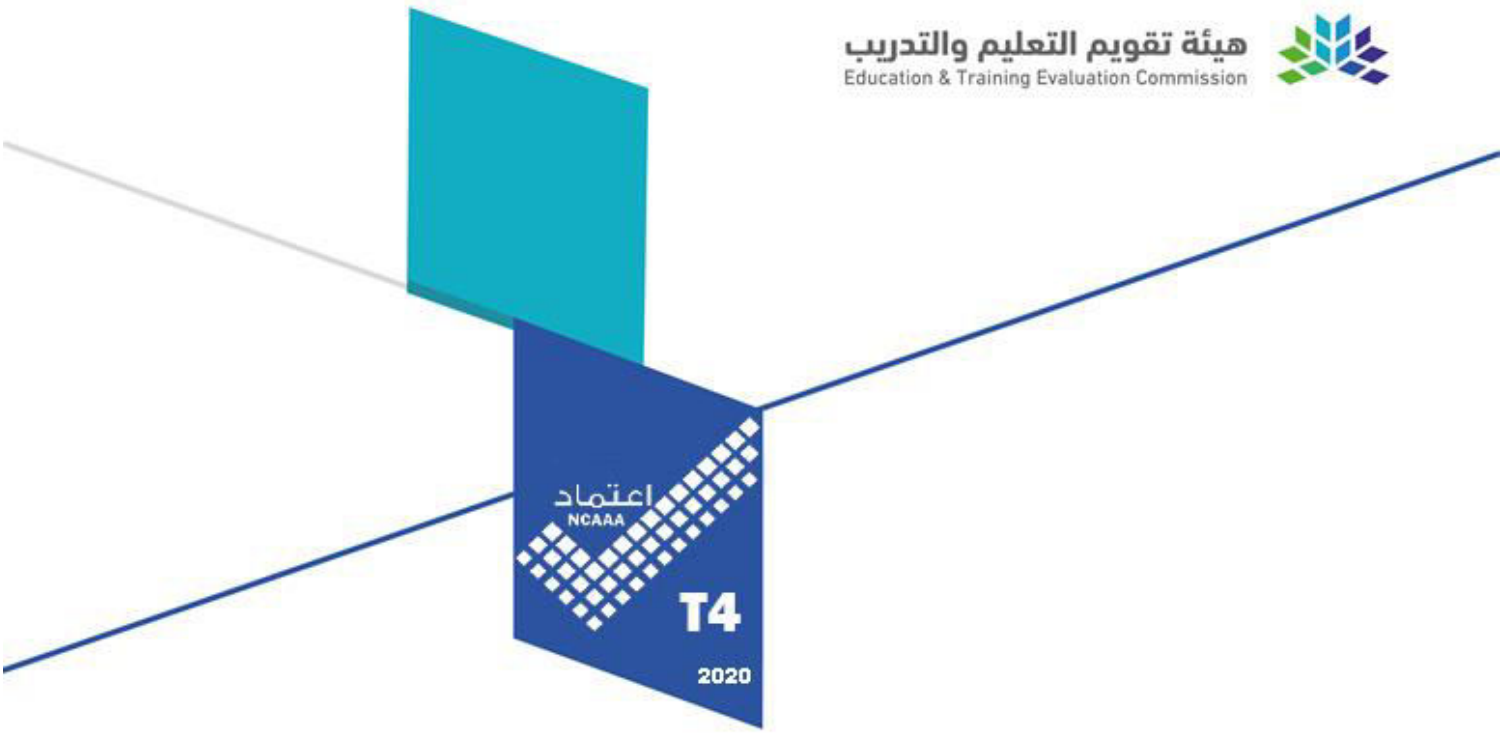
هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission



Course Specifications

Course Title:	Computer Skills
Course Code:	0677101
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3 Hours
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 1 / 1st year
4. Pre-requisites for this course (if any)**:** None
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	
2	**Laboratory/Studio**	45
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course provides students with basic as well as advanced skills to operate personal computers and make use of different applications needed by all the college programs, thereby enhancing the student technical skills. The course introduces the students to the main concepts and terminologies of information technology and equips them with the knowledge to administer operating systems. The course also provides the students with the practical skills to utilize the Microsoft Office productivity package for different purposes, and to use cloud computing. The course enables students to use the different tools available over the internet such as email, teamwork, cloud storage and the design and publishing of electronic surveys. The course contents are delivered using a hands/on approach, in order to achieve the course learning outcomes.

2. Course Main Objective

This course aims at achieving the following Course Learning Outcomes:

- Understand all the basic concepts of information technology and its related terminologies.
- Possess the advanced skills to use Microsoft Office productivity packages.
- Ability to search through the Internet effectively.
- Ability to use Cloud Computing Tools, e/mail services, Teamwork and Information Exchange tools.
- Ability to use electronic worksheets along with data analysis tools, particularly for course research projects.
- Ability to use e-learning systems effectively.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Explain the basic concepts of information technology and its related terminologies.	K2
1.2	Describe e-learning systems, their functions and their benefits.	K2
2	**Skills :**	
2.1	Ability to effectively use Microsoft Office productivity packages.	S1
2.2	Ability to use Cloud Computing Tools, e/mail services, Teamwork and Information Exchange tools.	S1
2.3	Ability to work with electronic worksheets and data analysis functions.	S1
2.4	Ability to search over the Internet effectively.	S1
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to information Technology	4.5
2	Operating Systems	4.5
3	Word Processing	6
4	Data Sheets	9
5	Presentations	3
6	Web Browsers	3
7	Electronic Mails	3
8	e-Learning Systems	3
9	Cloud Storage	3
10	Electronic Forms	3
11	Teamwork	3
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Explain the basic concepts of information technology and its related terminologies.	Peer teaching Note taking	Quizzes
1.2	Describe e-learning systems, their functions and their benefits.	Peer teaching Note taking Lab tutorials	Lab exercises
2.0	**Skills**		
2.1	Ability to effectively use Microsoft Office productivity packages.	Peer teaching Lab tutorials Group work	Lab exercises Group project
2.2	Ability to use Cloud Computing Tools, e/mail services, Teamwork and Information Exchange tools.	Peer teaching Lab tutorials Group work	Lab exercises Group project
2.3	Ability to work with electronic worksheets and data analysis functions.	Peer teaching Lab tutorials Group work	Lab exercises Group project
2.4	Ability to search over the Internet effectively.	Peer teaching Lab tutorials Group work	Lab exercises Group project
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Group project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes	3rd - 5th	20%
2	Lab exercises	During semester	60%
3	Group project	End of semester	20 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours

College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Computer Skills, Computer Skills Unit at the College of Computers and IT, King AbdulAziz University, Khawarzim Scientific, 9th Edition (2021), ISBN: 978-6038227831
Essential References Materials	An Introduction of Computer Skills, Abdullah Alfezy, Talal Noor, Dar Alnashr Aldwli, 1st Edition (2020), ISBN: 978-6039127833
Electronic Materials	N/A
Other Learning Materials	N/A

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Laboratory
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	N/A

