

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

Course Aims: The course overviews the concepts in different business management disciplines so as to provide a foundation for students in managing IT projects and organizations. At the end of studying this course, students without business training would have learned and be able to apply basic business fundamentals in the IT context. Students with business training will be able to appreciate further the relevancy and applicability of business fundamentals in managing IT projects, organizations, and people.

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 management concepts including strategic plan, portfolio management, human resources management, and intellectual property issues
2	Explain the marketing, finance and accounting practices in IT firms
3	Evaluate economic environment faced by IT firms
4	Explain the production and operational issues in the IT context
	Professional Skill
5	Apply basic business-related concepts in the IT context
6	Prepare capital budgeting

Calendar Description: The course overviews the concepts in different business management disciplines so as to provide a foundation for students in managing IT projects and organizations.

Teaching and Learning Activities (TLAs):

CILOs	Type of TLA
1-4	Students will attend lectures for the direction of IT management and how IT could be aligned with business objectives. Students will be introduced with different human resources management practices, structures of IT organizations, and intellectual property issues. Students will also learn the basic concepts of different business disciplines including marketing, finance and accounting, economics, operation management and production management.
5-6	Students will conduct exercises including identifying IT alignment in organization, and conducting capital budgeting.
5-6	Students will work on a group project to analyze the business environment of an IT firm, propose IT planning for it, and present the report orally. A test will assess the students' understanding on the concepts under different IT context.

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 on applying business concepts in the IT context. In particular, a test will assess the students' understanding on the concepts under different IT context.
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 business concepts and practices under different IT context.

Assessment Rubrics:

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

Course Content and CILOs Mapping:

Content		CILO No.
I	Management	1,5
II	Marketing	2,5
III	Managerial Finance and Accounting	2,5,6
IV	Managerial Economics	3,5
V	Production Management	4,5
VI	Operations Management	4,5

References:

- Andrew Pham, David K. Pham, and Tiffany Pham. From Business Strategy to Information Technology Roadmap: A Practical Guide for Executives and Board Members, CRC Press, 2013.
- Anthony M. Pagano, and Matthew Liotine. Technology in Supply Chain Management and Logistics: Current Practice and Future Applications, Elsevier, 2020.
- Christopher R. Thomas, and S. Charles Maurice. Managerial economics: foundations of business analysis and strategy. McGraw-Hill, 2013.
- Dominick Salvatore. Managerial Economics in a Global Economy, 8th Edition, Oxford University Press, 2015.
- Edward A. Silver, David F. Pyke, and Douglas J. Thomas. Inventory and Production Management in Supply Chains, Taylor & Francis, 2017.
- Gary Armstrong, and Philip Kotler, Marketing : an Introduction, 12th Edition, Pearson, 2015

- Gopal Saxena. Strategic Managerial Accounting: A Primer for the IT Professional, Business Expert Press, 2017.
- Jan R. Williams, Susan F. Haka, and Mark S. Bettner. Financial and Managerial Accounting, the Basis for Business Decisions, McGraw-Hill, 2015.
- Jill Dyche. The New IT: How Technology Leaders are Enabling Business Strategy in the Digital Age, McGraw-Hill Education, 2015.
- Lee J. Krajewski, Manoj K. Malhotra, and Larry P. Ritzman. Operations Management: Processes and Supply Chains, 11th Edition, Prentice Hall, 2015.
- N. Gregory Mankiw. Principles of Economics, Cengage Learning, 2021.
- 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.
- Stephen A. Ross, Randolph W. Westerfield, Jeffrey F. Jaffe, and Bradford D. Jordan. Corporate Finance: Core Principles and Applications, McGraw-Hill, 2015.
- Sushil Gupta, and Martin K. Starr. Production and Operations Management Systems. Productivity Press, 2014.
- 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. Management
 - A. Management concepts in the IT context
 - B. Strategic plans, organization design and behavior
 - C. Performance evaluation
 - D. Managing IT portfolio
 - E. Human resources management
 - F. Intellectual property
 - G. Career path of IT
- II. Marketing
 - A. Marketing concepts in the IT context
 - B. Marketing process
 - C. Marketing mix
 - D. Internet and WWW marketing
 - E. Social networking
 - F. Customer relationship management
- III. Managerial Finance and Accounting
 - A. Financial concepts in the IT context
 - B. Accounting concepts in the IT context
 - C. Types of financial statement
 - D. Value and capital budgeting
 - E. Net present value
 - F. Concepts of depreciation
- IV. Managerial Economics
 - A. Managerial economics concepts in the IT context
 - B. Supply and demand, elasticities
 - C. Types of markets
 - D. Barriers of entry
 - E. Factors of productions
- V. Production Management
 - A. Production management concepts in the IT context
 - B. Manufacturing planning and control

- C. Materials Requirements Planning (MRP I)
 - D. Manufacturing Resources Planning (MRP II)
 - E. Inventory management and just in time production
- VI. Operations Management
- A. Operations management concepts in the IT context
 - B. Product cycle management
 - C. Value chain
 - D. Process management
 - E. Quality management
 - F. Enterprise Resources Planning (ERP)
 - G. Total Enterprise Integration (TEI)