Princess Sumaya جامعـــة
University الأميـــرة سميّـــة
for Technology للتكنولوجيا

PROGRAM PROFILE

M.Sc. in Technology Policy and Management

M.Sc. in Technology Policy and Management

The Master's in Technology Policy and Management program provides proficiencies to connect technology and governance in the era of digital transformation. The curriculum blends policy analysis, innovation management, and technology strategy, offering hands-on and theoretical experience in assessing the impacts of new technologies through case studies and industry projects. Graduates emerge as strategic decision-makers, equipped to develop technology-driven policies and foster responsible digital transformation.

AACSB ACCREDITED

For More Info
www.PSUT.edu.jo/KTSBT/TechPolicy

PROGRAM AIMS

The Master's in Technology Policy and Management aims to cultivate visionary leaders who understand how technology, policy, and business come together to shape our future. The program empowers students to think critically, act ethically, and lead with purpose, turning innovation into meaningful and sustainable impact for organizations and society.

PROGRAM OBJECTIVES

- Assist students in developing a comprehensive understanding of the interaction between technology, management, and policy in a rapidly evolving digital landscape.
- Build strong analytical and leadership skills that enable graduates to design and manage technology driven strategies and decisions.
- Offer real learning experiences through case studies, simulations, and collaborative projects with industry and government.
- Encourage responsible and inclusive innovation by exploring the ethical and social dimensions of emerging technologies.
- Promote global awareness and research excellence through the program's dual comprehensive and thesis pathways, preparing graduates to contribute to sustainable and data driven transformation across sectors.

PROGRAM PROFILE

PROGRAM FEATURES

Interdisciplinary Balance

- Bridges technology, policy, and management to create agile thinkers who drive innovation where governance meets strategy.

Dual Pathways for Excellence

- Offers both Comprehensive and Thesis tracks, empowering students to pursue academic depth or applied expertise aligned with their professional goals.

Learn by Doing

- Transforms theory into impact through real-world projects, simulations, and collaborations with industry, government, and global partners.

Strategic Intelligence

- Cultivates data-driven insight, problem solving, and foresight to lead technology powered transformation across sectors.

Global Mindset

- Connects diverse talents to address complex challenges, fostering creativity, innovation, and cross-cultural understanding.

Responsible and Ethical Innovation

- Champions ethics, inclusivity, and sustainability, shaping leaders who align technology with human and societal progress.

ENTRY REQUIREMENTS

To be eligible for admission to the M.Sc. in Technology Policy and Management program, applicants must meet the following requirements:

Bachelor's Degree

Applicants must hold a Bachelor's degree (or its equivalent) obtained through regular, full-time study from an accredited university.

Minimum GPA

The Bachelor's degree rating must not be lower than Good.

Field Compatibility

The applicant's Bachelor's major must be compatible with the study plan of the Master's program. The list of compatible majors is announced by the university. Some applicants may be required to complete remedial courses as determined by the department offering the program.

English Proficiency

All applicants must demonstrate English language proficiency through one of the approved tests (IELTS or TOEFL).

Professional Experience

A minimum of two years of experience in a relevant field at the managerial or executive level *(preferred)*

M.Sc. in Technology Policy and Management
Program Learning Outcomes

Program Learning Outcomes (PLOs)	
PLO1	Equip students with the ability to lead and manage technological innovations, aligning them with organizational and societal goals to drive growth and efficiency.
PLO2	Enable students to understand and contribute to the development of policies that regulate and promote the responsible use of emerging technologies while addressing societal and ethical concerns
PLO3	Prepare students to analyze complex technological challenges, evaluate different management approaches, and formulate strategies that support decision-making in technology-driven environments.
PLO4	Encourage students to recognize and address ethical issues related to technology development and use, ensuring that technological advances benefit society while minimizing risks to privacy, security, and sustainability.
PLO5	Train students to apply technology management and policy solutions in global contexts, understanding the varying regulatory, cultural, and economic conditions across different regions and industries
PLO6	Strengthen students' ability to effectively communicate complex technology management issues and policy recommendations through written reports, visual documents, and oral presentations to diverse audiences.