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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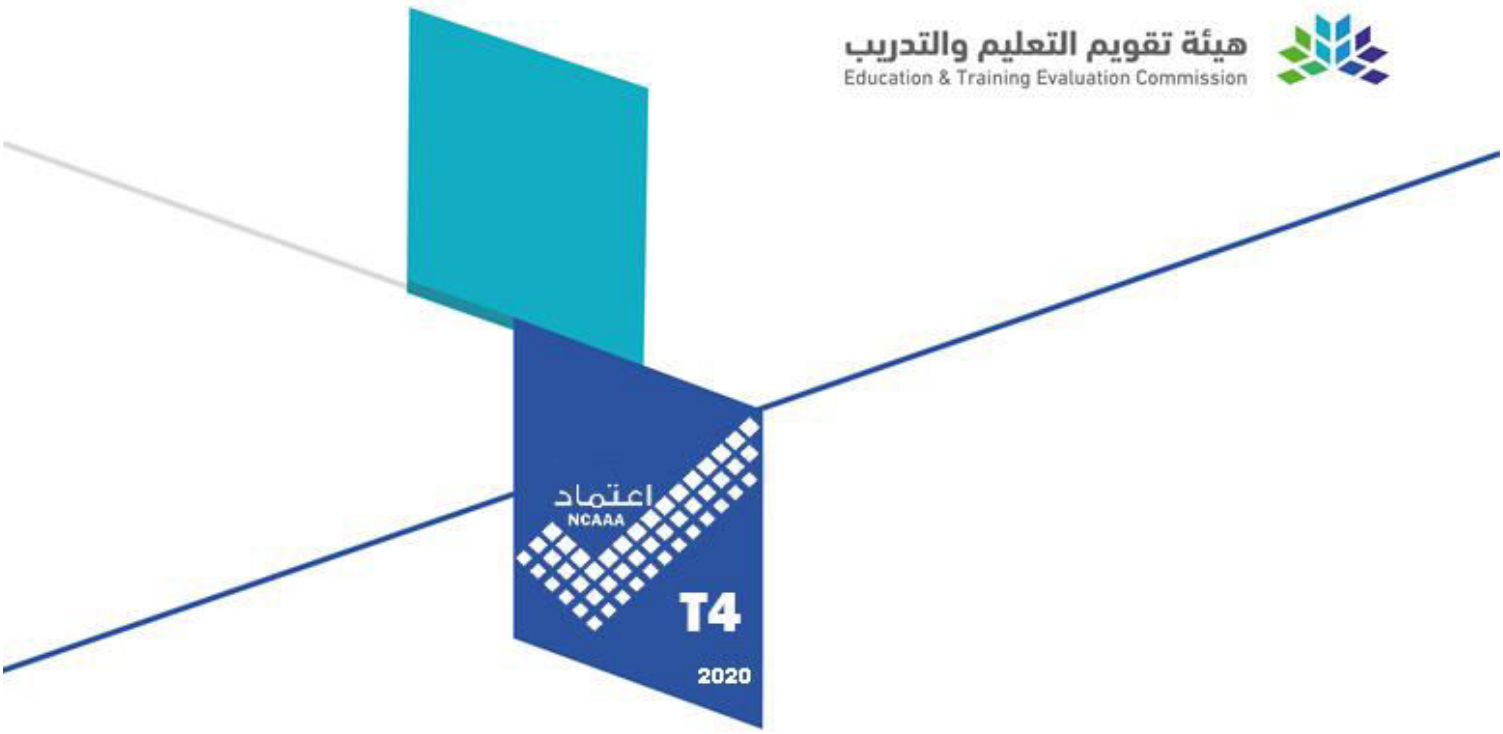
Education & Training Evaluation Commission



Course Specifications

Course Title:	Management Information Systems
Course Code:	0677201
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours:	**3**
2. Course type	
a.	University ☐ College ■ Department ☐ Others ☐
b.	Required ■ Elective ☐
3. Level/year at which this course is offered:	Level 3 / 2nd Year
4. Pre-requisites for this course (if any)**:**	0677101 – Computer Skills
5. Co-requisites for this course (if any)**:**	None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

Information Systems have significant impact on organizations and the way business is conducted. This course covers the fundamental concepts of management information systems and how they support business management and operations in today's business environment. Topics include organizations, management, networked enterprise, new trends in information technology infrastructure, telecommunications and data network, databases, building information systems and systems modeling methodologies

2. Course Main Objective

The main purpose of this course is to orient students about the significant impact of Information Systems on organizations and the way business is conducted.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Define an information system and its management, organization, technology components, Infrastructure and its development cycle	K2
1.2	Describe business processes and their relationship to information systems.	K1
2	**Skills:**	
2.1	Evaluate the role played by systems serving the various levels of management in a business and their relationship to each other	S1
2.2	Explain the enterprise data management systems and their role in improving business performance and decision making	S1
2.3	Demonstrate informed decision-making pertaining to management information systems implementation in an organization.	S2
3	**Values:**	
3.1	Demonstrate active participation while working with teams and large groups.	V1

C. Course Content

No	List of Topics	Contact Hours
1	Information Systems in Global Business Today, Global E-business and Collaboration	9
2	Information Systems, Organizations, and Strategy	6
3	E-commerce: Digital Markets, Digital Goods	6
4	Foundations of Business Intelligence: Databases and Information Management	6
5	Telecommunications, the Internet, and Wireless Technology	6
6	Enhancing Decision Making	6
7	Building Information Systems	6
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Define an information system and its management, organization, technology components, Infrastructure and its development cycle	Lectures Note taking	Exams Quizzes Assignments
1.2	Define business processes and their relationship to information systems.	Lectures Note taking	Exams Quizzes Assignments
2.0	**Skills**		
2.1	Evaluate the role played by systems serving the various levels of	Case-based learning Group work	Exams Assignments

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	management in a business and their relationship to each other		Group project
2.2	Explain the enterprise data management systems and their role in improving business performance and decision making	Case-based learning Group work	Exams Assignments Group projects
2.3	Demonstrate informed decision-making pertaining to management information systems implementation in an organization.	Group work	Group projects
3.0	**Values**		
3.1	Demonstrate active participation while working with teams and large groups.	Group work	Group projects

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2*5%)	5th, 12th	10%
2	Report-1 (Homework assignment 1)	3rd	5 %
3	Report-2 (Homework assignment 2)	8th	5 %
4	Midterm Exam	9th	20 %
5	Group Project	14th	20%
6	Final exam	16th	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

Students in need of academic accommodation may consult the faculty during office hours and are required to give reasonable notice prior to requesting accommodation.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	K. C. Laudon and J. P. Laudon "Management Information Systems: Managing the Digital Firm" 17th Edition, Published by Pearson (May 5th, 2021) - Copyright © 2022 ISBN-13: 9780136971542
Essential References Materials	N/A
Electronic Materials	http://www.pearsonhighered.com/laudon/

Other Learning Materials	N/A

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture room with multimedia facility
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Smart Board Laptop
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	N/A

