Princess Sumaya جامعـــة
University الأميـــرة سميّـــة
for Technology للتكنولوجيا

PROGRAM PROFILE

M.Sc. Technology Policy & Management

Master's 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

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.

For More Info

www.PSUT.edu.jo/KTSBT/TechPolicy

PROGRAM PROFILE

PROGRAM FEATURES

1.Interdisciplinary Balance

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

2.Dual Pathways for Excellence

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

3.Learn by Doing

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

4.Strategic Intelligence

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

5.Global Mindset

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

6.Responsible and Ethical Innovation

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

PROGRAM LEARNING OUTCOMES

Program Learning Outcomes (LOs)	
PLO1	Develop Expertise in Technology Management: Equip students with the ability to lead and manage technological innovations, aligning them with organizational and societal goals to drive growth and efficiency.
PLO2	Integrate Technology with Public Policy: 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	Foster Critical and Strategic Thinking: Prepare students to analyze complex technological challenges, evaluate different management approaches, and formulate strategies that support decision-making in technology-driven environments.
PLO4	Promote Ethical Leadership and Social Responsibility: 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	Cultivate Global and Multicultural Perspectives: 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	Enhance Communication and Leadership Skills: Strengthen students' ability to effectively communicate complex technology management issues and policy recommendations through written reports, visual documents, and oral presentations to diverse audiences.

Master's in Degree 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 and Governance 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	

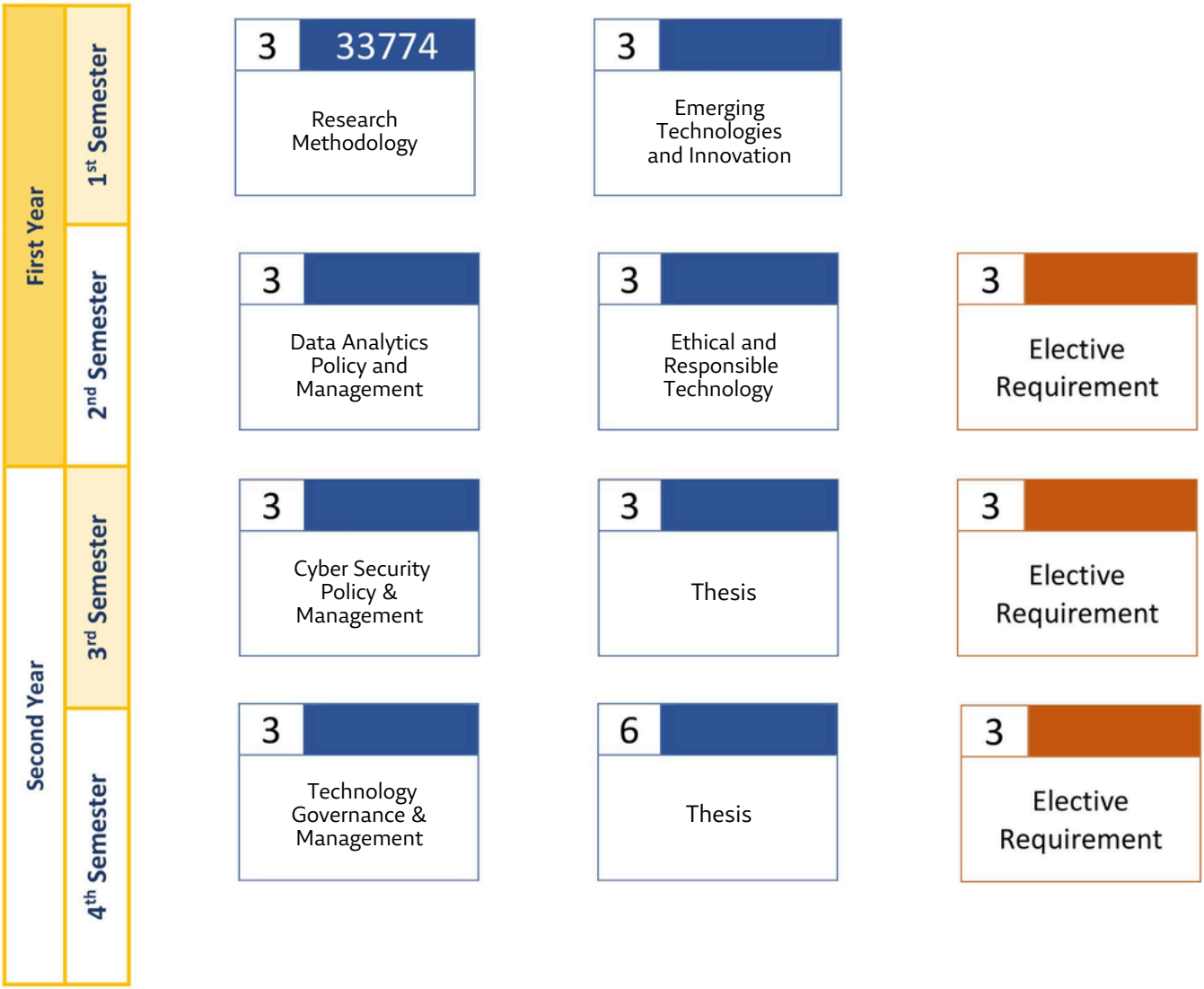
Master's in Degree Technology Policy and Management - Comprehensive Exam Track - Curriculum

