learn **Invaluable Skills, While Contributing** To The CCA(s) Of Your Choice



There are over 100 clubs and societies at SMU catering to each and every unique interest. Students may participate in enriching co-curricular activities relating to arts and culture, sports, special interests and community service.

STUDENT CLUBS UNDER THE SCHOOL OF ECONOMICS

ACTUARIAL SCIENCE CLUB

DATA SCIENCE & ANALYTICS SOCIETY

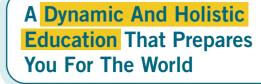
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SMU ECONOMICS INTELLIGENCE **CLUB**

ACHIEVEMENTS & AWARDS

- Gold Award, SMU Excellence in Student Life Awards 2018
- Bronze Awards, SMU Excellence in Student Life Awards 2018
- SMU Outstanding Achievement in Student Life Award 2018
- Silver Awards, Tan Tee Chee & Tsan Kah Ngooh Excellence in Student Life Awards 2019
- Bronze Awards, SMU Excellence in Student Life Awards 2019
- SMU Outstanding Achievement in Student Life Award 2019
- Gold Awards, SMU Excellence in Student Life Awards 2020
- Bronze Awards, SMU Excellence in Student Life Awards 2020
- SMU Special Recognition (Individual) 2020
- Silver Award, Tan Tee Chee & Tsan Kah Ngooh Excellence in Student Life Awards 2021
- Bronze Awards, SMU Excellence in Student Life Awards 2020
- 1st Runner-Up, Ruth Chiang Outstanding Intern of the Year Award 2021
- Bronze Awards, SMU Excellence in Student Life Awards 2022

WHAT MAKES SMU'S **GORE GURRIGULUM** ONE-OF-A-KIND?



The SMU Core Curriculum is a menu of twelve carefully selected course units (CUs) to initiate undergraduates into their journey to become holistic SMU graduates. The Core Curriculum also serves as a means for students across all disciplines to bond through a common intellectual experience. It stands on three pillars of learning, or inter-related paths of development; Capabilities, Communities and Civilisations,





Capabilities

Students will also complete an internship, either locally or overseas. Develop specific competencies and skills that are necessary to dexterously operate in an increasingly complex, digitised and data-driven working



Students will also complete a community service project, either locally or overseas. Promote understanding of the economic, technological, and cultural systems that structure our interactions with our communities.



Students will complete a Global Exposure Experience. Engage in critical dialogue and problem solving through immersion into fundamental and perennial debates that cut across time and space:

- Happiness & Suffering
- Wealth & Poverty
- War & Peace
- Global & Local

Core Curriculum (12 Course Units)

Economics Core (9-10 Course Units) **Economics Electives** (5-6 Course Units)

Free Electives (9 Course Units)

INTERNSHIP AND COMMUNITY SERVICE

SMU has introduced one academic credit for internships of 10 weeks or longer. The internship requirements will be enhanced to include elements such as a revamped Finishing Touch career-preparatory programme, guided reflection journals and an internship report. The enhanced credit-bearing Community Service programme will impart service learning knowledge and equip students with skills to conduct critical needs analysis and asset mapping, so as to help you provide more impactful and sustainable service to the community.

GLOBAL EXPOSURE

Academically, gaining a first-hand, real-world perspective of issues learnt in the classroom serves to deepen students' learning and knowledge application. More importantly, the journey builds independence, empathy, open-mindedness, not to mention soft-skills like communication and teamwork. You have the opportunity to participate in global experiences like international exchange programmes in any one of our 231 partner universities across 46 countries.

WHAT DOES SMU SOE'S CURRICULUM STRUCTURE ENTAIL?



Our Bachelor of Science (Economics) is a 4-year programme. It is carefully designed to provide you with a strong understanding of modern economic theory, inculcate independent thought about economic policies and problems, develop the capability for quantitative research, and provide descriptive knowledge about the local and global economies. The programme consists of the Economics Core (9-10 courses), Economics Electives (5-6 courses), and Free Electives (9 courses).

ECONOMICS CORE

The Economics Core lays a broad foundation for the study of economics. It has 9-10 compulsory courses:

Introduction to **Statistical Theory**

Mathematics for Economics

Microeconomics 1

Macroeconomics 1

Introduction to Econometrics

Economic Development in Asia

Microeconomics 2

Macroeconomics 2

International Economics

OR

International Trade AND International Macroeconomics

ECONOMICS ELECTIVES

Economics Electives provide you with specialised knowledge in various fields of economics. A total of 5-6 courses must be completed.