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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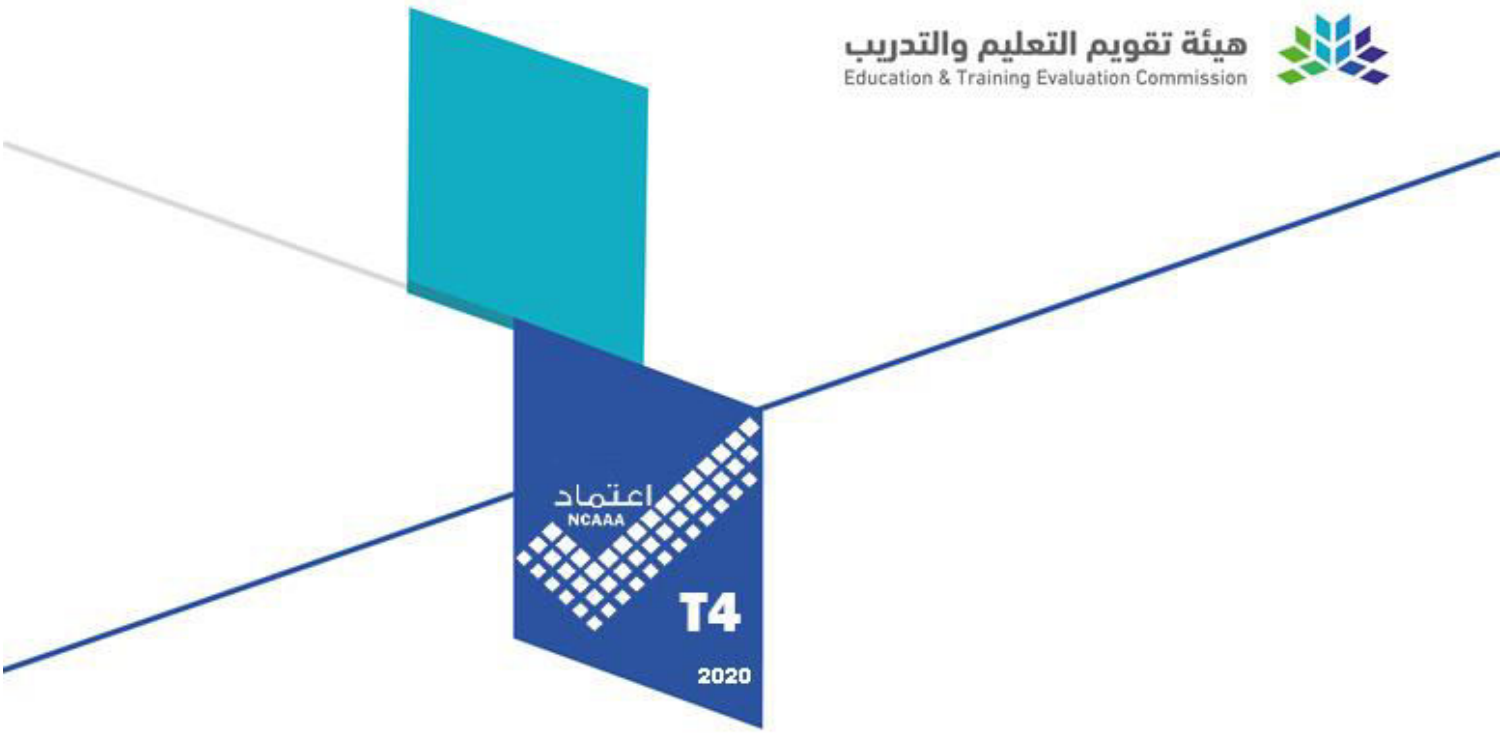

Course Specifications

Course Title:	E-Commerce
Course Code:	0677202
Program:	Management Information System
Department:	Management Information System
College:	School of Business
Institution:	King Feisal University

Table of Contents

A. Course Identification

1. Credit hours: 3 hours
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 3/ 2nd year
4. Pre-requisites for this course (if any)**:** 0677101- Computer Skills
5. Co-requisites for this course (if any)**:** **None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course provides an overview of e-commerce from both technological and managerial perspectives. It introduces e-commerce frameworks, and technological foundations; and examines basic concepts such as strategic formulation for e-commerce enterprises, management of their capital structures and public policy. It is designed to familiarize students with current and emerging electronic commerce technologies

2. Course Main Objective

The course aims at presenting the fundamental concepts of e-commerce.

By the end of this course students will be able to:

- Demonstrate an understanding of the foundations and importance of e-commerce
- Analyze the impact of e-commerce on business models and strategy
- Describe Internet trading relationships including Business to Consumer, Business-to-Business, Intra-organizational.

- Describe the infrastructure for e-commerce
- Describe the key features of Internet, Intranets and Extranets and explain how they relate to each other.
- Discuss legal issues and privacy in e-Commerce
- Assess electronic payment systems and e-contracting
- Recognize and discuss global e-commerce issues

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe fundamental concepts of e-commerce.	K2
1.2	Describe the fundamentals of digital marketing, e-payment and e-contracting.	K1, K2
1.3	Recognize ethical principles pertaining to e-commerce sites.	K1
2	**Skills:**	
2.1	Evaluate the information needs and requirements of a business entity aiming for a digital transformation.	S1
2.2	Analyze the requirements for setting up a new e-commerce service.	S2
2.3	Demonstrate effective oral and written communication skills.	S5
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to E-Commerce	1.5
2	e-Commerce: Mechanisms, Platforms, and Tools.	4.5
3	Retailing in Electronic Commerce: Products and Services.	6
4	Consumer Behavior, Market Research, and Advertisement.	6
5	The B2B (Business-To-Business) e-commerce	6
6	Security in E-Commerce	4.5
7	Electronic Commerce Payment Systems.	4.5
8	Strategies for e-Commerce.	3
9	Law and Legal Environment of e-Commerce	6
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe fundamental concepts of e-commerce.	Lectures Peer teaching Note taking	Exams Quizzes
1.2	Describe the fundamentals of digital marketing, e-payment and e-contracting.	Lectures Peer teaching Note taking	Exams Quizzes Assignment
1.3	Recognize ethical principles pertaining to e-commerce sites.	Lectures Peer teaching Note taking	Exams Quizzes Assignment
2.0	**Skills**		
2.1	Evaluate the information needs and requirements of a business entity aiming for a digital transformation.	Case-based learning Group work, Lectures	Group Project Assignment
2.2	Analyze the requirements for setting up a new e-commerce service.	Case-based learning Group work	Group project
3.3	Demonstrate effective oral and written communication skills.	Assignments Group work	Group project
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Group project
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Group Project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2*5%)	3rd, 8th	10%
2	Report-1 (Homework assignment 1)	4th	5%
3	Report-2 (Homework assignment 2)	10th	5%
4	Mid Term Exam	9th	25%
5	Group Project	14th	15%
6	Final exam	16th	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Electronic Commerce 2018: A Managerial and Social Networks Perspective, 9th ed. 2018 Edition; Efraim Turban, Dave King, Jae Kyu lee and Dennis Viehland; ISBN-13: 978-3319864600 E-commerce, Saud Suleiman Al-Nefaie, Ja`far Abdullah Musa Idris, Date of publication: 2018, Khwarizm Scientific.
Essential References Materials	Laudon K., C. G. Traver, e-Commerce 2019, 15/E, ISBN-10: 0134998456, ISBN-13: 978-0134998459, Pearson.
Electronic Materials	• Electronic Commerce Research and Applications Journal, Elsevier Publisher • International Journal of Electronic Commerce (IJEC) • Journal of Electronic Commerce Research (JECR)
Other Learning Materials	N/A

