Title (Units): **COMP7870 IT Innovation Management and Entrepreneurship (3,3,0)**

Course Aims: This course prepares students for the technology and information economy by providing the knowledge and skills necessary for innovation management and entrepreneurship. This course aims to (i) introduce students to the fundamental concepts, practices, opportunities, and challenges related to innovation management and entrepreneurship, (ii) provide students with frameworks and tools for the successful management of information technology innovation from idea generation to market exploitation, and (iii) stimulate students' interest in entrepreneurship and thus cultivating an entrepreneurial spirit.

Prerequisite: Nil

Course Intended Learning Outcomes (CILOs):
Upon successful completion of this course, students should be able to:

No.	Course Intended Learning Outcomes (CILOs)
	Knowledge
1	Explain the key concepts and elements related to innovation and innovation management
2	Explain the basic concepts and components of entrepreneurship
3	Describe activities involved in the managing and commercialization of innovations
	Professional Skill
4	Apply concepts and frameworks to identify information technology related opportunities as well as to analyze how firms can create, commercialize and capture value from information technology-based products and services
5	Develop critical thinking and problem-solving skills
6	Develop skills in oral/written communication and team building

Calendar Description: The development of information technology and innovations plays an increasingly important role in enhancing the competitiveness of countries, organizations, and individuals. This course prepares students for the technology and information economy by providing the knowledge and skills necessary for innovation management and entrepreneurship. With particular emphasis on information technology-related activities, this course aims to (i) introduce students to the fundamental concepts, practices, opportunities, and challenges related to innovation management and entrepreneurship, (ii) provide students with frameworks and tools for the successful management of innovation from idea generation to market exploitation, and (iii) stimulate students' interest in entrepreneurship and thus cultivating an entrepreneurial spirit.

Teaching and Learning Activities (TLAs):

CILOs	Type of TLA
1-4	Lectures, and guest lectures
3-6	Assignments, and presentation

Assessment:

No.	Assessment Methods	Weighting	CILOs to be addressed	Description of Assessment Tasks
1	Individual Assessment	30%	1-5	Individual Work: • Case summaries are used to assess students' understanding of the concepts, principles, and practices of information technology innovation management and entrepreneurship as described in the cases. They also prepare students for more productive class discussion.

2	Group Project	20%	1-6	Group Work: • Group assignments assess students' understanding of the concepts, principles, and frameworks of information technology innovation management and entrepreneurship. • Group term project (which requires students to explore a topic related to the dynamics of information technology innovation and entrepreneurship) not only assesses students' understanding of the important concepts and practices of information technology innovation management and entrepreneurship but also assesses their ability to apply the frameworks/tools learnt to analyzing opportunities and challenges in real-world situations. • Group assignments, group term project, and group term project presentation also assess students' team building skills and their oral/written communication skills.
3	Final Examination	50%	1-5	Final examination questions are designed to test the learning outcomes in the Knowledge and Professional Skills domains. They are designed to assess students' understanding of important concepts and their ability in applying these concepts to solve problems.

Assessment Rubrics:

Criteria	Excellent (A)	Good (B)	Satisfactory (C)	Fail (F)
Knowledge Acquisition	• Evidence of a thorough understanding of the key concepts and elements related to innovation, innovation management, and entrepreneurship • Able to describe activities involved in managing and commercialization of innovations thoroughly	• Evidence of a good understanding of the key concepts and elements related to innovation, innovation management, and entrepreneurship • Able to describe activities involved in managing and commercialization of innovations with minor mistakes	• Evidence of some understanding of the key concepts and elements related to innovation, innovation management, and entrepreneurship • Able to describe activities involved in managing and commercialization of innovations with acceptable amount of mistakes	• Fail to show understanding of the key concepts and elements related to innovation, innovation management, and entrepreneurship • Fail to describe activities involved in managing and commercialization of innovations
Professional Skills Development	• Can demonstrate an outstanding performance in identifying information technology related opportunities, as well as analyzing how firms can create,	• Can demonstrate a good performance in identifying information technology related opportunities, as well as analyzing how firms can create, commercialize	• Can demonstrate a fair performance in identifying information technology related opportunities, as well as analyzing how firms can create, commercialize	• Fail to demonstrate the ability in identifying information technology related opportunities, as well as analyzing how firms can create, commercialize and

