

**Title (Units):** **COMP7520 Foundations of Management in the IT Context (3,3,0)**

**Course Aims:** This course aims to provide the foundation concepts of information technology management and its impacts on organizations. By studying this course, students will develop the knowledge and skills to effectively manage IT resources and enable digital transformation to meet business needs. Students will explore topics including strategic planning, digital business models, project management, and emerging technologies.

**Prerequisite:** Nil

**Course Intended Learning Outcomes (CILOs):**

Upon successful completion of this course, students should be able to:

No.	Course Intended Learning Outcomes (CILOs)
	<b>Knowledge</b>
1	Explain the concepts including strategic plan, outsourcing, IT service management, and legal and ethical issues
2	Explain the concepts of process management, and digital business models for digital transformation
3	Describe the emerging technologies, digital marketing, and cybersecurity management issues
	<b>Professional Skill</b>
4	Apply project management techniques for IT projects
5	Prepare capital budgeting
6	Apply IT management techniques to solve real world problems

**Calendar Description:** This course provides the foundation concepts in managing IT resources and enabling digital transformation to meet business needs.

**Teaching and Learning Activities (TLAs):**

CILOs	Type of TLA
1-3	Students will attend lectures for how IT could be aligned with business objectives. Students will be introduced with outsourcing practices, IT service management, and legal and ethical issues. Students will also learn the basic concepts for digital transformation, emerging technologies, digital marketing, and cybersecurity management issues.
4-6	Students will conduct exercises on project management techniques, capital budgeting, and applying IT management techniques to solve real world problems.
4-6	Students will work on a group project to analyze the problems of an organization, propose IT planning for it, and present the report orally. A test will assess the students' understanding on the concepts covered in the course.

**Assessment:**

No.	Assessment Methods	Weighting	CILOs to be addressed	Description of Assessment Tasks
1	Assignments	40%	1-6	Continuous assessments are designed to evaluate students' understanding of applying the knowledge to manage information technologies. In particular, a test will assess the students' understanding of the IT management concepts.
2	Examination	60%	1-6	Final examination questions are designed to assess how far students have achieved the intended learning outcomes. Questions are designed to measure students' ability to apply the knowledge in different scenarios.

**Assessment Rubrics:**

<b>Excellent (A)</b>	<ul style="list-style-type: none"> <li>• Achieves all six CILOs, demonstrating a good mastery of both the theoretical and practical aspects of the knowledge and skills associated with the IT management concepts</li> <li>• Able to develop and present sound arguments and correct solutions to problems in IT management, accompanied by in-depth analysis and insight</li> <li>• Demonstrates a thorough understanding and solid knowledge of IT management</li> <li>• Able to draw on a variety of techniques and relevant knowledge and appropriately apply them to new IT management situations and problems</li> </ul>
<b>Good (B)</b>	<ul style="list-style-type: none"> <li>• Achieves all six CILOs, demonstrating a good understanding of IT management concepts</li> <li>• Able to develop solutions to problems in IT management, accompanied by adequate explanations</li> <li>• Demonstrates a competent level of knowledge of IT management</li> <li>• Able to make use of appropriate techniques and knowledge and apply them to IT management situations and problems</li> </ul>
<b>Satisfactory (C)</b>	<ul style="list-style-type: none"> <li>• Achieves most of the six CILOs, demonstrating a basic level of understanding of IT management concepts</li> <li>• Able to provide acceptable solutions to problems in IT management</li> <li>• Demonstrates an adequate level of knowledge of IT management</li> <li>• Able to make use of some techniques and knowledge and apply them to familiar situations</li> </ul>
<b>Fail (F)</b>	<ul style="list-style-type: none"> <li>• Achieves less than three of the six CILOs, with little understanding of IT management concepts</li> <li>• Unable to provide solutions to simple problems in IT management</li> <li>• Knowledge of concepts in IT management falling below the basic minimum level</li> <li>• Unable to apply techniques and knowledge to situations or problems</li> </ul>

#### Course Content and CILOs Mapping:

<b>Content</b>		<b>CILO No.</b>
I	Organization Issues	1,5,6
II	Digital Transformation for Business Operations	2,6
III	IT Service and Project Management	1,4,6
IV	Digital Marketing	3,6
V	Emerging Technologies	3,6
VI	Cybersecurity Management	3,6
VII	Legal and Ethical Aspects of Digital Transformation	1,6

#### References:

- Birgi Vogel-Heuser, and Manuel Wimmer. Digital Transformation: Core Technologies and Emerging Topics from a Computer Science Perspective. Springer Vieweg, 2023.
- Bob Hughes, Roger Ireland, Brian West, Norman Smith, and David I. Shepherd. Project Management for IT-Related Projects, 3rd Edition. Ian Borthwick, 2019.
- Dietmar P.F. Möller. Cybersecurity in Digital Transformation: Scope and Applications. Springer, 2020.
- Erik Beulen, and Pieter M. Ribbers. Managing Information Technology Outsourcing. Routledge, 2022.
- George Baffour. Business and Emerging Technologies. Business Expert Press, 2021.
- Gopal Saxena. Strategic Managerial Accounting: A Primer for the IT Professional, Business Expert Press, 2017.
- Harold Kerzner. Innovation Project Management: Methods, Case Studies, and Tools for Managing Innovation Projects. John Wiley & Sons, 2022.
- Nils Urbach , and Frederik Ahlemann. IT Management in the Digital Age: A Roadmap for the IT Department of the Future, Springer, 2019.
- Paul D. Kimmel, Jerry J. Weygandt, Jill E. Mitchell. Financial Accounting for Managers. Wiley, 2023.
- Raj Sachdev. Digital Marketing. McGraw Hill, 2024.
- Thierry Jean Ruch. Consumerization of IT: Studies to Explore the Phenomenon and Implications for IT Management, Information Security, and Organizational Structures. Cuvillier Verlag, 2017.

- Travis Wright, Brian Solis, and Chris J. Snook. Digital Sense: The Common Sense Approach to Effectively Blending Social Business Strategy, Marketing Technology, and Customer Experience, John Wiley and Sons, 2017.
- Volker Johannning. IT Strategy: Making IT Fit for the Digital Transformation. Springer, 2022.

**Course Content:**

**Topic**

- I. Organization Issues
  - A. Management concepts in the IT context
  - B. Strategic Planning
  - C. Organizational Behavior
  - D. Business-IT Alignment
  - E. Managing IT Portfolio
  - F. IT Investment Evaluation such as Cost-Benefit Analysis, and Capital Budgeting
  - G. Outsourcing
- II. Digital Transformation for Business Operations
  - A. Process Management
  - B. Digitalization of the Value Chain
  - C. IT Performance Evaluation
  - D. Digital Business Models
  - E. Change Management
- III. IT Service and Project Management
  - A. Service Level Agreements
  - B. Project Management Methodologies
  - C. Project Lifecycle Management
- IV. Digital Marketing
  - A. Digital Marketing Strategies
  - B. Social Media Marketing
  - C. Customer Relationship Management
- V. Emerging Technologies
  - A. Cloud Computing
  - B. Artificial Intelligence and Machine Learning
  - C. Internet of Things (IoT)
  - D. Blockchain Technology
  - E. Big Data and Data Warehousing
  - F. Business Intelligence
- VI. Cybersecurity Management
  - A. Fundamentals of Cybersecurity
  - B. Risk Management
  - C. Incident Response Planning
- VII. Legal and Ethical Aspects of Digital Transformation
  - A. Intellectual Property
  - B. Data Privacy
  - C. Ethical Issues