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 and Governance 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	

Master's in Degree Technology Policy and Management

Guidance Plan - Thesis Track

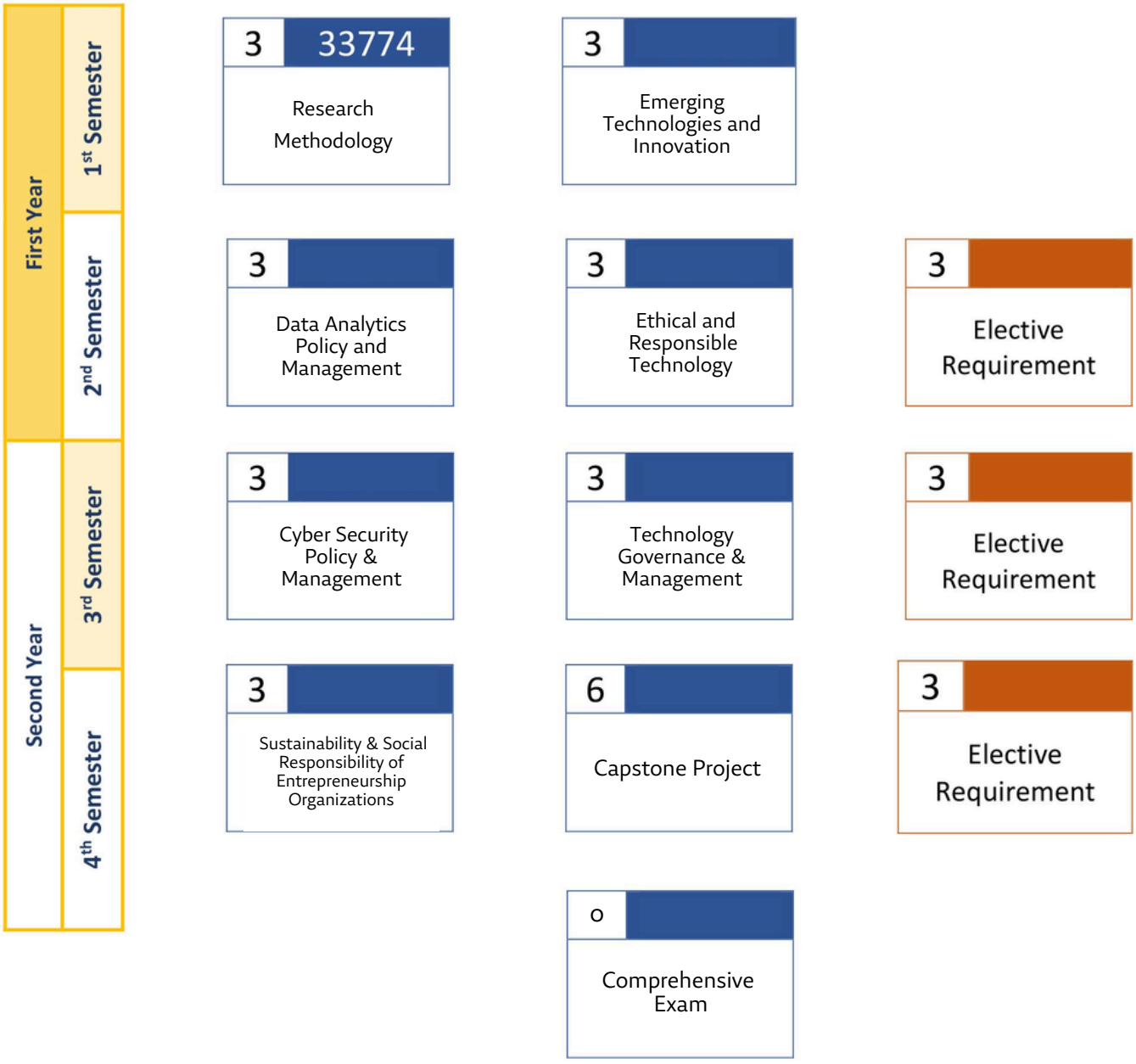


Key – Colors and Shapes

GUIDANCE PLAN

Master's in Degree Technology Policy and Management

Guidance Plan - Comprehensive Exam Track



Key – Colors and Shapes

GUIDANCE PLAN

	Digital Business Innovation	3

This course aims to equip students with variant skills in innovation, and it will explore the role of recent technologies in business innovation. This course will focus on the strategic role of digital technologies, digital transformation, digital entrepreneurship and creation of new business models, challenges of digital business innovation, and management and organizational aspects in digital business innovation.

	Economic Analysis for Business Decisions	3

This course is designed to deepen their understanding of economic analysis in a business context and equip students with the essential tools of microeconomics to make informed and strategic business decisions. It begins with fundamental economic concepts, such as supply and demand, and their applications to modern marketplaces and innovation. Students will learn how to analyze market structures, evaluate pricing strategies, and understand the sources and implications of market power. The course also introduces game theory as a means to explore competitive and cooperative behaviors in business, both within and between firms. Emphasis is placed on understanding the economic forces that shape business practices, from cost analysis and market demand to the role of government regulation. In addition, the course examines the broader economic, social, and political contexts that influence decisionmaking within organizations.

	IT Project Management	3

This course will provide students a high level of understanding about project management and its applications in modern organizations that integrate technology advances in their business. This course will cover varied topics in project management like project management environment, project management roles, the relationship with the business strategy, project management processes and tools in addition of techniques used in project planning, executing and control.

	Technology and Public Policy	**3**

This course explains the intricate relationship between public policy and technology advancements. Students will investigate how emerging technologies such as digital platforms and artificial intelligence affect society, the economy, politics, and ethics. The course will explore the process of formulating policies in relation to technical concerns, including policy design, implementation, and evaluation. Students will receive a comprehensive understanding of the challenges and opportunities presented by the intersection of technology and public policy by engaging in debates and critically analyzing case studies

	Special Topics in Technology Policy	**3**

