The MI programme provides students with attractive career options in nearly all economic sectors and across a wide range of industries and organisations.

Our rigorous Master of Science in Innovation (MI) programme was designed to equip students with a solid understanding of the principles and action steps of effective innovation management in various contexts, such as entrepreneurship, business management, creative arts, health, finance, technology and social enterprises.

The curriculum was carefully designed to ensure that our graduates will be able to apply their newly acquired innovation competencies to real-world innovation management challenges in business and society across the major stages of the innovation value chain, such as strategy development and idea generation, commercial concept and product development, launch management and market establishment, as well as successful commercialisation and sustainable growth.

As Singapore and other emerging markets gear up to become more innovation-driven economies, the MI programme provides students with attractive career options in nearly all economic sectors and across a wide range of industries and organisations.

A key goal is to advance the practice of good innovation management and to contribute to talent and innovation leadership development in this promising and strategically so important area.

For this programme, we have put together some of the most qualified and experienced teaching faculty from SMU, as well as other participating institutions, including several outstanding industry professionals who are passionate about innovation and eager to impart their knowledge to you.

I am certain that you will make full use of this enriching and rewarding learning opportunity.

Yours faithfully

Professor Howard Thomas
Dean
LKCSB Chair in Strategic Management
Lee Kong Chian School of Business
Singapore Management University

Message from the Programme Director

The programme will transform you into a master of innovation management.

SMU’s new Master of Science in Innovation (MI) programme is an important resource for leaders, managers, start-up entrepreneurs and others interested in improving an organisation’s innovation performance and potential. Based on a powerful framework which provides learners with a useful innovation management roadmap, ranging from the strategic mastery of creative (and other types of innovative) thinking and idea generation (with the help of various useful tools, such as design thinking approach), to market development and sustainable growth, students will learn how improvements in innovation can be triggered.

The carefully designed curriculum features several innovative elements, such as team teaching by reputable academics and practitioners, experiential and social media-enabled learning, structured interactions with innovation professionals, etc. The array of learning methods includes interactive lectures, case analyses, field trips, projects and assignments. Participants will interact with a diverse group of innovation experts from Asia, Europe and the United States. The overseas segment includes one week at the reputable Babson College (USA), a strategic nodal point in Boston’s renowned entrepreneurial, hi tech knowledge cluster.

The programme will transform you into a master of innovation management. Join us if you are passionate about new value creation in business and society.

Yours faithfully

Professor Thomas Menkhoff
Director, MSc in Innovation Management
Lee Kong Chian School of Business
Singapore Management University
SMU MASTER OF SCIENCE IN INNOVATION

Be an Entrepreneurial Leader

CHENG Ying Han
Account Manager
Ogilvy & Mather Worldwide Singapore

CHUA Sher Vin
Director, Asia Pacific
RightScale

Nawan POOVARAWAN
New Markets Online Sales and Operation Manager
Google Asia Pacific Pte Ltd
Programme Overview and Features

Singapore Management University (SMU) offers the Master of Science in Innovation (MI) programme by coursework. This new programme delivers a relevant curriculum and innovative pedagogy applied to the heart of Singapore and the region’s need for new business creation and innovation. Providing a 12-month weekend-based engagement, the programme offers a cross-disciplined and practical innovation and entrepreneurship education through world-class faculty, regular engagement with thought-leading practitioners, a study stint abroad at a globally leading business school, and practical innovation projects. It is designed to engage, challenge and grow Asia’s next generation of innovation and entrepreneurial leaders.

The Master of Science in Innovation (MI) programme is designed to allow working professionals to complete the (part-time) programme in four terms over 12 months. The MI programme commences in the month of August, and there will only be one intake each year. Candidates are required to complete Modules, including several Innovation Seminars, a Capstone Innovation Project, and an International Residency in order to be awarded the Master in Innovation degree. As in the previous year, our partner for the 2013 international residency segment will be the reputable Babson College in the USA (near Boston) on the basis of their high-quality Entrepreneurship education programme.

Programme and Curriculum Features

The MI programme is designed to ensure that our students acquire knowledge and competencies that are relevant to successfully tackling today’s and tomorrow’s innovation challenges in various sectors, such as services or manufacturing. You will benefit from the expertise and experiences of a wide range of resource persons, such as SMU’s outstanding and award-winning faculty, visiting professors, successful innovators, competent industry professionals, visionary entrepreneurs and your peers. Pedagogical approaches include pre-course assignments, case analyses, team activities, e-learning, industry talks, site visits and field trips. Students are also expected to complete a Capstone Innovation Project on a relevant topic of interest in order to hone their innovation skills and to contribute to new value creation.

