Strathmore UNIVERSITY

SCHOOL OF COMPUTING & ENGINEERING SCIENCES.
BACHELOR OF SCIENCE IN INFORMATICS AND COMPUTER SCIENCE
UNIT ICS 4602
IT INNOVATION AND ENTREPRENEURSHIP

COURSE OUTLINE AND DELIVERY PLAN

Lecturer: Ruth Kinyanjui
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Consultation: Anytime through email

Lecture hours: 45 Hours
Prerequisite: None
Period: April –August 2025

Class Module leader/s: TBT

Purpose of the Course

To equip the students with the skills, knowledge, and attitude necessary for problem-solving and finding entrepreneurial opportunities.

Intended Learning Outcomes

By the end of this course, the learner should be able to:

1. Identify and analyse characteristics and qualities of successful entrepreneurs.
2. Apply entrepreneurial skills through project-based and simulation activities.
3. Profile tech entrepreneurs and draw lessons from their journeys
4. Develop business ideas and present using an E-portfolio. (Project-based learning)
5. Explain the sources of funding for enterprises
6. Explain the role of incubators /accelerators in the growth of start-ups in Kenya

Course delivery plan

week	Topic	Intended learning outcomes	Learning Activities	Resources /Readings
1	Introduction to entrepreneurship	Develop entrepreneurship mindset . Describe the role of entrepreneurship in the economy . Explain different categories of entrepreneurs.	Group discussion characteristics / qualities of entrepreneurs. Profiles of entrepreneurs. Entrepreneurial potential assessment.	IT Innovationist talks on entrepreneurship . Power point presentations .
2	The process of	Describe approaches for	Idea generation	Idea generation

	entrepreneurship . Opportunity Recognition	Identifying opportunities. Techniques for generating business ideas	techniques (SCAMPER, brainstorming)	methods Group activity: find IT gaps in daily life
3	Business idea Feasibility analysis	Outline the importance of conducting feasibility analysis for business ideas .	Conduct feasibility on selected ideas	OpenStax - Feasibility
4	Innovation methodologies	Understand human centred design . Lean startup methods	Conduct field or online research to identify unmet needs.	Human-centered design
5	Business model canvas.	Elements of business model canvas	Fill in a business model canvas in groups	Blank business model canvas
6	Legal issues in business .	Business regulatory framework . Intellectual property rights. Forms of business ownerships.	Discuss factor influencing forms of business ownership	Visit e-citizen and reserve a business name .
7	Go-to-Market Strategies	Develop marketing strategies for IT ventures. Technology adoption model (TAM)	Develop go-to-market plan Review "Crossing the Chasm" case - Simulation: launch strategy	*Crossing the Chasm* by Geoffrey Moore
8	Funding & Investment	- Identify funding types - Understand investor expectations	- Create and present pitch decks - Role-play: investor Q&A - Guest speaker (VC or startup founder)	Startup funding sources
9	Emerging Trends in IT Entrepreneurship	- Identify emerging technologies - Evaluate trends shaping the future of entrepreneurship	- Case discussion: pay-as-you-go energy - Research presentation: future of IT innovation - Visit incubation hub	Top Tech Trends
10-12	Final Project & Presentations	- Apply course concepts to real-world business idea - Present complete IT-based business model	- Group presentations to a panel - Peer and instructor	Project marking guide (instructor-prepared)

			feedback - Final reflection activity	

Course Delivery Methodology

- **Lectures**: Introduction to key concepts.
- **Discussions**: Exploration of evolving trends and real-world issues.
- **Case Studies**: Application of theory in real-world contexts.
- **Presentations**: Develop communication and persuasion skills.
- **Video Resources**: Support learning through visual case examples.
- **Guest Speakers /** Engage with local IT entrepreneurs and incubators

Assessment Component	Weight
Final Examination	70%
Coursework (Total)	30%
- CAT 1 (Supervised Test)	10%
- Project based learning	20%

Reference reading :

1. Christensen, C. M. (2013). The innovator's dilemma: When new technologies cause great firms to fail. Harvard Business Review Press.
2. Schilling, M. A. (2020). Strategic management of technological innovation (6th ed.). McGraw-Hill Education.
3. Ries, E. (2011). The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses. Crown Business.
4. Osterwalder, A., & Pigneur, Y. (2010). Business model generation: A handbook for visionaries, game changers, and challengers. Wiley.

Journals.

1. Fichman, R. G., Dos Santos, B. L., & Zheng, Z. E. (2014). Digital innovation,a fundamental and powerful concept in the information systems curriculum. MIS Quarterly, 38(2), 329–353. https://doi.org/10.25300/MISQ/2014/38.2.02
2. Giones, F., & Brem, A. (2017). Digital technology entrepreneurship: A definition and research agenda. Technological Forecasting and Social Change, 123, 1–11. https://doi.org/10.1016/j.techfore.2017.01.013
3. Nambisan, S., Wright, M., & Feldman, M. (2019). The digital transformation of innovation and entrepreneurship: Progress, challenges and opportunities. Research Policy, 48(8), 103773. https://doi.org/10.1016/j.respol.2019.03.018