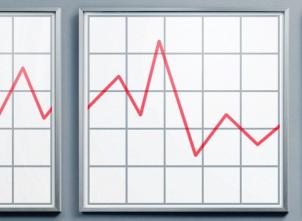
# SMU PhD IN ECONOMICS A leading school for economics research in Asia











# Overview and Programme Goals

The PhD in Economics programme offered by Singapore Management University (SMU) trains you to do rigorous research and analysis in economics. Graduates from our programme often go on to be professors in universities where they work to extend and transmit knowledge of our economies. Many graduates also go on to work in industry, the public sector, and in international organisations where they apply their economics knowledge and research capabilities to improve the economic condition of their firm, their industry, their country, or the world in general.

SMU's Economics PhD is a highly selective and carefully planned programme delivered by a team of internationally recognised professors who are actively engaged in research at the frontiers of economics knowledge, and who are dedicated to teaching and training the next generation of economics researchers and thinkers, teachers and policy makers. Our programme provides the rigorous training you will require to operate at the forefront of economics research, starting with intensive foundation courses in your first year, field courses in your second year to give you a wide exposure to different fields and different faculty members, and then finally, in-depth study into your chosen area of research. There are also many seminars and research workshops in which you can immerse yourself in research at the highest level and interact with top researchers from around the world.

SMU's School of Economics is recognised internationally as a leading centre for economics research. In Tilburg University's 'Top 100 Economics Schools Research Ranking,' based on publications in leading journals between 2011 and 2015, it was ranked 2<sup>nd</sup> in Asia, and among the top 60 in the world. In the sub-discipline of econometrics, it is ranked within the top 5 globally.

While training you to be a top economics researcher is the programme's paramount objective, we also have several accompanying programmes to help you develop more fully, including instructor and presentation training, and support programmes and guidance for those entering the job market. We also offer financial support for students to present their work at international conferences. Ultimately, our goal is to produce graduates who will go on to clinch good positions in academia, government and policy institutions, or industry, and who will make important contributions there.

We invite you to find out more about us and the programme we offer, and should you decide that you would like to pursue a PhD in Economics, we invite you to apply for our programme, to join us as we together explore the fascinating discipline of economics.



**Bryce Hool** Professor of Economics Dean, School of Economics



Anthony Tay Associate Professor of Economics, Associate Dean (Postgraduate), and Programme Director, PhD and MSc in Economics





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My five years in the PhD in Economics programme was a wonderful experience. I have seen myself grow tremendously over the years, both on a professional and personal level. SMU is a place with high-quality research, yet it also exudes a nice and warm family-like atmosphere. The environment is well-suited for a dynamic student who is embarking on his or her postgraduate studies, and for him or her to carve out a name for him or herself in research.

The faculty members are supportive and encouraging. Their doors are always open, and they always have time for students. Their expertise and experiences are freely available for us to tap into. For us students, we take our work seriously, yet we still have moments of fun and relaxation – a balanced approach to cope with the various demands in research. We push and support one another because we want everyone to excel. Ideas and experiences are shared freely among ourselves. I had doubt and apprehension before I started the programme, but looking back I find that I have enjoyed my learning and research journey in SMU. I am glad that I made the choice of doing my postgraduate studies at SMU.

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The SMU PhD in Economics journey certainly changed my life. I entered the PhD programme with little research experience and was unclear of how to conduct highquality research. Through the rigorous training I underwent in the programme and the collaborative research projects with my supervisors, I learned how to come up with creative ideas and do high-quality research. SMU has opened doors of opportunity for me to be a successful scholar.

I also thoroughly enjoyed my PhD life at SMU. The faculty members were supportive and my classmates were very friendly. It is as if we study and work in a big family. I am fortunate to study under the supervision of the best advisors in the world. Being renowned econometricians in their field, they are not only knowledgeable, but are also very kind and helpful. I will always be grateful for being able to undertake my PhD studies at SMU.







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SMU was my home for 10 years as I did both my undergraduate and postgraduate studies here. SMU has a sense of warmth, and the thirst for knowledge that you can feel from your first day here. This search for excellence is a key value at SMU.

The SMU PhD in Economics programme reflects these core SMU values, and research is rigorous and cutting-edge in the pursuit of new frontiers of insight. Students are equipped with all the training and guidance necessary to embark on new and impactful research. The PhD programme has a collegial atmosphere, with students pursuing a shared goal to make a valuable academic contribution.

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# Programme Description

The SMU PhD in Economics programme provides students with a structured path from classroom learning to front-line research. The students develop the skills necessary to put together rigorous, well-founded arguments and theories of the behaviour of economies, markets, industries, and of the people and institutions that make up these entities. They develop the empirical skills needed to tease out evidence from data, to falsify or lend support to their novel theories, to the highest standards demanded by economic science.