This course explores selected advanced and emerging topics in technology policy that are shaping industries, governments, and societies. Students will examine the interaction between technological innovation and public policy, with a focus on how policies can promote or hinder technological development. The course emphasizes the impact of technology on regulatory frameworks, ethical considerations, sustainability, economic development, and societal outcomes.

	AI Governance and Sustainability	**3**

This course explores the governance frameworks, ethical challenges, and sustainability issues related to artificial intelligence (AI). It focuses on the role of AI in promoting sustainable development while addressing the risks and regulatory concerns associated with its deployment across industries and societies.

	Foundations of Business Analytics	**3**

This is an introductory course to Business Analytics (BA). It explains the levels of BA with a focus on descriptive, predictive, and prescriptive analytics. Main concepts such as Business Intelligence (BI), data mining, and data warehousing are discussed during the course, which also introduces some key terms in the field such as dimensional data models, data warehouse architecture and infrastructure, techniques for data integration, online analytical processing (OLAP), data visualization, analytical reporting, and managerial issues of data warehouse implementation. In addition, the course introduces the concept of Big Data and how it can be used to support business decisions.

	Cyber Security & Information Management	**3**

This course provides a comprehensive examination of information management and cybersecurity principles, focusing on their intersection within the context of technology management and policy. Students will gain insights into managing and securing information assets, aligning security strategies with organizational goals, and adhering to regulatory requirements. The course is designed to equip students with the skills to manage information effectively, assess cybersecurity risks, and develop policies that support both technological advancement and data protection.

	Ethics and Responsible Technology	**3**

This is a comprehensive course providing the main concepts of ethical theories and frameworks. It covers the ethical challenges and societal implications of emerging technologies. The course addresses the ethical considerations in technology design, development, and deployment with a focus on inclusivity, fairness, and sustainability. Contemporary technological issues such as artificial intelligence, data privacy, cybersecurity, and digital rights are covered from an ethical and responsible perspective. The course delves into the moral, legal, and social responsibilities of technology developers, managers, and policymakers. By the end of the course, students are expected to identify ethical dilemmas, develop strategies for responsible innovation, and craft policies that promote the ethical use of technolog