M.Sc. in Technology Policy and Management
Thesis Track - Curriculum

Course Title	Credit Hours	Prerequisite
Program Requirements (33 CHS)		
1. Compulsory Requirements (18 CHs)		
Rresearch Methodology	3	
Data Analytics Policy and Management	3	
Emerging Technologies and Innovation	3	
Ethical and Responsible Technology	3	
Cyber Security Policy and Management	3	
Technology Governance and Management	3	

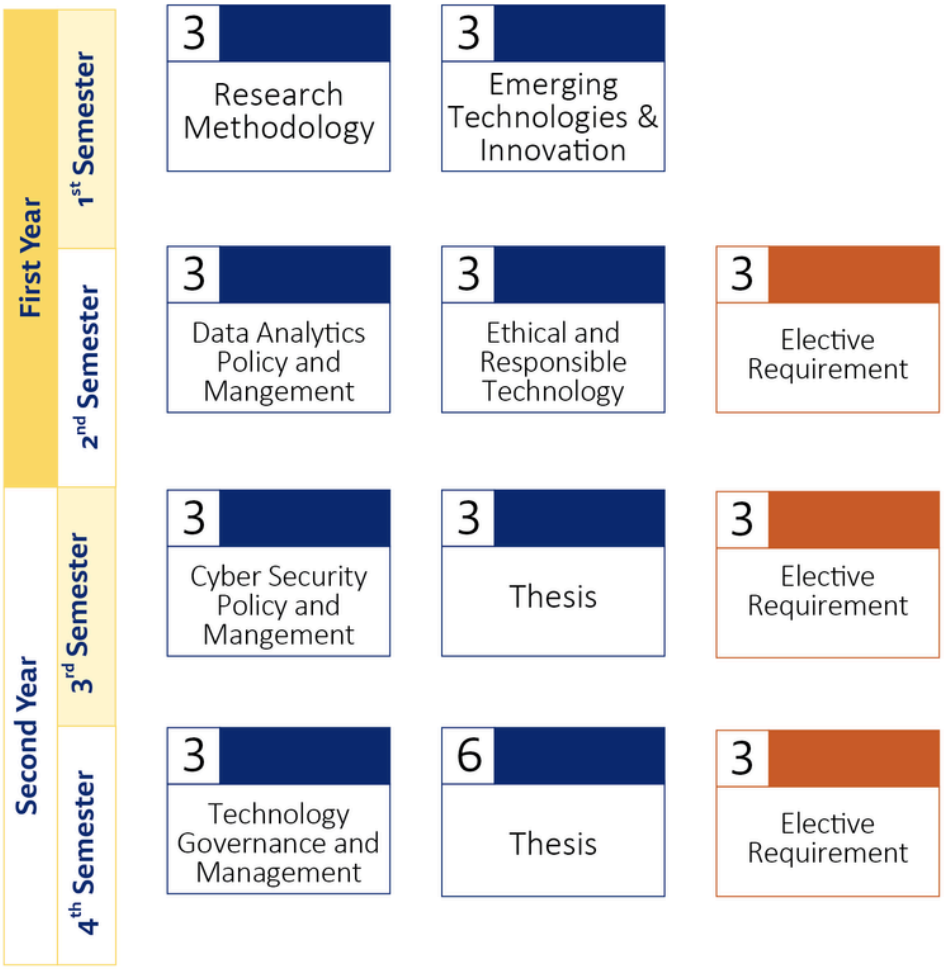
2. Elective Requirements (6 CHs)		
Special Topics in Technology Policy and Management	3	
AI Governance and Sustainability	3	
Foundations of Business Analytics	3	
Economic Analysis for Business and Decision	3	
IT Project Management	3	
Sustainability & Social Responsibility of Entrepreneurship Organizations	3	
Business Data Engineering	3	
Introduction to Financial Technology	3	
Thesis Requirements (9 CHs)		
Thesis	9	