The set of Economics Electives is a rich menu of courses offering a wide range of topics to choose from. Some examples are:

- Advanced Macroeconomics
- Advanced Microeconomics
- Data Science with R
- Development Economics
- Economic Dynamics
- Economic Growth
- Economic Forecasting
- Economics of Ageing
- Empirical Industrial Economics
- Environmental Economics

- Family and the Society: **Economic Theories and Practices**
- · Game Theory
- Health Economics
- Healthcare Management
- Health Systems and Policy Industrial Organisation
- Intermediate Econometrics
- Introductory Data Analytics in Healthcare
- Labour Economics
- Macroeconomics of Income Distribution

- Monetary Economics
- Organisational Economics
- Political Economy of Globalisation
- Public Sector Economics
- Real Estate Economics
- Statistical Inference for Data Science
- Statistical Learning with R
- Strategic Thinking
- The Economics of Politics
- Urban Economics and Policy

FREE ELECTIVES

A total of 9 courses must be completed in this category. You may choose courses from among Economics Electives or Free Electives from any of the other schools for which you satisfy the prerequisites.

WHAT SPECIFICALLY DESIGNED PROGRAMMES ARE UNIQUE TO SMU SOE?



Within the Economics major, there are some specifically designed combinations of courses.

QUANTITATIVE **ECONOMICS TRACK**



The Quantitative Economics Track (QET) is designed to respond to the increasing demand from industry, government and academia for graduates with the knowledge and skills required for technical analyses of economic situations and issues. This track is ideal for students who are interested in:

- 1) becoming professional economists in the government or private sectors;
- 2) pursuing a more technical career path in industry;
- 3) pursuing graduate studies in Economics or in Finance; or simply increasing the scope and depth of their knowledge in the quantitative aspects of Economics.

The choice of Economics courses is guided to place more emphasis on the development and application of quantitative methods. Students who opt for this track will take the more quantitative international economics options which provide the training for conducting in-depth analysis of international trade and finance issues, while a deeper foundation in economic analysis and a higher level of technical competency will be achieved through advanced courses in the core areas of microeconomics, macroeconomics and econometrics.

The compulsory courses for the QET are the following 3 courses:

- 1) Intermediate Econometrics
- 2) Advanced Microeconomics
- 3) Advanced Macroeconomics

In addition, students need to take 2 elective courses from the following list:

- International Trade
- International Macroeconomics
- Mathematical Methods for Economic Dynamics
- Empirical Industrial Economics
- Time Series Econometrics
- Research Methods in Economics

REAL ESTATE TRACK



The Real Estate Track (RET) is designed to provide students doing Economics and/or Finance majors the opportunity to widen and deepen their knowledge and understanding of real estate. Students will be able to leverage the fundamentals of Economics and Finance and acquire the quantitative and qualitative tools necessary for a variety of roles in the sector, such as real estate development, advisory, research, leasing, financing, property/project management, Real Estate Investment Trusts (REITS) management, investment banking, consulting and agency management.

The RET aims to develop a pipeline of graduates who will be equipped with a strong grounding in real estate investment and finance. They will be familiarised with real estate development in Singapore and the region. The track fits in well with the national objective to develop more talent and skillsets needed to advance Singapore as a hub for real estate financing for the region and participate in China's "One Belt, One Road" initiatives.

The track is complemented with exposure to real-world business practices, case studies and experiential learning opportunities, such as speaker events, local and overseas internships, as well as local and overseas study trips. In addition, bond-free academic awards will be offered to students. The requirement of the RET is the following 5 courses relevant to the real estate industry, including 3 compulsory courses:

- 1) Real Estate Investments and Finance
- 2) Real Estate Economics
- 3) Risk and Regulations in Real Estate

Minimum 2 electives from a specified set of courses relevant to the real estate industry.

SECOND MAJOR

You may choose a second major within School of Economics in Actuarial Science, Data Science and Analytics, or Health Economics and Management. You may also select a second major from one of the other schools. Examples of second majors include:

- Accounting
- Actuarial Science
- Communication Management
- Data Science and Analytics
- Finance
- Health Economics and Management
- Information Systems
- Legal Studies
- Marketing
- Organisational Behaviour and Human Resources
- Political Science
- Psychology
- Quantitative Finance
- Sociology
- Sustainability

SECOND MAJOR IN **ACTUARIAL SCIENCE** (ACS)

Actuarial Science applies rigorous probability and statistics models to the analysis and management of various risks in business, which includes life insurance, non-life insurance, and enterprise risk management of all corporations. The ACS major provides multidisciplinary training on probability, statistics, finance. economics, risk management, and predictive modelling, etc. The ACS curriculum meets all the objectives listed in Validation for Education Experience (VEE) guidelines under the US Society of Actuaries (SOA) and prepares students for the professional credentials under SOA as an actuary, i.e. Associate (ASA) and Fellow (FSA), as well as an enterprise risk analyst i.e. Chartered Enterprise Risk Analyst (CERA).