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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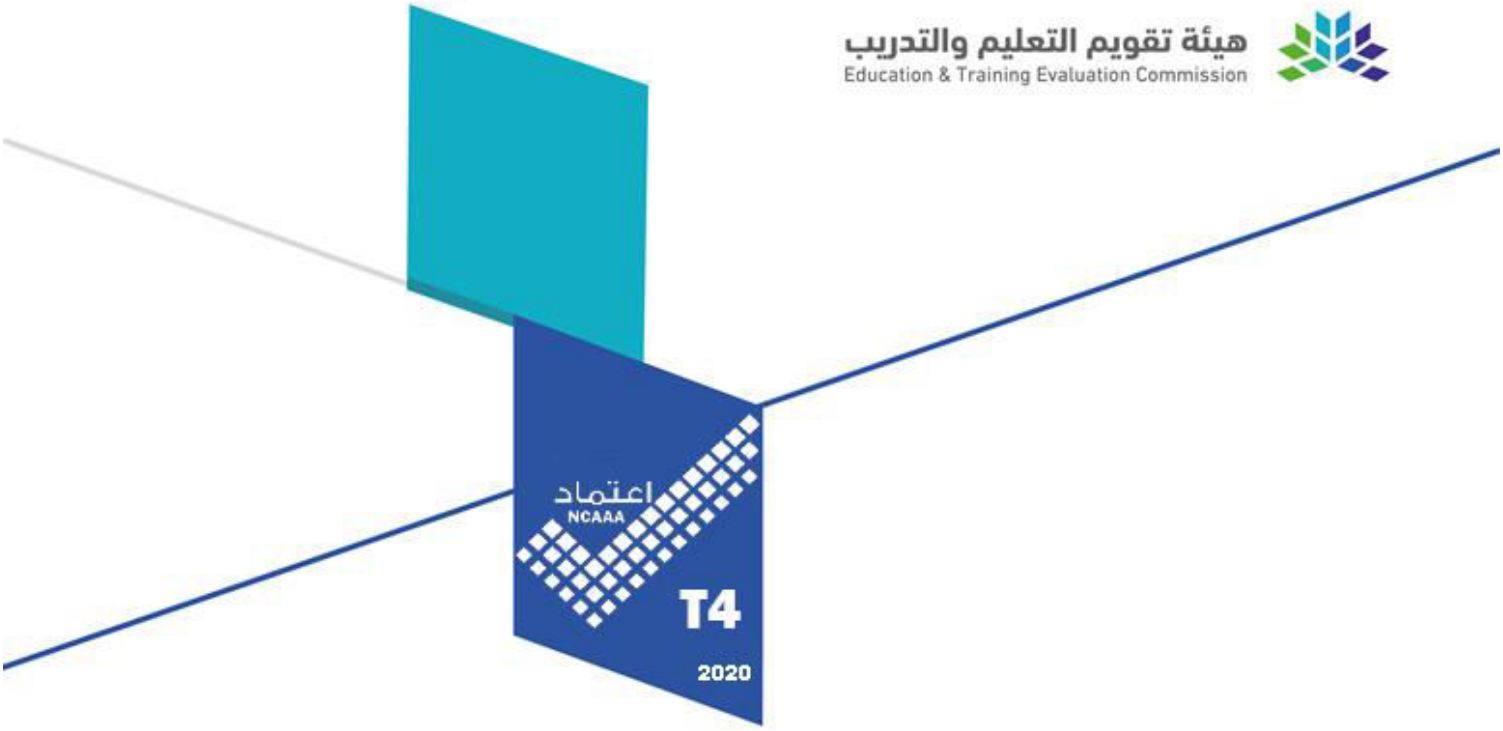

Course Specifications

Course Title:	Fundamentals of Scientific Research
Course Code:	0677204
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 2 hours
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 4 / 2nd Year
4. Pre-requisites for this course (if any)**: None** 0677201 – Management Information Systems
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	30	100
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	30
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	30

B. Course Objectives and Learning Outcomes

1. Course Description

This course introduces students to different methodologies for doing successful research. Students will acquire practical research skills, understand the principles of research and link the research process with the theories of their specific field of study.

2. Course Main Objective

- Identify and formulate research problems.
- Recognize the characteristics and limitations of key research methodologies.
- Explain the key differences between qualitative and quantitative research.
- Develop hypothesis and research questions.
- Choose a research design for a topic and generate appropriate research questions.
- Understand main ethical criteria used in academic business research are address it appropriately.
- Design and administer a pilot questionnaire as part of research data collection process.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe fundamentals of scientific research methodologies.	K2
1.2	Describe the ethical issues arising in scientific research.	K1
2	**Skills:**	
2.1	Ability to code and analyze both qualitative and quantitative data to deduce useful insights.	S1
2.2	Critique the theories and literature related to information systems.	S1
2.3	Demonstrate critical thinking in assessing scientific research.	S1
2.4	Demonstrate effective writing and communication skills.	S5
3	**Values:**	
3.1	Demonstrating effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Abide by the ethical values while conducting research.	V2
3.3	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	V3

C. Course Content

No	List of Topics	Contact Hours
1	Research Problem and Questions.	3
2	Identifying and critically reviewing relevant literature.	3
3	Choosing research approaches and strategies.	4
4	Ethics in business research.	4
5	Choosing samples from population.	4
6	Quantitative research methods.	4
7	Questionnaire design and testing.	4
8	Qualitative research methods.	4
Total		30

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe fundamentals of scientific research methodologies.	Lectures Project, reading handouts	Exams, and research methodology assignment
1.2	Describe the ethical issues arising in scientific research.	Lectures Work-along exercises Handouts	Exams Project Proposal Work-along exercises
2.0	**Skills**		
2.1	Ability to code and analyze both qualitative and quantitative data to deduce useful insights.	Project deliverables	Data analysis report

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
2.2	Critique the theories and literature related to information systems.	Project deliverables, handouts	Literature review report
2.3	Demonstrate critical thinking in assessing scientific research.	Group work	Report
2.4	Demonstrate effective writing and communication skills.	Group work	Oral presentation and project report
3.0	**Values**		
3.1	Demonstrating effective time management, leadership and organization skills while working with individuals, teams, and large groups.	Group work	Group project
3.2	Abide by the ethical values while conducting research.	Group work	Group project
3.3	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	Group work	Group project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Report-1 (Homework assignment 1)	4th	5%
2	Report-2 (Homework assignment 2)	6th	5%
3	Report-3 (Homework assignment 3)	8th	5%
4	Report-4 (Homework assignment 4)	12th	5%
5	Mid Term Exam	9th	25%
6	Group Project	14th	25%
7	Final Exam	16th	30%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

Students in need of academic accommodations may consult the faculty during office hours and are required to give reasonable notice prior to requesting an accommodation.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Research Methods for Business Students, Mark NK Saunders, Pearson, 2019, ISBN: 978-1292208787.