M.Sc. in Technology Policy and Management
Comprehensive Exam Track - Curriculum

Course Title	Credit Hours	Prerequisite
Program Requirements (33 CHS)		
1. Compulsory Requirements (24 CHs)		
Rresearch Methodology	3	
Data Analytics Policy and Management	3	
Emerging Technologies and Innovation	3	
Ethical and Responsible Technology	3	
Cyber Security Policy and Management	3	
Technology Governance and Management	3	
Sustainability & Social Responsibility of Entrepreneurship Organizations	3	
Capstone Project	3	
Comprehensive Exam	0	

2. Elective Requirements (9 CHs)		
Special Topics in Technology Policy and Management	3	
Foundations of Business Analytics	3	
Economic Analysis for Business and Decision	3	
IT Project Management	3	
Business Data Engineering	3	
Introduction to Financial Technology	3	
AI Governance and Sustainability	3	

M.Sc. in Technology Policy and Management
Guidance Plan - Thesis Track



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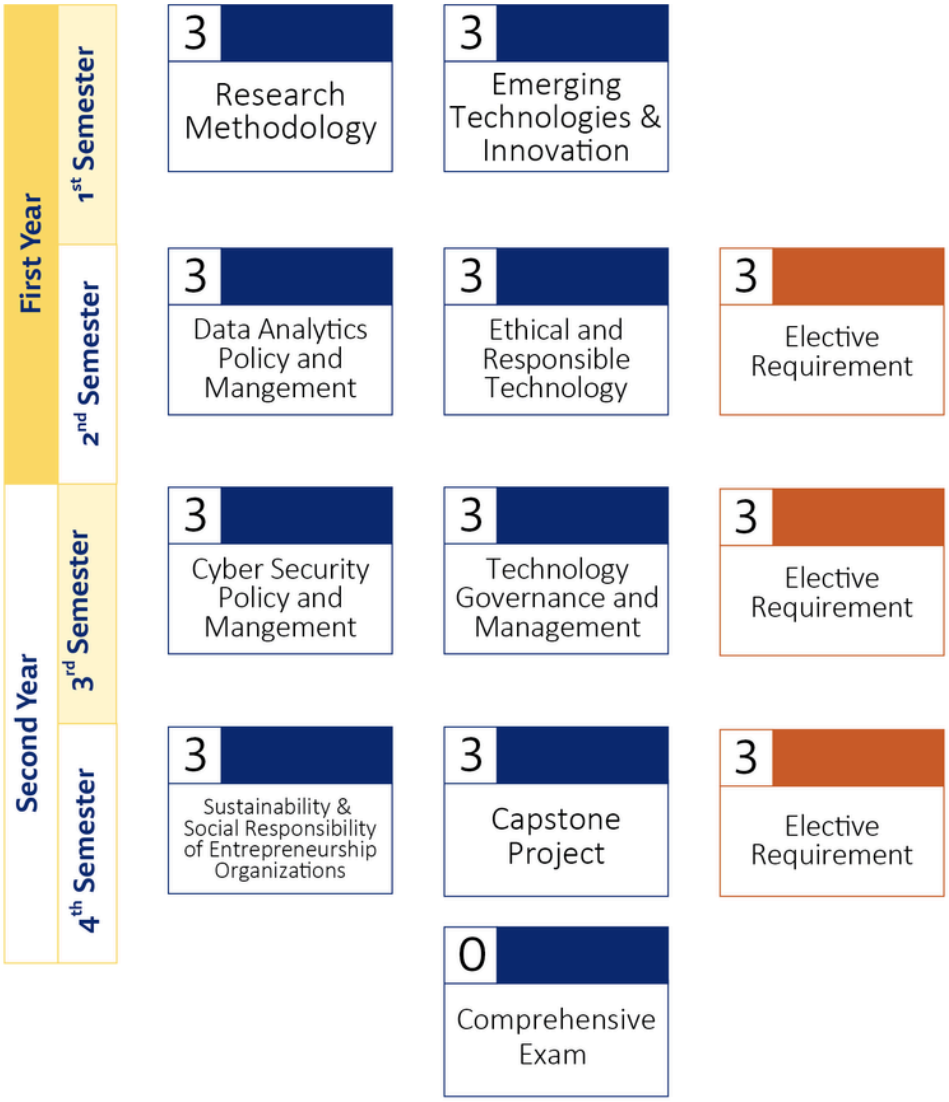
GUIDANCE PLAN