Many of our students graduate with academic publications in top research journals, and go on to successful careers in industry and academia.

Our research strengths include:

- Econometrics Game Theory, Social Choice & Mechanism Design
- Macroeconomics Health Economics Industrial Organisation
- International Trade Labour, Human Capital & Education
- Real Estate & Urban Economics.

#### FIRST YEAR

Our students spend their 1<sup>st</sup> year building their foundations in Microeconomics, Macroeconomics and Econometrics, with coverage of both theoretical foundations of economics and the advanced mathematical skills, as well as empirical and computational skills, which they will need in their research.

Students must sit for, and pass the PhD Qualifying Examinations in Microeconomics, Macroeconomics and Econometrics before being able to advance in the programme.

#### SECOND YEAR

The 2<sup>nd</sup> year of the programme provides our students with the opportunity to survey the many branches of economics and econometrics, and to delve deeper into their chosen areas of research. The many 'Advanced Research Topics' or ARTs that we offer include:

Advanced Time Series Econometrics Advanced Topics in Macroeconomics **Financial Econometrics** Health Economics Industrial Organisation I Industrial Organisation II Labour Economics Mechanism Design I Mechanism Design II Monetary Economics Panel Data Econometrics I Panel Data Econometrics II Social Interactions **Spatial Econometrics Topics in Development Economics Urban Economics** Advanced Topics in Mathematical Economics

Through the ARTs, students develop working relationships with our faculty members and start the development of their research ideas. The students also continue with their development of Microeconomics and Macroeconomics through our international elective where students choose either International Trade or International Macroeconomics.

### THIRD YEAR

The students move fully into research gear in their 3<sup>rd</sup> year. They put together their research proposals, defend it and write their first serious research paper – the '3<sup>rd</sup> year paper' – which often becomes the first chapter of their dissertations. At this stage, students also start attending seminars and presenting at our workshops, and may choose to participate in one or more of our 'study groups', where faculty members and students meet regularly to discuss new developments and exciting new working papers and publications. Current study groups include the following: the Econometrics Study Group, the Time Series Econometrics Study Group, the Macro-Labour Study Group, and the International Trade Study Group.



#### FOURTH AND FIFTH YEARS

At this stage, students continue with their dissertation; work on their second and third papers; submit to journals; and present at conferences. Some of our more advanced students are able to finish their dissertations in four years, though most would require five years. The 5<sup>th</sup> year is also when most of our students enter the job market.

Although developing our students into productive researchers is the primary objective, our programme also aims to help them develop other skills which the students will need to become good communicators, presenters and teachers. Some of our senior students are also given the opportunity and responsibility of teaching entire undergraduate classes on their own. All of this, of course, culminates in strong, well-rounded graduates, who compete for jobs in industry, international organisations and academic positions all over the world – graduates who create new knowledge, new understanding and who make a difference.



# Admission and Application

### ADMISSION REQUIREMENTS

- At least a good Bachelor's degree.
- A Master's degree is useful but not required.
- Good GRE or GMAT results.
- Good TOEFL or IELTS scores.

For applicants whose medium of instruction at the Bachelor's/ Master's level was not English.

#### Submission of the following documents:

Copy of Identity Card/Passport

- Latest Curriculum Vitae with a recent photograph
- Copies of Degree Certificates and Transcripts
- Personal and Research Statements

**Recommendation Letters** 

Writing Samples/Indicators of Research Potential

All shortlisted applicants will be interviewed. Our admission decision will be based on an assessment of your entire application package.

The PhD in Economics programme is technically rigorous and mathematically demanding. A strong mathematical background is essential just to get through the 1<sup>st</sup> year's core courses. An ideal background would include multivariable calculus (typically covered over two courses of calculus at the undergraduate level), real analysis, intermediate level linear algebra, and a strong foundation in probability and statistics.

### APPLICATION INFORMATION

The PhD in Economics is a full-time programme. The University's application window is listed below.

Intake	Opening Date for Application	Closing Date for Application
August	1 November (of prior year)	31 January (of intake year)

Details of programme fees and application procedure can also be found at http://smu.sg/phd-econs.





Shurojit Chatterji Professor of Economics Singapore Management University

Shurojit Chatterji is an economic theorist whose research interests include the study of dynamics in the presence of learning behaviour, equilibrium theory, mechanism design and the economics of climate change.

Shurojit's research has appeared in journals including Journal of Economic Theory, Games and Economic Behaviour, Journal of Mathematical Economics, Economic Theory, Journal of Economic Dynamics and Control, and Econometrica.



Liangjun Su Professor of Economics Singapore Management University

Liangjun Su's main research interests include econometric theory, nonparametric econometrics, panel data models, financial econometrics and spatial econometrics. He has published over 30 papers in top international journals in economics and statistics and edited two books, as listed below.

