

MSc TIP MODULES & COURSES

MASTER OF SCIENCE TECHNOPRENEURSHIP & INNOVATION PROGRAMME

The Master of Science in Technopreneurship and Innovation Programme (MSc TIP) aims to develop and equip global entrepreneurs with the skills and stamina to turn novel ideas into successful ventures in the fast-paced economy today.

Modelled after the venture creation cycle, this graduate programme enables candidates to develop an entrepreneurial mindset and the essential business knowledge. Participants learn effective entrepreneurship problem-solving techniques and business decision making approaches through the unique TIP pedagogy: Experiential Learning, Global Immersion and Transformational Experience.

1. ENTREPRENEURSHIP & BUSINESS PLANNING

2. NEW VENTURE & ENTREPRENEURIAL MARKETING

3. INTELLECTUAL PROPERTY & TECHNOLOGY
EVALUATION & COMMERCIALISATION

4. STRATEGIC MANAGEMENT FOR NEW VENTURES &
TECHNOLOGY FIRMS

5. VENTURE CAPITAL FINANCING

6. ACCOUNTING FOR NEW & ONGOING VENTURES

7. STRATEGIC HUMAN RESOURCE MANAGEMENT FOR
NEW & ONGOING VENTURES

8. SEMINARS ON SPECIAL TOPICS IN TECHNOPRENEURSHIP

9. NEW VENTURE CREATION: IMPLEMENTING BUSINESS
STRATEGY & MANAGING GROWTH (SIMULATION)

10. DEVELOPING NEW BUSINESS MODELS

11. TECHNOLOGY, INNOVATION & DESIGN

12. SUSTAINABLE LEADERSHIP & STRATEGY INNOVATION

13. CORPORATE FINANCE & MERGER & ACQUISITION

14. ENTREPRENEURSHIP CASE STUDY PROJECT

OVERSEAS IMMERSION PROGRAMME

1. ENTREPRENEURSHIP & BUSINESS PLANNING

Focuses on equipping candidates with knowledge and tools including business plan development and start-up planning that generate and translate entrepreneurial ideas into successful enterprises.

2. NEW VENTURE & ENTREPRENEURIAL MARKETING

Key entrepreneurial marketing concepts and methods are imparted along with sophisticated marketing approaches and practical guidance on their application in entrepreneurial situations.

3. INTELLECTUAL PROPERTY & TECHNOLOGY EVALUATION & COMMERCIALISATION

Investigates models and tools for effective management of an organisation's Intellectual Property (IP), including patents, copyright, trade secret, etc. with emphasis on the identification of appropriate options and methods for organisations to protect and exploit their investments in developing IP.

4. STRATEGIC MANAGEMENT FOR NEW VENTURES & TECHNOLOGY FIRMS

Explore strategic tools and priorities with which entrepreneurs create and sustain a competitive advantage in today's challenging and complex business environment.

5. VENTURE CAPITAL FINANCING

Explore high-risk financing from entrepreneurial and venture capitalists' perspectives and learn financing strategies for different stages of the venture lifecycle.

6. ACCOUNTING FOR NEW & ONGOING VENTURES

Introduces candidate to entrepreneurial accounting and provides them with a preliminary tool to survive as an entrepreneur.

7. STRATEGIC HUMAN RESOURCE MANAGEMENT FOR NEW & ONGOING VENTURES

Focuses on people management related challenges and considerations and discusses practical management methods and techniques in entrepreneurial context.

8. SEMINARS ON SPECIAL TOPICS IN TECHNOPRENEURSHIP

Distinguished industry speakers and faculty experts take participants through specialised topics relating to technopreneurship and innovation.

9. NEW VENTURE CREATION: IMPLEMENTING BUSINESS STRATEGY & MANAGING GROWTH (SIMULATION)

Participants work in teams to run a simulated start-up company for three years in a realistic global business setting - working with guidance from instructors and/or mentors to assume top management roles, make business decisions and manage business operations.

10. DEVELOPING BUSINESS MODELS

Participants will form "venture teams" to evaluate IP positions and develop business concepts for "patented" emerging technologies available for venture creation from a "technology menu" consisting of technologies created by the Nanyang Technological University, Agency for Science, Technology Transfer Network (TTN) or other institutions/organisations

11. TECHNOLOGY, INNOVATION & DESIGN

Focuses on how start-up companies manage the process of innovation for sustainable competitive advantage.

Topics discussed:

Creativity, knowledge and skills

Working environment and infrastructure required for innovation

Generation and evaluation of ideas in product development process

Management of innovations leading to technology commercialisation

Needs identification and product specifications

12. SUSTAINABLE LEADERSHIP & STRATEGY INNOVATION

The essence of leadership including models, traits, skills and ability, concept of strategy innovation in contrast with product or technology innovation and the concept of business design innovation are introduced in-depth to develop in the students the leadership capacity: analytical skills and knowledge of leading organisational change and conducting a business redesign based on changing customer priorities.

13. CORPORATE FINANCE & MERGER & ACQUISITION

Study the principles of financial management in the analysis of corporate financial problems in on-going ventures. This includes equity and debt financing, managing corporate growth, free cash flow, risk management, international corporate finance and real options.

14. ENTREPRENEURSHIP CASE STUDY PROJECT

Participants are required to undertake an entrepreneurial case writing project where they will prescribe teaching objectives to the case and propose answers to strategic questions.

OVERSEAS IMMERSION PROGRAMME

Specially crafted Overseas Immersion Programme comprising corporate visits, workshops/seminars at leading colleges and provides participants with an eye-opening and thought-provoking learning experience. Through this learning journey, participants will be able to develop a holistic view of the entrepreneurship ecosystem and gain a sense of current trends and emerging directions of entrepreneurship.