

# Ph.D. in Business (Operations Management)

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# Introduction to SMU

- National University
  - A management university in the city center
  - Near “Wall Street” of Singapore
- Faculty: 394
- Enrolment size (September, 2020)
  - Undergraduates: 9,144
  - Postgraduates: 2,477 (to increase to 3,000)



# SMU Campus





# SMU Campus





# Vibrant Campus Life



# PhD in Business

- Finance
- Marketing
- **Operations Management**
- Organizational Behavior & Human Resources
- Strategic Management & Organization

# Program Overview and Goals

- Emphasize theoretical research with practical relevance
- Provide teaching opportunities for PhD students
- Targeted placements
  - Faculty positions in leading universities
  - Managerial positions in industry, public sector, and international organisations

# Faculty

- Broad research areas
  - Business Analytics
  - E-Commerce and marketplace analytics
  - Healthcare operations management
  - Inventory, logistics, and transportation management
  - Operations planning, scheduling, and control
  - Operations strategy
  - Product, process and service design and improvement
  - Project management
  - Purchasing and sourcing management
  - Supply chain management
  - Sustainable operations



# Faculty

- Strong publication records
  - Operations Research
  - Management Science
  - Manufacturing and Service Operations Management
  - Production and Operations Management
  - Journal of Operations Management
  - Naval Research Logistics
  - IIE Transactions
  - Operations Research Letters
  - European Journal of Operational Research
  - Annals of Operations Research
- UT Dallas 2016-2020 Research Rankings
  - SMU: 35<sup>th</sup> worldwide (2<sup>nd</sup> in Asia; 1<sup>st</sup> in Singapore)
    - UC Berkeley 32<sup>nd</sup>, CUHK 40<sup>th</sup>, Purdue 41<sup>st</sup>, Yale 50<sup>th</sup>
- Young and energetic!

# Faculty's publications with graduate students

- “Managing Stochastic Bucket Brigades on Discrete Work Stations,” **Peng Wang**, Kai Pan, Zhenzhen Yan, Yun Fong Lim, *Production and Operations Management*, 2021
- “Urban Consolidation Center or Peer-to-Peer Platform? The Solution to Urban Last-Mile Delivery,” **Qiyuan Deng**, Xin Fang, Yun Fong Lim, *Production and Operations Management*, 30(4), 2021
- “Capacity management in agricultural commodity processing and its application in the palm industry,” Onur Boyabatli, **Jason Quang Dang NGUYEN**, Tong Wang, *Manufacturing & Services Operations Management*, 19 (4), 551-567, 2017
- “The impact of budget constraints on flexible versus dedicated technology choice,” Onur Boyabatli, **Tiecheng Leng**, L. B. Toktay. *Management Science*, 62 (1), 225–244, 2016
- “Consignment contracts with revenue sharing for a capacitated retailer and multiple manufacturers,” Yun Fong Lim, Y. Wang, **Yue Wu**. *Manufacturing and Service Operations Management*, 17(4), 2015
- “Cellular bucket brigades on U-lines with discrete work stations,” Yun Fong Lim, **Yue Wu**. *Production and Operations Management*, 23(7), 2014

# Placement Records (PhD Programmes in SMU)

- Chinese University of Hong Kong
- Tilburg University
- Peking University
- Fudan University
- Renmin University
- Wuhan University
- Zhongshan University
- Shanghai University of Finance and Economics
- Central University of Finance and Economics
  
- Singapore Corporate Executive Board
- Google
- A\*STAR
- Twitter



# Program Structure & Curriculum

- 4 to 5 years
- Curriculum
  - 6 Foundation Courses
    - Introduction to Business Research, Linear Optimization, Probability and Statistics, Foundations of Operations Management, Dynamic Programming, Stochastic Models
  - 4 Advanced Research Topics (ART) Courses
    - Topics in Advanced Optimization Techniques, Topics in Game Theory and Its Applications, Topics in Manufacturing and Service OM, Topics in Interdisciplinary Research in OM, etc.
  - 2 Elective Courses
    - Microeconomics, Econometrics, Algorithms and Optimization, Machine Learning, Foundations for Data Analytics, etc.

# Program Structure & Curriculum

Year	Term 1 (Aug - Nov)	Term 2 (Jan - Apr)	Term 3 (May - Aug)
1	Foundation Courses Elective Courses	Foundation Courses Elective Courses	Research
2	ART Courses Elective Courses Research	ART Courses Elective Courses Research	Pass PhD Qualifying Exam Form Dissertation Committee
3	Dissertation Research Submit Dissertation Proposal Oral Defense of Dissertation Proposal	Dissertation Research	Dissertation Research
4	Dissertation Research	Dissertation Research Submit Dissertation Report Oral Defense of Dissertation Report	Dissertation Research Revise and/or Re-submit Dissertation Report Submit Final Dissertation

# Admission Requirements

- Undergraduate Bachelor's degree
- GRE or GMAT
- TOEFL or IELTS if undergraduate medium of instruction was not in English
- Curriculum Vitae
- Statement of purpose (1 page)
- 2 referee reports