- The Oxford Handbook of Applied Nonparametric and Semiparametric Econometrics and Statistics, edited with Jeffrey Racine and Aman Ullah, New York: Oxford University Press, January 2014.
- Advanced Mathematical Statistics, written in English and translated into Chinese by Liangjun's students, Peking University Press, September 2007.

A winner of the Econometric Theory Multa Scripsit award in 2014, he is currently an associate editor for Journal of Econometrics and Econometric Reviews, and a coeditor for Econometric Theory.





Jun Yu Professor of Economics and Finance Singapore Management University

Jun Yu's research interests are in financial econometrics, empirical asset pricing and econometric theory. His recent work includes the econometric identification of asset bubbles and estimation of bubble origination dates. He has published more than 40 articles in journals including Review of Financial Studies, International Economic Review, Journal of Econometrics, Econometric Theory, and Journal of Business and Economic Statistics.

Jun has served on the editorial boards of several journals, including Econometric Theory, Journal of Financial Econometrics and Econometric Reviews. He has edited special issues for Journal of Econometrics and Econometric Theory. He is a fellow of the Journal of Econometrics and the Society of Financial Econometrics.



Assistant Professor of Economics Singapore Management University

Jing Li's research interest includes urban economics, real estate economics and health economics. Her work focuses on agglomeration economies in the healthcare industry, in particular, the extent to which concentrations of medical activities generate spillover effects that boost the productivity of treating patients. She also studies issues related to the land and housing markets, such as bidding strategies adopted by land developers when participating in government land auction sales and how the land auction outcomes impact the equilibrium price of housing properties.

Jing's work has been published in the Journal of Urban Economics, Regional Science and Urban Economics, and the Journal of Applied Econometrics.



Juliana Yu Sun Assistant Professor of Economics Singapore Management University

Juliana Yu Sun's research focuses on technological factors that determine economic growth and structural change, the interactions between industry technological characteristics and business cycles, and the linkage between the real economy and finance. In particular, she works on multi-industry growth models with industry differences in productivity growth rates to replicate the pattern of structural change along the development path in the long run. She also studies variation in industry growth within manufacturing to determine which technological characteristics interact significantly with business cycles and macroeconomic uncertainty.

Juliana's work has been published in the Review of Economic Dynamics and the European Economic Review.





# Financial Assistance Schemes

SMU awards three types of scholarships and fellowships on a competitive basis. We assess applicants for different award schemes either at the time of admission based on qualification and suitability for these schemes or during their PhD journey based on their outstanding academic performance.

### SMU SCHOLARSHIP

The scholarship covers registration and subsidised tuition fees. This scheme also provides successful recipients with monthly living stipends.\* The scholarship is renewed yearly, conditioned on good academic performance, for a maximum duration of four years. Beyond the scholarship duration, students who have been on the scholarship may receive continued support through research and teaching assistantships or industry grants.



# SMU PRESIDENTIAL DOCTORAL FELLOWSHIP

The SMU Presidential Doctoral Fellowship\* is awarded to exceptionally qualified students who enrol into SMU's PhD programmes as well as to existing PhD students who have outstanding academic performance. The Fellowship is a one-year award that is renewed annually, for up to four years.

# SMU MULTIDISCIPLINARY DOCTORAL FELLOWSHIP

The SMU Multidisciplinary Doctoral Fellowship\* is awarded to existing PhD students whose research output show the use of techniques from two or more fields of research. This Fellowship is also a one-year award that is renewed annually, for up to four years.

\* The stipend rates are published at http://smu.sg/phd and are subject to change.

# A Unique University in Vibrant Singapore



SMU has been designed to provide a different model of university education in Singapore.

### A STRONG AND INNOVATIVE RESEARCH CULTURE

Internationally recognised for its world-class research and distinguished teaching conducted by faculty members who joined us from top universities.

Faculty members collaborate on cross-disciplinary work to generate impactful and real-world relevant ideas, over and above research in their own disciplines.

Faculty members establish research centres and institutes to conduct problem-driven research and influence industry practice across a wide range of topics.

### A DIFFERENT LEARNING APPROACH

Faculty members encourage an interactive learning environment through inquiry, participation and teamwork.

Seminar-style teaching in small classes optimises student-instructor interaction.

### STATE-OF-THE-ART INFRASTRUCTURE

Research support includes proprietary and published databases.

SMU's library provide access to many scientific journals, electronic books and other neccessary publications and materials.

Being in the heart of the city, students will have easy access to industry partners who provide research data and validation platforms.

Each School has dedicated personnel to take care of students' administrative needs. Furthermore, many SMU research centres and institutes provide post-doctoral fellowships and/or research assistantships that add value to students' research experience.



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