Academic Research PhD Programmes

Research Excellence across Management, Social Science & Computing

- Business
- Accounting
- Economics
- Information Systems
- Psychology
- Computing
- Social Science
The Singapore Management University (SMU) is a premier university in Asia that is internationally known for its world-class research and distinguished teaching. SMU offers the following academic research Doctor of Philosophy (PhD) programmes across the disciplines of management, social science and computing. The PhD programmes offered are in Accounting, Business, Economics, Psychology, Computer Science and Information Systems.

With at least a Bachelor’s degree and a passion for research and teaching, you can embark on a PhD with us in specialised and multidisciplinary research areas of interest. The SMU PhD provides high-quality doctoral training that equips our students and graduates to produce leading-edge research in their specialised fields. Our graduates are in diverse careers in academia and industry, working for prestigious academic institutions and industry organisations in Singapore and abroad.

Pursuing a PhD may be a long journey involving 4 to 5 years of full-time study, but it is the beginning of an enriching career. On your journey, you will look for gaps in existing literature and find innovative solutions to problems, and explore unique ways to ‘connect the dots’ or even ‘disconnect and reconnect current ones’. Your research work could be disseminated in top-tier journals and conferences, and could also bring about impactful changes to the lives of others. Basically, you are creating knowledge, the kind that could eventually be used by educationists, industry or even policy makers.

SMU ensures that you do not walk this journey alone. We provide you with academic and professional training to prepare you well for your career. You will be taught and supervised by our distinguished faculty members who are experts in their respective fields. They will carefully take you through every major milestone in your PhD study. You will also receive training in professional skills (such as teaching, and scientific writing and presentation).

I encourage you to take this first step in shaping your future, and look forward to welcoming you on board our SMU PhD programme.

Professor Steven Miller
Vice Provost (Research)

SMU PhD Programmes:
Broad Research Strengths

**PhD in Accounting**
- Auditing
- Capital Markets
- Corporate Governance
- Disclosure
- Financial Reporting
- Taxation

**PhD in Business**
- Finance
  - Asset Pricing
  - Corporate Finance & Governance
  - Hedge Funds
- Institutional Investors
- Market Microstructure
- Private Equity
- Marketing
  - Digital & Mobile Marketing
  - Offline and Online Retailing
  - Financial Impact of Marketing Actions
  - Role of Feelings & Emotions on Consumer Decision Making

**Operations Management**
- Business Analytics
- E-Commerce & Marketplace Analytics
- Healthcare Operations Management
- Inventory, Logistics & Transportation Management
- Operations Planning, Scheduling & Control
- Operations Strategy
- Product, Process & Service Design and Improvement
- Project Management
- Purchasing & Sourcing Management
- Supply Chain Management
- Sustainable Operations including Agri-business

**Organisational Behaviour & Human Resources**
- Culture & Cross-cultural Management
- Ethics
- Fairness
- Human Capital
- Strategy & Management
- Judgement & Decision Making
- Leadership
- Negotiation
- Organisational Creativity & Innovation
- Organisational Justice
- Performance Measurement
- Positive Organisation (Mindfulness, Humility, Proactivity)
- Trust
- Well-being & Stress

**Strategic Management & Organisation**
- Entrepreneurship
- Innovation
- International Business
- Organisation Theory
- Strategic Management

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

**PhD in Psychology**
- Cognitive
- Cultural
- Evolutionary
- Industrial & Organisational
- Social-Personality

**PhD in Computer Science**
- Cybersecurity
- Data Science & Engineering
- Intelligent Systems & Optimisation
- Software & Cyber-Physical Systems

**PhD in Information Systems**
- Information Systems & Management
PhD Programmes

SCHOOL OF ACCOUNTANCY

PhD in Accounting

This programme equips students with in-depth knowledge of accounting theory and practice, and of related fields such as economics and finance. Students will have the ability to conduct original scientific research in accounting through theory-building and state-of-the-art quantitative research methodology, and will be trained by distinguished faculty members in fields such as financial accounting, managerial accounting, auditing and tax. Our programme’s objective is to develop highly-skilled and innovative thought leaders in accounting research and education for leading research-oriented universities and industries in this region and throughout the world.

