

MS6233: E-LOGISTICS AND ENTERPRISE RESOURCE PLANNING

Effective Term

Semester B 2024/25

Part I Course Overview

Course Title

E-logistics and Enterprise Resource Planning

Subject Code

MS - Decision Analytics and Operations

Course Number

6233

Academic Unit

Decision Analytics and Operations (DAOS)

College/School

College of Business (CB)

Course Duration

One Semester

Credit Units

3

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course aims to:

- Provide students with an introduction to the concepts, the development, the implementation, and the applications of enterprise resource planning in logistics and supply chain management in the business sector.
- Develop students' computing and analytical skills in applying enterprise resource planning software to solve real business problems in areas such as logistics and supply chain management.
- Provide students with cutting-edge techniques to structure complex problem situations and solve business problems in areas such as logistics and supply chain management.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Describe the advantages and disadvantages of applying enterprise resource planning in a company.	15	x	x	
2	Discuss the impacts of applying enterprise resource planning in logistics and supply chain management of a company and evaluate critical success factors and major challenges faced in implementing enterprise resource planning in a company.	15	x	x	
3	Analyse business processes in logistics from both multi-disciplinary and inter-disciplinary perspectives.	15		x	
4	Solve real business problems in logistics and supply chain management by applying enterprise resource management skills.	15		x	x
5	Apply a prominent enterprise resource planning software package to solve problems in logistics and supply chain management.	40		x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures	Students will engage in lecture activities about concepts, knowledge, and problem-solving skills relevant to the applications of e-logistics management, enterprise resource management, and supply chain management in the business sector.	1, 2, 3, 4, 5	
2	SAP Laboratories	Students will participate in applying SAP enterprise resource planning software to solve logistics and supply chain problems through performing computer exercises and case studies.	2, 4, 5	
3	Group Discussions	Students will discuss, clarify, and debate critical arguments and concepts through interaction with others while listening to and developing appropriate and different views.	2, 3, 4	

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Case studies	1, 2, 3, 4	20	
2	Laboratory test	3, 4, 5	30	

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

2

Additional Information for ATs

Examination: CILO No. 1,2,3,4.

Assessment Rubrics (AR)**Assessment Task**

Case studies (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

- 1.1 CAPACITY for SELF-LEARNING to understand the principles and methodology of enterprise resource planning
- 1.2 ABILITY to DISCUSS critical issues in logistics and manufacturing in a company

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Laboratory test (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

- 2.1 ABILITY to APPLY enterprise resource planning software in performing business processes in logistics and manufacturing in a company

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Written examination (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

- 3.1 CAPACITY for understand the principles of enterprise resource planning
- 3.2 ABILITY to SOLVE problems in logistics, manufacturing and supply chain management

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Case studies (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

1.1 CAPACITY for SELF-LEARNING to understand the principles and methodology of enterprise resource planning

1.2 ABILITY to DISCUSS critical issues in logistics and manufacturing in a company

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Laboratory test (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

2.1 ABILITY to APPLY enterprise resource planning software in performing business processes in logistics and manufacturing in a company

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Written examination (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

- 3.1 CAPACITY for understand the principles of enterprise resource planning
 3.2 ABILITY to SOLVE problems in logistics, manufacturing and supply chain management

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Basic

Failure

(F) Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

1. Introduction to E-Logistics and Enterprise Resource Planning

From material resources planning (MRP) to enterprise resource planning (ERP). Impacts of information technology to a company. Integrated view of business processes. Functions and characteristics of enterprise systems.

2. Materials Management

Understanding the materials management processes. Common materials management problems. Business process in purchasing. Functions and tools for managing inventory.

3. Sales and Distribution

Common sales and distribution problems. Understanding the sales and distribution processes. Sales and distribution functionality. Sales order management processes.

4. Production Planning and Management

Sales and operations planning. Demand management. Master production scheduling and material requirement planning. Production order execution and control. Manufacturing execution systems.

5. Enterprise Resource Planning Implementation Issues

Business process reengineering. ERP-driven business process change. Process modelling tool. Challenges of implementing enterprise systems. Evaluation and selection of enterprise systems. Managing the implementation projects.

6. Advanced planning and scheduling in supply chain Management

Understanding and solving logistics and supply chain problems. Advanced Planner and Scheduler.

Reading List

Compulsory Readings

Title	
1	M Murray, Discover Logistics with SAP ERP. SAP Press (the latest edition)
2	S Pradhan, Demand and Supply Planning with SAP APO. SAP Press (the latest edition)

Additional Readings

Title	
1	Books
2	M Chudy, L Castedo, R Lopez (2015) Sales and Distribution in SAP ERP — Practical Guide, SAP Press

3	M Chudy, L Castedo (2014) Purchasing with SAP MM—Practical Guide, SAP Press
4	M Murray (2013) Material Management in SAP ERP, SAP Press
5	Journal articles
6	G Kohers (2015). SAP and the introductory management information systems course, Academy of Educational Leadership Journal Volume 19, Number 1, pp. 65-70.
7	Sona Kanungo (2012). Improved supply chain management using integrated ERP systems, Sona Global Management Review, Vol. 7, pp. 1-4.
8	Tsan Ming Choi, PuiSze Chow, Shuk Ching Liu (2013). Implementation of fashion ERP systems in China: Case study of a fashion brand, review and future challenges, Int. J. Production Economics, Vol. 146, pp. 70-81.
9	Online Resources
10	History of SAP http://www.sapfans.com/sapfans/saphist.htm
11	Introduction to SAP R/3 http://www.sapfans.com/sapfans/sapr3con.htm
12	SAP Help Portal http://help.sap.com/
13	SAP AG http://www.sap.com/
14	SAP Online Documentation: SAP Library http://help.sap.com/saphelp_46c/helpdata/en/73/69f5c755bb11d189680000e829fbbd/frameset.htm