Main Learning Goals of the MI Programme

The Masters of Science in Innovation programme aims to equip students with a good conceptual understanding of the principles and action steps of effective innovation management in business and society, including entrepreneurship, creative arts, science & technology, social enterprises, etc. The programme will prepare graduates so that they can apply newly gained insights and acquired competencies to real-world innovation management challenges across the four major stages of the innovation value chain (see ‘Phases of Innovation Value Chain and Core Module Topics’ on the next page) from strategy development and idea generation to commercial concept and product development and successful market establishment, as well as sustainable growth in various contexts.

In particular, the programme will enable graduates to:

- Think beyond current paradigms in order to discover innovation needs and to envision impact through strategic idea and concept development (Term 1).
- Turn innovation concepts into tangible new products, services, processes and business cases (Term 2).
- Manage commercialisation challenges and market launch with confidence (Term 3).
- Know how to accelerate growth and create sustainable value through appropriate business development, risk management, financing and value extraction strategies (Term 4).
**Pedagogical Focus on Dynamic Innovation Value Chain Concept**

**PHASES OF INNOVATION VALUE CHAIN AND CORE MODULE TOPICS**

<table>
<thead>
<tr>
<th>TERM 1</th>
<th>TERM 2</th>
<th>INT. RESIDENCY</th>
<th>TERM 3</th>
<th>TERM 4</th>
<th>GRADUATION</th>
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<tbody>
<tr>
<td>(AUG – SEP)*</td>
<td>(OCT – NOV)*</td>
<td>(DEC)*</td>
<td>(JAN – MAR)*</td>
<td>(MAR – MAY)*</td>
<td>(JUL)</td>
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**Strategic Innovation Leadership Drives Capability and Capacity to Innovate!**

<table>
<thead>
<tr>
<th>Strategic Concept and Idea Development</th>
<th>Development of Innovative Products, Services, Processes and Business Cases</th>
<th>Market Launch and Successful Commercialisation</th>
<th>Managing Risk, Sustainable Growth and Value Extraction</th>
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<tbody>
<tr>
<td>• Innovation-focused strategic leadership</td>
<td>• Achieving innovation success through people and organisation</td>
<td>• Market development and brand leadership, including launch management</td>
<td>• Business acceleration and growth strategy (scaling), including production ramp-up management, roll ups, etc.</td>
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<tr>
<td>• Innovation strategy development</td>
<td>• Innovation development: turning concepts into business cases</td>
<td>• Commercialising innovations</td>
<td>• Risk management in an era of volatility, uncertainty, complexity and ambiguity (VUCA)</td>
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<td>• Ideation management, creative design, prototyping and testing of concepts</td>
<td>• Financial management and new venture financing</td>
<td>• Supplier and partnership (network) management</td>
<td>• Business sustainability and value (e.g. IP) extraction</td>
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*Subject to change as deemed appropriate.

While innovation processes are seldom linear in practice, the curriculum structure is based on the innovation process model, featuring four different phases, stages, components, or main activities of the innovation value chain as shown above.

1. The first phase, which we have termed Strategic Idea and Concept Development, is characterised by searching for the strategic intent and value-added innovation needs triggered by the constantly changing ecosystem in which the organisation is embedded. Once the overall strategy, direction and positioning of the innovation efforts have been determined, the stage of idea generation or ideation management kicks in to systematically gather, share, analyse and execute innovative ideas generated within the organisation and its collaborative networks.

2. After ideas have been ranked, conceptualised and their feasibility assessed, they need to be turned into viable business models and aligned with the business models of partners and other relevant stakeholders. We have coined this second idea conversion phase as Development of Innovative Products, Services, Processes and Business Cases.

3. The main objective of the third phase is the successful implementation of the innovation. This includes prototype production, testing and validating, production, finance, market launch, roll-out management, sales management, etc. In our framework, we refer to this stage as Market Launch and Successful Commercialisation.

4. The ‘final’ phase (Managing Risk, Sustainable Growth and Value Extraction) puts emphasis on the business acceleration aspect of innovation management, sustainable growth and continuous value extraction.