Criteria	Excellent (A)	Good (B)	Satisfactory (C)	Fail (F)
	commercialize and capture value from information technology-based products and services • Can demonstrate excellent critical thinking and problem solving skills • Can demonstrate prominent skills in oral/written communication and team building	and capture value from information technology-based products and services • Can demonstrate good critical thinking and problem solving skills • Can demonstrate good skills in oral/written communication and team building	and capture value from information technology-based products and services • Can demonstrate fair critical thinking and problem solving skills • Can demonstrate fair skills in oral/written communication and team building	capture value from information technology-based products and services • Fail to demonstrate sufficient critical thinking, problem solving, oral/written communication and cooperation skills

Course Content and CILOs Mapping:

Content		CILO No.
I	Information Technology Innovation	1,4-6
II	Information Technology Entrepreneurship	2-6

References:

- Seward, E. (2023). Back to the Basics Business Plan: A Business Plan Workbook for Entrepreneurs, Kindle version.
- Neck, H.M., Neck, C.P., and Murray, E.L. (2020). Entrepreneurship: The Practice and Mindset, 2nd Edition, SAGE Publications.
- Lednor, P.W. (2019). How to be Innovative: Early Stage Innovation For Scientists, Technologists and Others – From Idea to Proof-Of-Concept, WSPC.
- Benjamin, C. (2022). Cases Studies in Entrepreneurship: A Business Development Guide Book, Glass Onion Publishing.
- Barringer, B.R., and Ireland, R.D. (2018). Entrepreneurship: Successfully Launching New Ventures, 6th Edition, Pearson.
- John Bessant and Joe Tidd (2016). Innovation and Entrepreneurship, 3rd Edition, Wiley.
- Weaver, R.L. (2022). Social Entrepreneurship: A Practical Introduction, 1st Edition, Kindle Edition, Routledge.
- Banks, K., Gabriel, P., and Drayton, B. (2016). Social Entrepreneurship and Innovation: International Case Studies and Practice, 1st Edition, Kogan Page.
- Johannessen, J.A., and Stokvik, H. (2018). Evidence-Based Innovation Leadership: Creating Entrepreneurship and Innovation in Organizations, Emerald Publishing.
- Ryan, P. (2019). Impact Imperative: Innovation, Entrepreneurship, and Investing to Transform the Future, Greenleaf Book Group Press.
- Schaufeld, J. (2015). Commercializing Innovation: Turning Technology Breakthroughs into Products, Apress.
- Almeida, F., Santos, J., and Trusko, B. (2018). The Business Plan Reference Manual for IT Businesses (River Publishers Series in Multi Business Model Innovation, Technologies and Sustainable Business), River Publishers.
- Other books and journal articles appropriate to the topics under study.

Course Content:

<u>Topic</u>

I. Information Technology Innovation
   A. What is innovation?

a. Definitions of innovation
b. Characteristics of innovation
c. Sources of innovation
d. Innovation systems
e. Impact of information technology innovation on society

B. Elements of innovation management
a. Developing innovation strategy
b. Managing creativity and knowledge
c. Selecting and managing portfolio
d. Implementing innovation
e. People, organization and innovation

C. Information technology innovation
a. Characteristics of information technology innovation
b. Drivers of information technology innovation adoption and diffusion
c. Technology adoption life cycle
d. Internal vs. external technology transfer
e. Information technology innovations at industry leading companies – Cases and mini cases

II. Information Technology Entrepreneurship
A. What makes an entrepreneur?
a. Definitions of entrepreneur and entrepreneurship
b. Benefits of entrepreneurship to society
c. Profile of the entrepreneur

B. Basics of entrepreneurship
a. Identifying and evaluating opportunities
b. Developing the business plan
c. Entry strategies
d. Financing the business
e. Managing and growing the business
f. Exit strategies

C. Information technology-based entrepreneurship
a. Characteristics and success factors
b. The role of university in information technology commercialization and entrepreneurshi
c. Cases and mini-cases