Essential References Materials	1. Rogelberg, S. G. (2004). Handbook of Research Methods in Industrial and Organizational Psychology. London: John Wiley. 2. Schutt, R. K. (2012). *Investigating the Social World: The Process and Practice of Research*. Los Angeles: Sage. 3. Poindexter, P. M., & McCombs, M. E. (2000). *Research in Mass Communication: A Practical Guide*. Bedford/St. Martin's.
Electronic Materials	N/A
Other Learning Materials	N/A

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture room with multimedia facility.
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access, blackboard
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	N/A

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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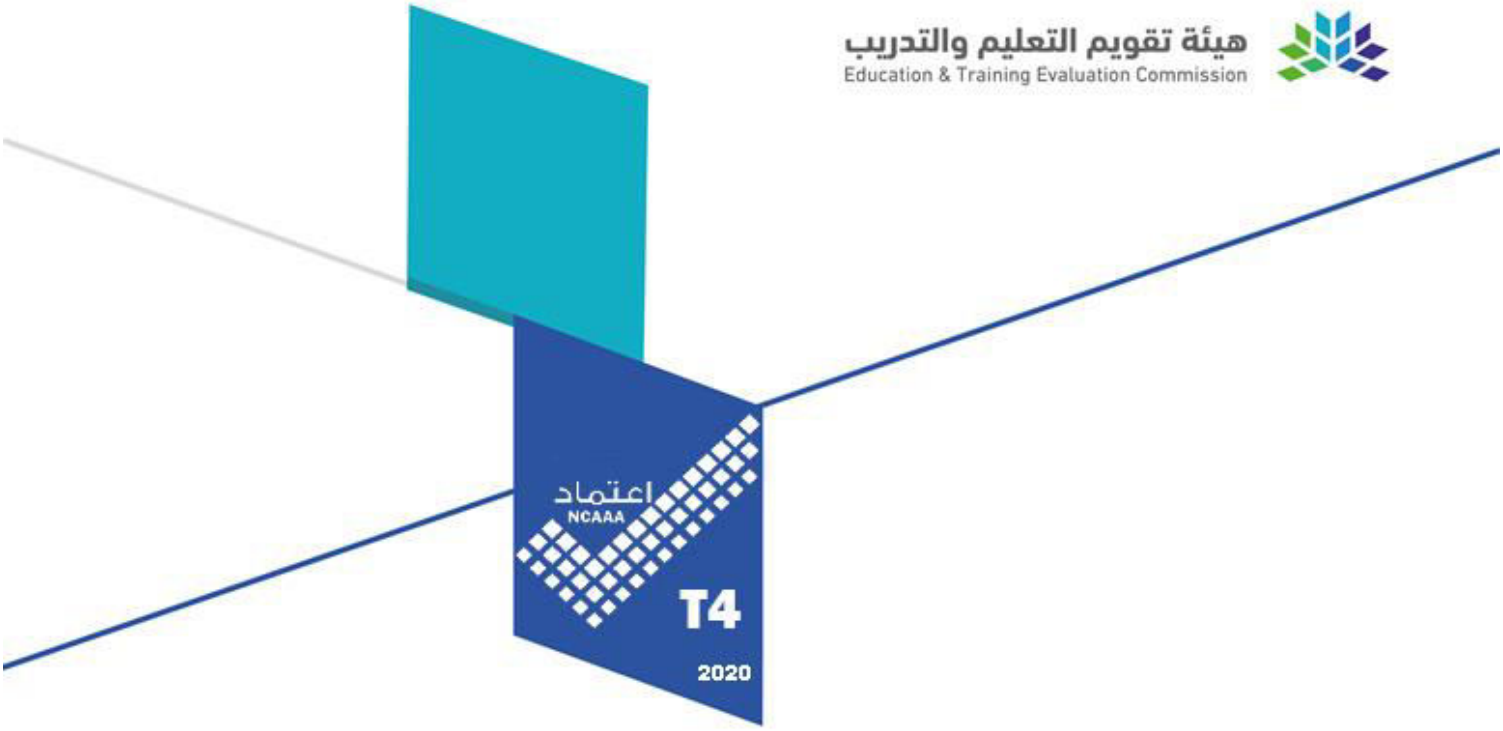
Education & Training Evaluation Commission



Course Specifications

Course Title:	Fundamentals of Business Programming
Course Code:	0677205
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours:
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: 2nd year/ Level 4
4. Pre-requisites for this course (if any)**:** Management Information Systems – 0677201
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	30
3	**Tutorial**	
4	**Others** (specify)	
	Total	75

B. Course Objectives and Learning Outcomes

1. Course Description

The course provides students with the fundamental concepts, skills, and knowledge for developing applications using Python. It covers the basic concepts of programming including types, operations, statements, functions, and generations. It also comprises the use of exception handling mechanism to improve program robustness.

2. Course Main Objective

The main purpose of this course is to teach basic programming skills using Python.

Course Objectives:
At the end of the course the students will be able to**:**

- Describe basics of Python programming, i.e. the terminology, structure, and syntax of the language.

- Work with Python data types such as string, float, integer, list, set, and tuple.
- Demonstrate the skills to implement solutions to basic programming problems.
- Use conditional statements, loops and functions to write complex programs.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe the effective use of constructs such as object types, conditional statements, loops and functions to develop programs.	K2
1.2	Explain the error and exception handling mechanisms.	K2
2	**Skills:**	
2.1	Apply knowledge of program building blocks to design solutions to a given scenario.	S2
2.2	Develop programs that are robust and fault tolerant.	S2
2.3	Demonstrate the ability to work under guidance as well as independently to design and develop business applications.	S3
2.4	Work with an integrated development environment to analyze, develop and make use of existing opensource code.	S3
3	**Values:**	
	N/A	N/A

C. Course Content

No	List of Topics	Contact Hours
1	Overview of the course	1.5
2	The coding environment set up, writing and running the first program	3
3	Numeric types	3
4	Strings	3
5	Lists and dictionaries	3
6	Tuples and files	3
7	Simple statements	3
8	Conditional statements	3
9	Loops	4.5
10	Iterations and comprehensions	3
11	Writing basic functions	3
12	Function scope and arguments	6
13	Exception handling	9
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.1	Describe the effective use of constructs such as object types, conditional statements, loops and functions to develop programs.	Lectures Note taking	Exams Quizzes
1.2	Explain the error and exception handling mechanisms.	Lectures Note taking	Exams Quizzes
2.0	**Skills:**		
2.1	Apply knowledge of program building blocks to design solutions to a given scenario.	Lectures Case-based learning Peer teaching	Exams Lab exercises Code collection file
2.2	Develop programs that are robust and fault tolerant.	Lectures Case-based learning Peer teaching	Exams Lab exercises Code collection file
2.3	Demonstrate the ability to work under guidance as well as independently to design and develop business applications.	Case-based learning Peer teaching	Lab exercises Code collection file
2.4	Work with an integrated development environment to analyze, develop and make use of existing opensource code.	Case-based learning Peer teaching	Lab exercises
3.0	**Values:**		
	N/A		

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz 1	5th	5 %
2	Quiz 2	12th	5 %
3	Midterm exam	9th	25 %
4	Lab exercises	All weeks	25%
5	Code collection file (individual)	14th	10 %
6	Final exam	16th	30 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours
College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Learning Python, Mark Lutz, O'Reilly Media, 5th Edition (2013), ISBN: 978-1449355739.