We are confident that graduates will benefit from our integrated learning roadmap (see core modules next page) which is informed by the dynamic innovation process concept whose major interrelated stages and iterative feedback loops will be regularly discussed by the contributing resource persons enabling graduates to think ‘end-to-end innovation’.

In combination with SPRING’s Business Excellence Niche Standard (Innovation) which features an ‘Innovation Scorecard for Business Excellence (I-SCORE)’ and other schemes rolled out by Singapore’s Workforce Development Agency (WDA), SMU’s MI programme provides a great launch platform for innovators eager to create new value and to avoid being disrupted by competitors.
Curriculum Structure

Students attend 12 Modules (Saturdays), including several Innovation Seminars (Friday evenings). Each term has a duration of eight weeks. The total programme duration is 12 months.

<table>
<thead>
<tr>
<th>TERM 1</th>
<th>MODULE 1</th>
<th>Innovation-focused Strategic Leadership</th>
<th>MODULE 2</th>
<th>Innovation Strategy Development</th>
<th>MODULE 3</th>
<th>Ideation Management, Creative Design, Prototyping and Testing of Concepts</th>
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<tr>
<td>Strategic Idea and Concept Development</td>
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<td>Development of Innovative Products, Services, Processes and Business Cases</td>
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<tr>
<th>INTERNATIONAL RESIDENCY</th>
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<tr>
<th>TERM 3</th>
<th>MODULE 7</th>
<th>Market Development and Brand Leadership (including Launch Management)</th>
<th>MODULE 8</th>
<th>Commercialising Innovations</th>
<th>MODULE 9</th>
<th>Supplier and Partnership (Network) Management</th>
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<td>Market Launch and Successful Commercialisation</td>
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<tr>
<th>TERM 4</th>
<th>MODULE 10</th>
<th>Business Acceleration and Growth Strategy (Scaling)</th>
<th>MODULE 11</th>
<th>Risk Management in an Unstable World (VUCA)</th>
<th>MODULE 12</th>
<th>Business Sustainability and Value Extraction</th>
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<tbody>
<tr>
<td>Managing Risk, Sustainable Growth and Value Extraction</td>
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Friday evening classes are held from 7pm to 10.15pm (with a 15 mins break at about 8.30pm).
Saturday AM class run from 9am to 12.15pm (with a 15 mins break at 10.15/10.30am).
Saturday PM classes are conducted between 1.45pm to 5pm (with a 15 min break at 3.15pm).

*SMU reserves the right to alter the venue as deemed appropriate.
Innovation Seminars

The Innovation Seminars represent an important element of the learning experience. Participation will enable students to be at the forefront of practice and research by engaging and networking with diverse and knowledgeable innovation experts: all in the quest for the latest in innovation thinking and practice. Some of these seminars will introduce practical innovation tools while others will be structured like a normal seminar on the basis of an interactive (mini) lecture, experience sharing and a question and answer segment.

The key purpose is to acquire relevant insights and competencies with regard to the various strategic learning thrusts of the MI Programme (see below) and to support the creation of a robust innovation ecosystem within the programme context.

The final schedule of the various seminars (which might be conducted on Friday evenings and/or Saturdays depending upon the availability of resource persons) will be provided at the beginning of the programme in August 2013. Examples of seminar topics may include:

- Intersectional Innovation: The ‘Medici Effect’
- Creating a Culture of Innovation
- The Innovator’s Mindset
- Essentials of Design Thinking and Management
- Patent Thinking
- Social Innovation
- Innovation Research
- Entrepreneurial Journeys
- Innovations and the Cloud
- Crowd Sourcing and Open Innovation

Academic rigor will be instilled through active participation, case analyses, creation of seminar wikis and/or practice tests. Participation and attendance are compulsory. The purpose is to provide as many inputs as possible to our students in the process of innovating across boundaries and existing domains.

Admission and Application

ADMISSION REQUIREMENTS

- A good Bachelor degree in any field from a recognised university
- A good GMAT test score or SMU online admission test
- A good TOEFL or IELTS score

PROGRAMME FEES

The fees for the programme are:

**MI FULL-TIME / PART-TIME**

The total fee is as follows:

<table>
<thead>
<tr>
<th>Application fee</th>
<th>Registration fee</th>
<th>Tuition fee</th>
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<tbody>
<tr>
<td>S$50</td>
<td>S$400 (Singaporeans / Singapore Permanent Residents)</td>
<td>S$39,800 (before GST)</td>
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<td></td>
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<td>$42,586 (after GST)</td>
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</table>
Innovation-focused Strategic Leadership