For more details, please visit: http://smu.sg/phd-accounting

LEE KONG CHIAN SCHOOL OF BUSINESS

PhD in Business (Finance)

This rigorous and intellectually stimulating programme emphasises advanced study in the areas of finance, economics, statistics and quantitative research methods. The programme is taught by a group of dynamic faculty who consistently publish in top finance journals.

At the end of the programme, graduates will have the skills needed to conduct in-depth research into a specific sub-field in finance such as asset pricing, corporate finance and market microstructure. Graduates will also have a broad appreciation of the key research issues that resonate with the field. Given the tremendous relevance of finance to the global economy, a graduate of this programme will be well prepared for diverse careers in academia, industry, international organisations and the public sector.

For more details, please visit: http://smu.sg/phd-business-finance

PhD in Business (Marketing)

The programme aims to train students to conduct rigorous and relevant research focused on understanding, modelling and predicting marketing actions of firms and managers, and the behaviour of consumers. To this end, students have the opportunity to decide the research-active faculty members they would like to work with, making this a flexible and nurturing programme. Our faculty members have published their research in prestigious journals like the Journal of Marketing, Journal of Marketing Research, Journal of Consumer Research, Marketing Science, and Management Science. This highly selective programme is geared towards helping students in their journey to becoming scholars and leading marketing faculty.

For more details, please visit: http://smu.sg/phd-business-marketing

PhD in Business (Organisational Behaviour & Human Resources)

This programme equips graduates with the knowledge, skills and abilities to conduct highly rigorous research in Organisational Behaviour and Human Resources (OBHR) in major research universities worldwide. The programme, taught by an international group of faculty members who consistently publish in the field's most respected journals, will provide hands-on training in research right from the onset as well as a stimulating curriculum emphasising psychological foundations of organisational behaviour and human resources, statistics and research methods. A nurturing approach will be adopted by faculty members to help students succeed in the job market and in their careers.

For more details, please visit: http://smu.sg/phd-business-obhr

PhD in Business (Strategic Management & Organisation)

This programme is designed to equip students with the skills, knowledge and competencies to conduct high-quality research in the areas of strategic management and organisation. Students can choose their research topics from a variety of sub-areas within the domains of strategic management and organisation theory, including corporate and business strategy, innovation, technology management, entrepreneurship, and corporate governance.

The programme provides rigorous training by faculty members who regularly publish in top academic journals. This ensures that students will be well equipped to start their academic careers as competent and independent researchers.

For more details, please visit: http://smu.sg/phd-business-smo

The Lee Kong Chian School of Business is now one of the youngest business schools in the world, and the only Singaporean business school, to hold the honour of being triple accredited by the Association to Advance Collegiate Schools of Business (AACSB), AMBA and European Quality Improvement System (EQUIS).
SCHOOL OF SOCIAL SCIENCES

PhD in Psychology
This programme equips students with doctoral-level knowledge in content areas in psychology and research methodology, focusing on areas in experimental, social, personality and organisational psychology.
Students will learn, from both coursework and hands-on research experience, to link psychological theory, study design, measurement, and data analysis in order to make substantive inferences and evidence-based recommendations to theory and practice that are scientifically defensible. Students in the programme have presented their work at international conferences and published their research in top journals in psychology. Graduates of the programme will be well-prepared for careers in universities, research institutes and industry.
For more details, please visit: http://smu.sg/phd-psychology

SCHOOL OF ECONOMICS

PhD in Economics
This programme trains students to do rigorous research and analysis in Economics. It is delivered by internationally recognised professors who are actively engaged in research, and who are dedicated to teaching and training the next generation of economic researchers, teachers and policy makers. We also offer interaction opportunities with top researchers in economics from around the world through our extensive seminar and visitor programmes. SMU’s School of Economics is recognised internationally as a leading centre for economic research.
For more details, please visit: http://smu.sg/phd-econs

SCHOOL OF INFORMATION SYSTEMS

PhD in Computer Science
PhD in Information Systems
These programmes develop researchers and developers who address deep technological challenges in real-world information systems that impact business processes or management, or who develop tools and methodologies to translate business goals into technological solutions. There are four niche areas of research concentration for Computer Science, namely: Cybersecurity; Data Science & Engineering; Intelligent Systems & Optimisation; and Software & Cyber-Physical Systems. The niche research area of concentration for Information Systems is Information Systems & Management.
Our graduates are capable of collaborating with researchers from different disciplines, designing technology solutions for real-world problems and applications, and producing top-rated academic publications. The programmes will equip them for careers with research and development laboratories, academia and industry.
For more details, please visit: http://smu.sg/phd-is