Essential References Materials	Intro to Python for Computer Science and Data Science: Learning to Program with AI, Big Data and The Cloud, Paul J. Deitel, Harvey Deitel, 1st Edition (2019), ISBN: 978-0135404676
Electronic Materials	w3schools.com (Python Tutorial)
Other Learning Materials	The Python Standard Library documentation (docs.python.org)

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms, laboratory
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Lab containing enough computers installed with required software to support the students.

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
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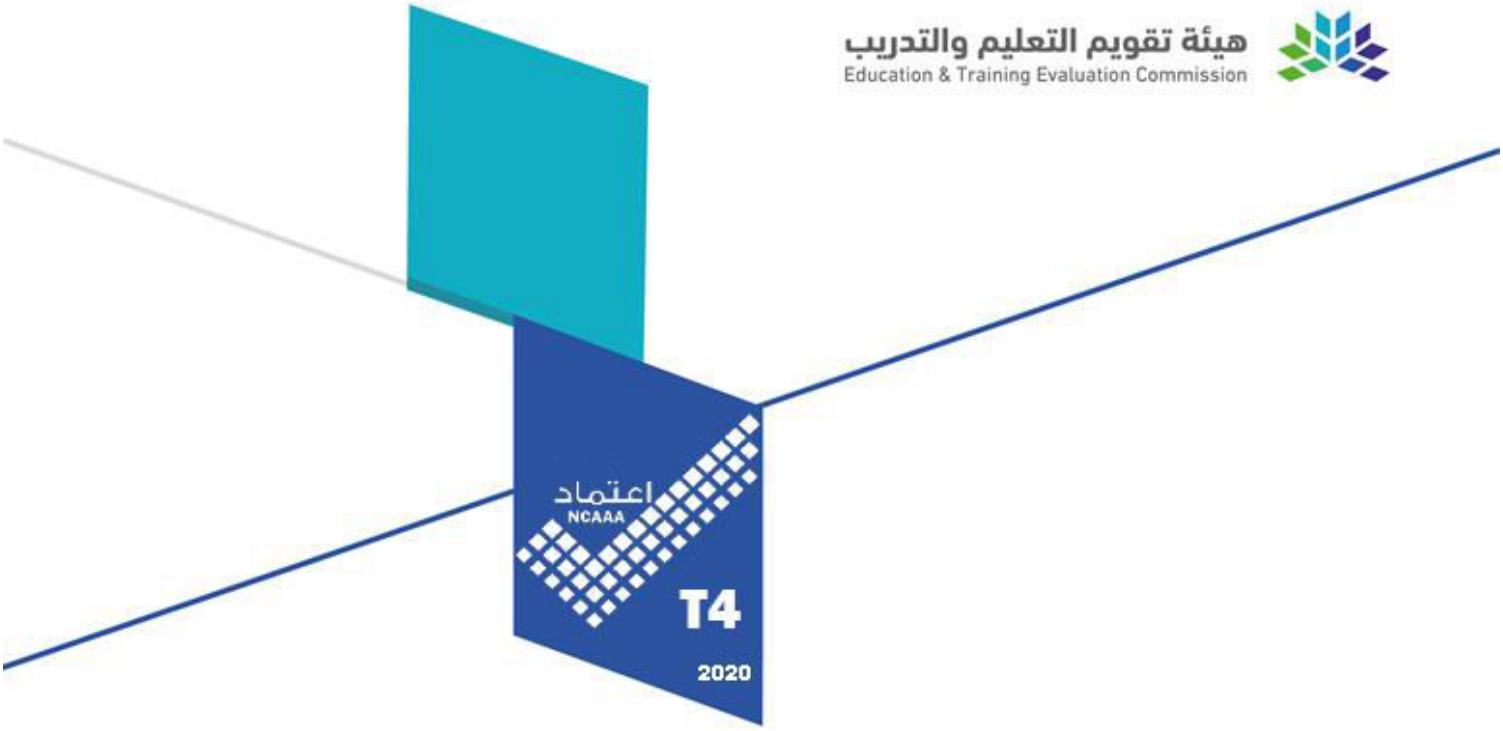

Course Specifications

Course Title:	Enterprise Data Management
Course Code:	0677206
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours:	**3 Hours**
2. Course type	
a.	University ☐ College ☐ Department ■ Others ☐
b.	Required ■ Elective ☐
3. Level/year at which this course is offered:	Level 4 /2nd Year
4. Pre-requisites for this course (if any)**:**	0677201- Management Information Systems
5. Co-requisites for this course (if any)**:**	None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course discusses the basic concepts and design of databases. It covers topics such as data modeling, data independence, concurrency, entities, relationships, strong and weak entities, attributes, value domain, key and participation constraints, normalization and entities hierarchy. The course covers the practice of relational model: creating, modifying, and querying tables, enforcing integrity constrains using structured query language (SQL).

2. Course Main Objective

The aim of this course is to present both the theoretical and practical aspects of data management at the enterprise level.

Course Objectives:
At the end of the course the students will be able to:

- Describe and discuss the concepts of database.
- Design an Entity Relationship Model and a conceptual data modeling.
- Evaluate a set of queries by using SQL.
- Explain and apply the database normalization techniques.
- Analyze the physical and logical database designs, database models, relational and hierarchical models.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe and discuss the fundamental concepts of database management systems.	K2
1.2	Describe the effective use of conceptual data modeling (ER and EER models) and database design.	K2
1.3	Explain different normalization forms of a database design.	K2
2	**Skills:**	
2.1	Apply the knowledge to develop an Entity Relationship Model and Enhanced Entity Relationship Model of a database.	S2
2.2	Design and construct the physical database using SQL and evaluate relations operations using SQL.	S3
2.3	Create normalized relations from un-normalized data.	S3
2.4	Demonstrate effective oral and written communication skills.	S5
2.5	Propose innovative solutions to upgrade traditional systems to improve business processes.	S6
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Database and database users	3
2	Database System Concepts and Architecture	6
3	Data modeling using the Entity-Relationship Model	6
4	Data modeling using the Enhanced Entity-Relationship Model	4.5
5	Relational model and Relational database Constraints	4.5
6	Basic SQL	4.5
7	SQL: Queries, Constraints, Triggers	4.5
8	Relational Database Design by ER- and EER-to-Relational Mapping	6
9	Schema Refinement and Normal Forms	6
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe and discuss the fundamental concepts of database management systems.	Lectures Peer teaching Note taking	Exams Quizzes Group Project
1.2	Describe the effective use of conceptual data modeling (ER and EER models) and database design.	Lectures Peer teaching Note taking	Exams Quizzes Group Project
1.3	Explain different normalization forms of a database design.	Lectures Peer teaching Note taking	Exams Quizzes Group Project
2.0	**Skills:**		
2.1	Apply the knowledge to develop an Entity Relationship Model and Enhanced Entity Relationship Model of a database.	Lectures Peer teaching Note taking Case-based learning Group work	Exams Quizzes Group Project
2.2	Design and construct the physical database using SQL and evaluate relations operations using SQL.	Lectures Peer teaching Note taking Case-based learning Group work	Exams Quizzes Group Project
2.3	Create normalized relations from un-normalized data.	Lectures Peer teaching Note taking Case-based learning Group work	Exams Quizzes Group Project
2.4	Demonstrate effective oral and written communication skills.	Group work	Group Project
2.5	Propose innovative solutions to upgrade traditional systems to improve business processes.	Group work	Group Project
3.0	**Values:**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Group Project
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business	Group work	Group Project

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	solutions.		