# SMU Scholarship

- 4 years, waiver of registration fee and tuition fee
- Monthly living stipends

Citizenship	Before Qualifying Exam	After Qualifying Exam
Singapore Citizen	S\$2,800	S\$3,300
Singapore Permanent Resident	S\$2,400	S\$2,900
Foreign Student	S\$2,200	S\$2,700

- 5<sup>th</sup> year onwards
  - Research Assistantship (RA) or Teaching Assistantship (TA)
- Conference funding: S\$3,500
- Presidential Doctoral Fellowship
  - Higher monthly stipend and additional conference support

# Doing Research in SMU

- Research environment
  - Strong collaboration among members within the OM group and beyond
  - Active interaction with other schools (through seminars, summer camps, research collaboration)
  - NUS, NTU, SUTD and INSEAD (Singapore campus)
  - Top scholars and journal editors
- Government supports
  - Research grants available from MOE, A\*STAR, NRF, etc.
  - Supports for extra stipends, conference travel, computers, etc.
- Industry relationships
  - Active engagement with various industries and public organizations
  - Institute of Innovation and Entrepreneurship, Institute of Service Excellence, Retail Center of Excellence, Living Analytics Research Center, etc.

# Studying and Living in Singapore

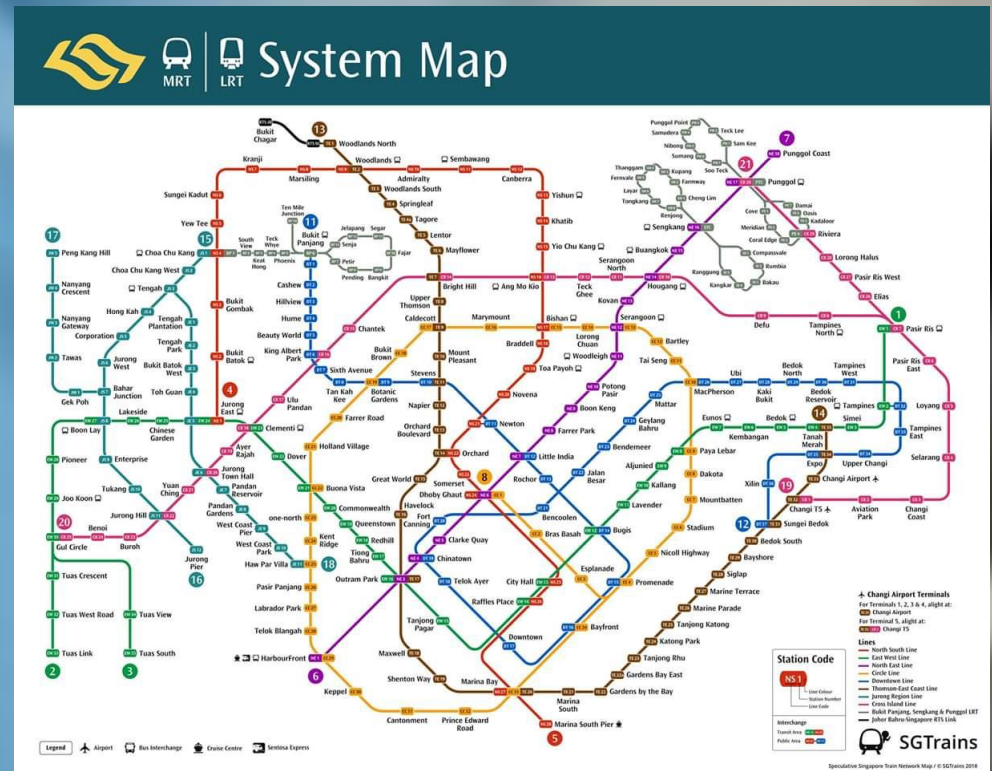
- Travel

- MRT and bus
- Taxi
- Convenient location

- Medical insurance

- Full-time and part-time local and international graduate students

- Shopping





# Housing Development Board (HDB) Flats

- Developed by government agency, HDB
- 80-85% of the population lives in HDB flats
- Typically near amenities such as MRT, food centers



# Private Condominiums

- Developed by private property companies
- Typically equipped with facilities such as swimming pool, tennis courts, gyms





# Landed Properties





# Living Expense (Estimated Figures)

- Accommodation
  - Rental rates
    - Whole-unit rental and 2 persons share a room
    - HDB flat: S\$500/month
    - Condominium: S\$750/month
    - Usually include utility and internet bills (S\$50/month)
  - Cheaper to stay with landlord(s)
- Food
  - S\$500/month
  - Average S\$5/meal (lunch or dinner) in canteens near school
- Travel
  - S\$120/month
  - Assuming you go to school everyday and take taxi occasionally
- Shopping and entertainment
- **Quality of life**

Scholarship
Year 1&2: S\$2200/month
Year 3&4: S\$2700/month

# Program Website and Contact

- Our program website
  - <http://business.smu.edu.sg/programmes/phd-business-operations-management/overview-programme-goals>
  - Search: smu phd operations management
- Contact information
  - Tel: (65) 6828 9585 / (65) 6828 0896
  - Fax: (65) 6828 0777
  - Email : [msc\\_phd\\_lkcsb@smu.edu.sg](mailto:msc_phd_lkcsb@smu.edu.sg)
  - My email : [xfang@smu.edu.sg](mailto:xfang@smu.edu.sg)

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**Apply Now!**