Visiting Graduate Student Programme
The programme provides opportunities for students from universities worldwide to spend one or more academic terms at SMU as non-graduating students. PhD and Master’s students from other universities may enrol in our postgraduate research courses and participate in research projects under the co-supervision of SMU faculty members.
For more details, please visit: https://smu.sg/visiting-graduate-student-programme
Programme Structure

A PhD student will focus on coursework in the first one to three years, followed by dissertation research in subsequent years. The coursework is intended to lay the ground in preparation for the dissertation research.

Preparatory Coursework
(Over Years 1 to 3)

Qualifying Examination
(By Year 3)

Dissertation
(Years 4 to 5)

The coursework requirement of the various PhD programmes is a combination of these courses:

- Foundation Courses
- Electives
- Advanced Research Topics
- Empirical Research Projects

On completion of all required coursework, the student will sit for a PhD Qualifying Examination (QE). It will assess his or her mastery of the foundation required for the next stage of the PhD programme – the dissertation. This is the student’s original work in his or her specialised area through independent research. On successful completion of the QE, the student will be ready to embark on the dissertation. If he or she feels comfortable with the PhD curriculum along the way, the dissertation research can commence even before the coursework is completed. The dissertation is marked by two major milestones, as follows.

ORAL DEFENCE OF THE DISSERTATION PROPOSAL
This is an oral presentation of the proposed topic to a Dissertation Committee. A written dissertation proposal will have to be submitted before the presentation. A supervisor with the expertise in the chosen topic will be appointed. He or she guides and mentors the student throughout the dissertation work.

ORAL DEFENCE AND COMPLETION OF THE PhD DISSERTATION
This is an oral presentation of the written dissertation report to the Committee. After possible revision(s) to the report and upon fulfillment of all necessary requirements, the Committee will recommend to the University to award the PhD degree.

Admission and Application

GENERAL ADMISSION REQUIREMENTS

- At least a good Bachelor’s degree.
- A Master’s degree is useful but not required. Some disciplines require a Bachelor’s degree in related areas.
- Good GRE or GMAT results. Some disciplines may specify a preferred test.
- 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 and/or Reference Letters
- Writing Samples

APPLICATION INFORMATION

All the PhD programmes are full-time. The University’s application windows are listed below. All programmes, except the PhD in Computer Science and PhD in Information Systems programmes, accept only one intake per year, in August.

<table>
<thead>
<tr>
<th>Intake</th>
<th>Opening Date for Application</th>
<th>Closing Date for Application</th>
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<tbody>
<tr>
<td>August**</td>
<td>1 August (of prior year)</td>
<td>31 January (of intake year)</td>
</tr>
<tr>
<td>January**</td>
<td>1 February (of prior year)</td>
<td>30 June (of prior year)</td>
</tr>
</tbody>
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* Candidates who apply by 31 October would be given priority for consideration of scholarships.
** Candidates who apply by 31 March would be given priority for consideration of scholarships.

Details on the application procedure can be found in the respective programmes’ websites (indicated earlier under ‘Academic Research PhD Programmes’).
Financial Assistance Schemes

SMU awards four 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 IN COMPUTING
The SMU Presidential Doctoral Fellowship in Computing is provided to exceptionally qualified students, who are offered candidatures into SMU School of Information Systems’ PhD programmes, from the August 2018 intake. The Fellowship is a one-year award that is renewed annually, for up to four years.

SMU PRESIDENTIAL DOCTORAL FELLOWSHIP
The SMU Presidential Doctoral Fellowship* is awarded to existing PhD students who have outstanding academic performance. The Fellowship is a one-year award.

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.