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2%5)	3rd, 11th	10 %
2	*Deliverable-1 (Group Project Phase-1)	6th	5 %
3	*Deliverable-2 (Group Project Phase-2)	10th	5%
4	Midterm Exam	9th	25 %
5	Group Project	14th	25 %
6	Final Exam	16th	30 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours

College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Elmasri, R., Navath,S., and Navath, B.,"Fundamentals of Database Systems" , Pearson; 7 edition (June 18, 2015), ISBN 0133970779
Essential References Materials	1. Raghu, R. and Johannes, G., "Database Management Systems", McGraw- Hill,3rd ed., 2002, ISBN 0072465638. Date, C. J., "Introduction Database Systems", Addison-Wesley, 8th ed.,2003, ISBN 0321197844.
Electronic Materials	w3schools Oracle University
Other Learning Materials	SQL 11g from Oracle Documentation

2. Facilities Required

Item	Resources
Accommodation (demonstration ,laboratories ,(Classrooms (.etc ,rooms/labs	Lecture rooms
Technology Resources (,software ,Smart Board ,data show ,AV) (.etc	Data show Laptop Internet access
Other Resources (if specific laboratory .e.g ,(Specify list requirements or ,equipment is required	N/A

Item	Resources
attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

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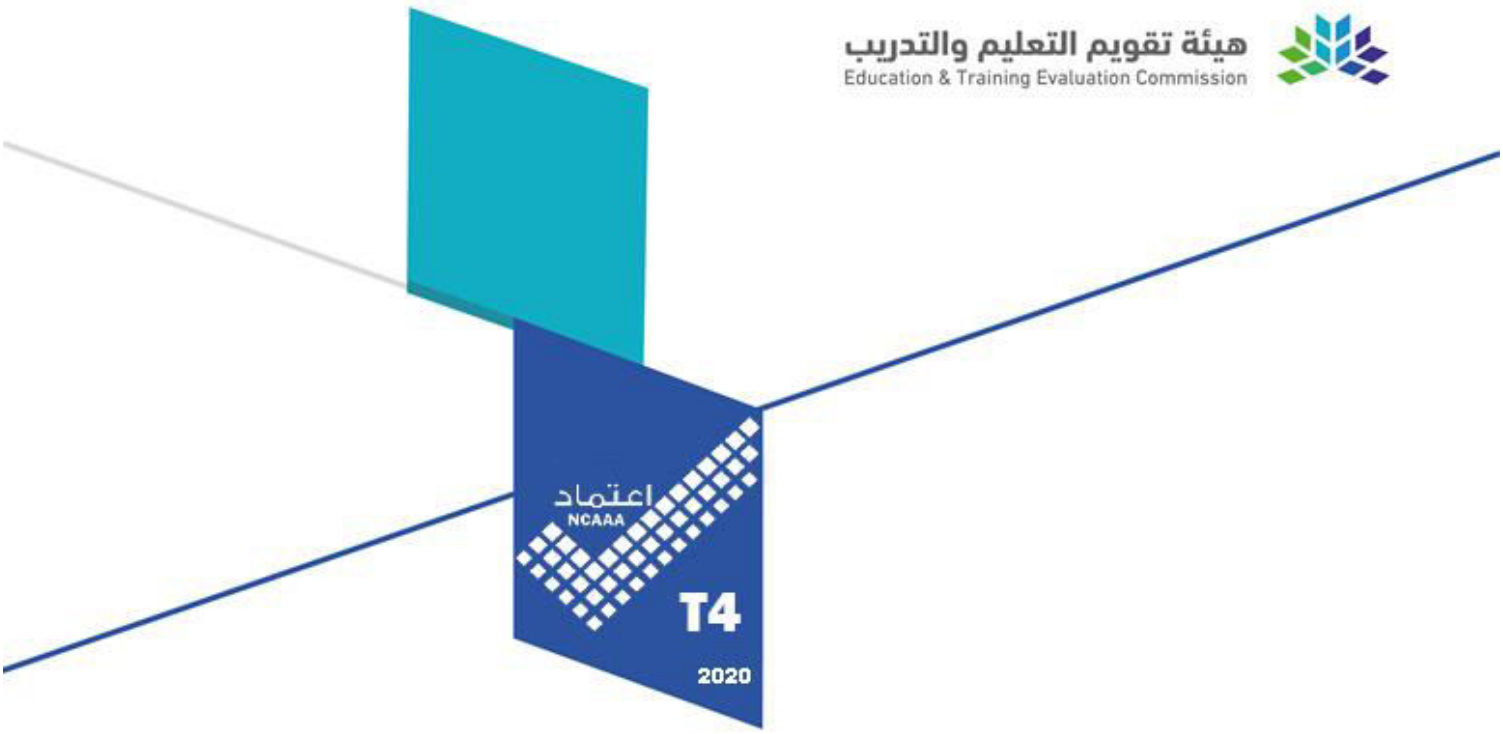

Course Specifications

Course Title:	Integrated Enterprise Systems
Course Code:	0677207
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours:3
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 4 / 2nd year
4. Pre-requisites for this course (if any)**:** 0677201-Management Information Systems
5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description:

This course introduces the student to the architecture of ERP systems, issues related to their acquisition and implementation, their impact on organizations and their potential benefits and costs. It examines business processes and their interaction with the ERP, focusing on the powerful capabilities of ERP systems in the integration of business processes across functional areas. The course makes extensive use of case studies focusing on the evaluation of business problems and the formulation of strategies to address these issues**.**

2. Course Main Objective:

The purpose of this course is to provide a comprehensive insight into theoretical foundations, concepts, tools and current practice of enterprise systems.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe major business processes within organizations and the importance of business processes and the role of information in modern organizations	K1
1.2	Recognize the scope of common Enterprise Systems.	K2
2	**Skills:**	
2.1	Explain key issues relating to ERP systems	S1
2.2	Recognize the steps involved in the selection, acquisition and implementation of enterprise systems	S2
2.3	Demonstrate effective oral and written communication skills.	S5
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate integrity, professional and academic ethics when dealing with the implementation of an Integrated Enterprise System	V2

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to Enterprise Systems for Management	6
2	Systems Integration	6
3	Enterprise System Architecture	6
4	ERP Development Lifecycle	6
5	Implementation Strategies	6
6	Software and Vendor Selection	4.5
7	Operations and Post Implementation	4.5
8	Project Management.	6
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe major business processes within organizations and the importance of business processes and the role of information in modern	Lectures Peer teaching Note taking	Exams Quizzes