This module introduces students to the fundamentals of financial management, new venture financing and accountable fund raising in the contexts of concrete business cases and real-world management scenarios. Students will be familiarised with the role of finance and accounting throughout the various stages of the innovation value chain from obtaining seed funding during the start-up phase of a business to meeting working capital needs (including options basics) in times of accelerated business expansion and growth. Besides exploring various forms of new business financing, such as crowd-funding, the module will also cover comprehensive business planning approaches in order to improve decision-making, e.g. on the basis of financial forecast analyses. Students who studied this module will know how to obtain finance from venture capitalists and other private and public sources, including the specifics of accountability, cost and revenue forecasting and some of the requirements of risk management processes in business planning contexts.

Market Development and Brand Leadership

This module provides students with the managerial insights to perceive opportunities in markets that currently may not exist, or where current solutions apply to other markets. Both the positioning and strategy issues, and marketing (including strategic pricing) activities of the innovative business are explored. Students will learn how to develop and execute marketing strategies in intensive, fast-changing markets, including those characterised by shrinking product life cycles and rapid turnover of knowledge and information. The course pushes students to consider future opportunities in new spaces. In addition, the concept of brand leadership will be covered, as well as the basics of risk analysis, successful market education and effective launch management tactics. A key goal is to enable students to prepare the market for innovations to ensure greater market share and to build a strong brand.

Commercialising Innovations

This module covers the basics of effectively selling innovations in the context of an organisation's ecosystem and ties with customers, suppliers, distributors, sales force, etc. Relevant strategic sales management tools and approaches will be introduced. Students will be familiarised with the art of persuasive communication, effective negotiation, successful sales and after sales management, as well as post-launch management requirements. Students who studied this module will be able to articulate how to ensure that customers and other network partners ‘buy’ innovations and that sales increase significantly during the post-launch phase through effective sales management efforts and on the basis of robust business and ecosystem development approaches.

Supplier and Partnerships (Network) Management

This module introduces students to the imperatives of effectively managing suppliers and partners, as well as the strategic advantage of leveraging ‘connectivation’. This term refers to the unique business models of companies who are available 24/7 anywhere, i.e. organisations who are exceptionally well connected to their customers. The key emphasis of this module is on acquiring the necessary connectivisation skills. Students will learn how innovations can be promoted amongst relevant stakeholders and how to integrate them into corporate innovation plans by using connectivity enhancing tools and approaches, such as social media and Web 3.0.

Business Acceleration and Growth Strategy (Scaling)

The main topics of this module centre on the challenge of business acceleration and what management needs to do in order to manage rapid growth and value creation (scaling) in the context of cross-border and global expansion. Students will be introduced to relevant management concepts, such as value-chain production and the requirements of developing an integrated growth and value-creation strategy towards a fully-thriving large-scale business (scaling tactics). After this module, students will understand how a planned increase in firm production ahead of anticipated increases in product demand can be managed, including the widening of one’s customer base, business model refinement, cementing one’s innovative brand leadership position and business growth to the next level in the corporate life cycle.

Risk Management in an Unstable World

Risk management and strategic agility are crucial during all stages of the innovation effort. Besides covering selected principles of business ethics and corporate social responsibility, students will learn how to achieve challenging profit targets while minimising risks, the theory and practice of good earnings management, as well as advanced risk management and reduction tools for globalising businesses. A key goal is to enable students to explain how to ensure through proper ‘earnings management’ that profit targets can be achieved and risks, such as systematic market risks (which imply vulnerability to events which affect aggregate outcomes, such as broad market returns) and unpredictable, idiosyncratic risks are minimised, e.g. by hedging. ‘VUCA’ issues will be covered as well in order to appreciate how businesses can better navigate the grand rapids of volatility (change), Uncertainty (difficulties to predict problems), Complexity and Ambiguity (cause-and-effect confusion, uncertainty).

Business Sustainability and Value Extraction

This module focuses on the advanced stage of business innovation and growth with special reference to sustainability as business imperative and source of innovation, strategic value extraction tools and approaches (e.g. roll ups), the dos and don'ts of preparing and following-up on successful initial public offerings (IPOs), strategic investor relationship and regulatory compliance and management, smart (new ways to exceed customer expectations and P&L (IP, contracts and licensing). Students who have taken this module will be able to explain how to achieve business sustainability and long-term, effective value extraction through thoughtful business expansion and good management interventions.