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

Selected Dissertations

PhD IN BUSINESS

Finance
• Essays on Asset Management (Lin SUN, 2017)
• Three Essays on Return Predictability and Asset Pricing (Fuwei JIANG, 2014)

Marketing
• Empirical Investigation of Digital Strategies in Retail (Yong Chin TAN, expected 2019)
• Examining Outcomes of Marketing Actions from Consumers, Investor and Operational Perspectives (Leon Gim LIM, 2018)

Organisational Behaviour & Human Resources
• Women in Innovation: Challenges and Opportunities (Mengzi JIN, expected 2019)

PhD IN ECONOMICS

• Nonstationary Panels with Unobserved Heterogeneity (Wenxin HUANG, 2018)
• Three Essays on Bayesian Econometrics (Xiaobin LIU, 2018)
• Essays in the Economics of Health and Ageing (Yi Jin TAN, 2018)
• Three Essays on Social Insurance (Sun YA, 2018)
• Three Essays on Financial Econometrics (Liang JIANG, 2016)

PhD IN PSYCHOLOGY

• What Influence Gratitude? The Effects of Type of Benefactor, Sense of Entitlement and Downward Counterfactual Thought (Chou Chuen YU, 2018)
• The Role of Bilingual Interactional Contexts in Predicting Interindividual Variability in Executive Functions: A Latent Variable Analysis (Andree HARTANTO, 2018)
• Coping with Stereotype Threat: Multiple Identities and the Role of Gender Professional Identity Integration [G-PII] (Amy LIM Jia Ying, 2018)
• When Pursuing Multiple Goals, People Prioritize the Minimally Acceptable Level Over Aspiration Level (Huey Woon LEE, 2017)
• A Proposal and Examination of a Novel Life History and Sociometer Model of Self-esteem (Jin Chuan YONG, 2017)

PhD IN INFORMATION SYSTEMS

• Analyzing and Modeling Users in Multiple Online Social Platforms (Roy LEE Ka Wei, 2019)
• Proactive and Reactive Resource/Task Allocation for Agent Teams in Uncertain Environments (Pritee AGRAWAL, 2018)
• From Digital Traces to Marketing Insights: Recovering Consumer Preferences for Digital Entertainment Services and Online Shopping (Ai Phuong HOANG, 2018)
• Overfitting in Automated Program Repair: Challenges and Solutions (Dinh Xuan Bach LE, 2018)
• Automatic Vulnerability Detection and Repair (Siqi MA, 2018)
SMU PhD Student Life and Achievements

SMU supports our PhD students’ social and professional growth. We develop our students to become skilled thought leaders through professional training workshops, including teaching; scientific writing and presentation; and career development courses (such as interview preparation and resume writing).

In the course of their PhD study, our students are also provided with opportunities to undergo on-the-job academic training through research and teaching assistantships, as well as being graduate instructors (where they are given full responsibility to teach undergraduate or postgraduate courses). As research assistants, our students have access to SMU’s research centres and institutes which conduct world-class research and influence industry practice across a wide range of topics.

To enhance interactions and encourage collaborations with one another, our PhD students actively participate in a variety of activities organised throughout the academic year. These include research exhibitions, sports events and networking sessions.

Our PhD students have gained extensive research achievements. They have won best paper awards at distinguished international conferences. Some of their papers are joint research work with our faculty members that have been presented at these conferences and/or published in good journals.

Our students have also secured competitive internships with prestigious international organisations, and been invited to present at peer-reviewed international conferences. Each year, our most outstanding students across the various academic research PhD programmes are awarded the SMU Presidential Doctoral Fellowship, and the SMU Multidisciplinary Doctoral Fellowship in recognition of their achievements.

These outstanding research achievements and international exposure give our PhD students a competitive edge in the job market, be it for an academic or industry position.

Over 120 SMU academic research PhD graduates have found good placements at prestigious international academic institutions and industry organisations in various regions including Asia-Pacific, Europe and North America. Read what two of our graduates have to say about their PhD experience at SMU.

A graduate student’s journey during the degree programme is akin to an apprenticeship and as such, the relationship between the student and his or her supervisor is especially crucial. My development into a researcher would not have been possible without my immediate supervisor and other SMU faculty members from the SMU School of Social Sciences. They have built an open, warm and nurturing environment for their graduate students, and are genuinely interested in their progress.

SMU’s innovative pedagogy, rigorous curriculum, supportive professors and flexible research environment provide excellent opportunities to grow personally and professionally. Classes are highly interactive and provide a congenial environment for deliberation. The SMU PhD allows for multidisciplinary collaboration across academia and industry. My professors are always encouraging me to participate in international conferences and publish in top-tier journals. This has indeed been a great avenue for me to promote my work to the wider research community.

Lay See ONG
Graduate
PhD in Psychology

Pavneet Singh KOCHHAR
Graduate
PhD in Information Systems