SECOND MAJOR IN DATA SCIENCE AND ANALYTICS (DSA)

The increasing volume of data and advanced data technologies pose new opportunities as well as challenges for data analysts to transform data to useful information for decision-making. In order to provide a rigorous training for students to develop appropriate data analysis skills, the DSA major emphasises applications of data visualisation, statistical modelling, computing and information technology as well as simulation and predictive approaches to solve real-life problems in all private and public institutions. The DSA curriculum adopts a hands-on and comprehensive pedagogy in both statistics and computer science, focusing on statistical software applications of big data analysis related to Economics, Social Sciences, Finance, Risk Management, Business, Insurance, etc.

SECOND MAJOR IN **HEALTH ECONOMICS** AND MANAGEMENT (HEM)

The second major in Health Economics and Management (HEM) centres on the healthcare industry. one of the largest and fastest-growing industries. Students in the HEM major will learn essential knowledge and skills for all high-level healthcare professionals. hone them through experiential learning, and develop first-hand understanding of the healthcare environment through internship. The HEM major opens the door to meaningful career paths in the healthcare industry and is suitable for those with a passion for promoting health and wellbeing, delivering quality healthcare, contributing to the saving of lives, and ensuring graceful ageing of a society.

DOUBLE DEGREE

The double degree programme provides students with added flexibility in their career options. Under the double degree programme, a student can graduate with two degrees in:

- Economics and Accountancy
- Economics and Business Management
- Economics and Computer Science
- Economics and Computing & Law
- Economics and Information Systems
- Economics and Social Sciences
- Economics and Law (Law must be the primary degree)

HERE'S WHAT SMU SOE'S ALUMNI HAVE TO SAY

"I benefitted from SMU School of Economics' undergraduate curriculum in many ways. The seminar-style teaching allowed me to clarify doubts and engage in discussion easily. Group work allowed me to get to know many of my peers, as well as adapt to different working styles. The requirement to take many different kinds of courses outside of my major also helped me. For example. a programming course I took provided me with many skills I used in my graduate studies and in my first job. I was also fortunate to have the flexibility to set up an undergraduate research club (SEIC, or SMU Economics Intelligence Club) together with several of my peers, which made them my lifelong friends. Finally, I also gained valuable overseas experience through exchange and overseas community involvement projects."



Leung Weiwen

Senior Data Scientist, Coupang PhD in Economics. University of Minnesota - Twin Cities Graduated in 2013

"Joining SOE was one of the best decisions I made in my life. Its flexible curriculum meant there was more freedom to plan my own development goals accordingly. Going through the SOE curriculum has invaluably added onto my analytical and reasoning skills. It also offered an immensely diverse education experience – from student demographics, course tracks to internship opportunities. Using SOE as a platform, I was fortunate enough to have secured multiple internships including a 10-week stint in China. I strongly believe these experiences will continue to help in my professional development."



Lim Xue Yan, Marilyn Scheduler, BHP Graduated in 2019

"The SMU experience is unique because it gives students the power to shape their own experience and education. The curriculum structure and breadth of course offerings at SOE gave us flexibility to explore, with the option of pursing depth through advanced modules if a certain field was particularly interesting. International exposure and hands-on learning are also core tenets of the curriculum. Through three internships and a semester exchange in the Netherlands, I gained invaluable exposure and a confidence in unfamiliar environments, be it a new country or a new company. Last but definitely not the least, SMU is a place where I met amazing people. The friends that I met in class, through Oikos and through other co-curricular activities are people who have given me endless support and advice. They form an irreplaceable element of the SMU experience that will stay for many years to come."



Natalie Ng Yun Yi Analyst, Partners Group Graduated in 2018

"I was an exchange student at the School of Economics of SMU during fall 2019. I mostly took fourth-year courses where I could understand in-depth several notions of economic theory. The format of the courses and the class size provide a great learning environment where each student is stimulated. The repeated interaction with the Professors helped me to digest the material of the classes. The Advanced Microeconomics class was definitely the highlight of my undergraduate studies. Challenging and rewarding, I still use on a regular basis the tools I learnt during this course. Overall, I believe my short stay at the SOE strengthened my interest in economics and was a great preparation for my graduate studies."



Vincent Leandre Pául Pallud

Master's in Economics. Barcelona School of Economics Exchange Student in 2019



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For more information on our curriculum, please visit our website: economics.smu.edu.sg