M.Sc. in Technology Policy and Management
Guidance Plan - Comprehensive Exam Track



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GUIDANCE PLAN

M.Sc. in Technology Policy and Management
Course Description

Research Methodology	3

This course aims to equip students with the skills to conduct scientific research by introducing them to research methods and providing the basic skills needed to write academic research. Topics include defining the research problem and variables, identifying research significance and objectives, developing research models based on literature review, determining study population and sampling methods, data collection, hypothesis writing and testing, statistical analysis and interpretation, and writing conclusions and recommendations linked to the literature. The course also introduces students to various documentation and citation methods.

Data Analytics Policy and Management	3

This course provides a comprehensive understanding of the intersection between data analytics and policy management, emphasizing how data-driven decision-making supports policy formulation, implementation, and evaluation. Students will learn techniques for data collection, cleaning, and management, as well as applying statistical methods to analyze policy-related data. The course also covers data visualization for communicating findings to stakeholders, and addresses ethical and privacy considerations when using data in policy contexts. Through real-world case studies, students will develop practical analytical skills that promote responsible and sustainable policy development.

Emerging Technologies and Innovation	3

This course equips students with skills related to innovation and explores the role of emerging technologies in shaping new business models. It focuses on digital transformation, digital entrepreneurship, challenges of digital business innovation, and the managerial and organizational aspects of technology-enabled innovation.

Ethical and Responsible Technology	3

Introduces ethical theories and frameworks related to technology. Topics include AI ethics, data privacy, cybersecurity, digital rights, fairness, sustainability, and responsible innovation. Students learn to identify ethical dilemmas and create ethical tech policies.

Cyber Security Policy and Management	3

Provides an understanding of information management and cybersecurity principles in relation to policy and technology management. Students learn to secure information assets, align security with organizational goals, assess risks, and develop regulatory-compliant policies.

Technology Governance and Management	3

Examines how public policy interacts with technological advancements such as AI and digital platforms. Students analyze societal, economic, political, and ethical impacts, and explore policy design, implementation, and evaluation through debates and case studies.

Sustainability & Social Responsibility of Entrepreneurship Organizations	3

Covers social entrepreneurship and corporate social responsibility (CSR) from multidisciplinary perspectives. Students work with real cases and community projects to understand how organizations integrate sustainability and social responsibility into strategy and leadership.

Capstone Project	3

A practical project integrating concepts from technology, policy, and management. Students design and implement a solution or study addressing a real-world challenge. Includes faculty supervision, potential industry/government collaboration, and final written and presentation deliverables.

Special Topics in Technology Policy and Management	3

Explores advanced and emerging topics in technology policy influencing governments, industries, and societies, with focus on the interaction between innovation and public policy.

Foundations of Business Analytics	3

Introduces descriptive, predictive, and prescriptive analytics, including BI, data mining, data warehousing, OLAP, data visualization, and Big Data applications in decision-making.

Economic Analysis for Business Decisions	3

Teaches microeconomic tools for strategic business decisions, including supply and demand, market analysis, pricing strategies, game theory, government regulation, and economic forces affecting organizations.

IT Project Management	3

Covers project management principles in technology-integrated organizations, including project environments, roles, strategy alignment, planning, execution, control techniques, and research topics in technological project management.

Business Data Engineering	3

Explains the modern data ecosystem and ETL (extract, transform, load) processes, types of data, staging, profiling, cleansing, migration, and basic visualization required for data science workflows.

Introduction to Financial Technology	3

Introduces fintech concepts including blockchain, cryptocurrencies, big data, machine learning, and their impact on financial industries.