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	organizations		
1.2	Recognize the scope of common Enterprise Systems.	Lectures Peer teaching Note taking	Exams Quizzes
2.0	**Skills:**		
2.1	Explain key issues relating to ERP systems	Case-based learning Group work	Group project
2.2	Recognize the steps involved in the selection, acquisition and implementation of enterprise systems	Case-based learning Group work	Group projects
2.3	Demonstrate effective oral and written communication skills.	Group work	Group projects
3.0	**Values:**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Group projects
3.2	Demonstrate integrity, professional and academic ethics when dealing with the implementation of an Integrated Enterprise System	Group work	Group projects

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz * 2	3rd, 9th	10%
2	Report -1: (Assignment 1)	4th	5 %
3	Mid Term Exam	7th	20 %
4	Report -2: (Assignment 2)	10th	5 %
5	Project	13th	20 %
6	Final Exam	End of semester	40 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

Students in need of academic accommodation may consult the faculty during office hours and are required to give reasonable notice prior to requesting accommodation.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Enterprise systems for management 2nd edition / 2019 by Pearson Education Luvai F. Motiwalla, Jeffrey Thompson ISBN-13: 978-0132145763 ISBN-10: 0132145766

Essential References Materials	1. Shanks, Graeme, Seddon, Peter B., Willcocks, Leskie P. (eds.) (2003), Second wave Enterprise Resource Planning systems New York Cambridge University Press. 2. Journal of Integrated Enterprise Systems (JIES), Microsoft Dynamics Academic Alliance 3. International Journal of Enterprise Information Systems (IJEIS), IGI Global 4. Journal of Enterprise Information Management, Emerald Publisher
Electronic Materials	Links will be distributed to students during class
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture room with multimedia facility
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Smart Board Laptop
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

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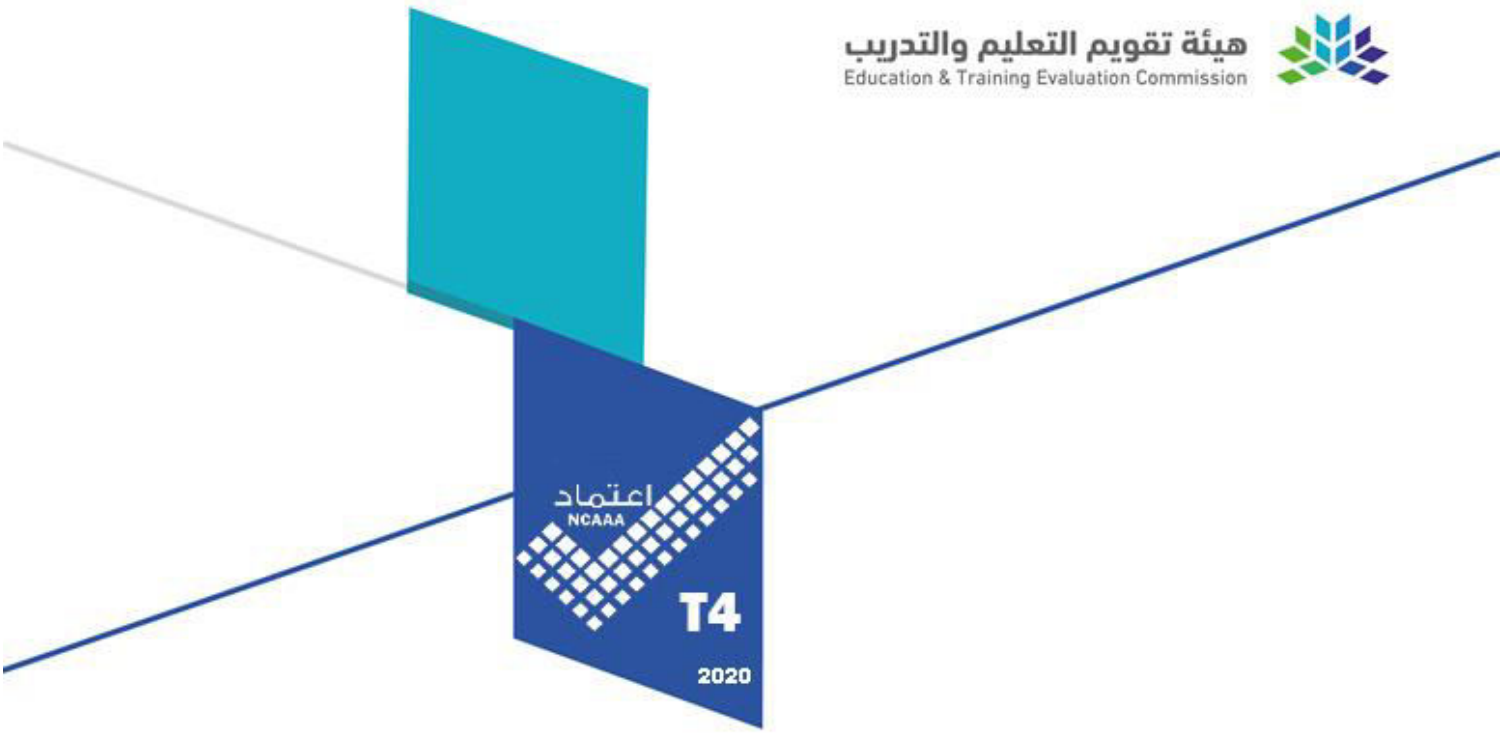

Course Specifications

Course Title:	Advanced Business Programming
Course Code:	0677301
Program:	Management Information Systems
Department:	Management Information Systems
College:	Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 5 / 3rd Year
4. Pre-requisites for this course (if any)**:** Fundamentals of Business Programming - 0677205
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	30
3	**Tutorial**	
4	**Others** (specify)	
	Total	75

B. Course Objectives and Learning Outcomes

1. Course Description

The course provides students with the advanced concepts, skills, and knowledge required for developing business applications using Python. It has two main parts. The first part covers the use of classes and object-oriented programming concepts such as inheritance and polymorphism. The second part is dedicated to application of Python in the context of Data Analysis. This part covers the details involved in manipulating, processing, cleaning, and crunching data in Python.

2. Course Main Objective

This course is complementary to Fundamentals of Business Programming, and it aims to teach advanced skills of programming business applications using Python.

Course objective:

At the end of the course the students will be able to:

- Use the classes, their relationships, and hierarchies.
- Use operator overloading.
- Make use of interfaces and polymorphism.
- Use the libraries that provide high-level data structures and manipulation tools to perform data analysis and manipulation in Python.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Explain the use of classes and related object-oriented concepts.	K2
1.2	Describe the fundamental concepts related to data analysis.	K2
1.3	Explain the basic constructs of contemporary packages, data structures, and manipulation tools involved in data analysis.	K2
2	**Skills**	
2.1	Design and implement hierarchies of concrete classes, abstract classes and interfaces.	S2
2.2	Implement applications that perform import and export of data using built-in libraries.	S2
2.3	Create plots as well as static and interactive visualizations.	S2
2.4	Demonstrate the ability to work under guidance as well as independently to design and develop business applications.	S3
2.5	Use at least one tool for visualization of data.	S3
3	**Values**	
3.1	Demonstrate effective time management, leadership and organization skills while working with individuals, teams, and large groups.	V1

C. Course Content

No	List of Topics	Contact Hours
1	Overview of the course	1.5
2	Fundamentals of object-oriented programming and class coding	3
3	and polymorphism ,operator overloading ,Inheritance	6
4	Data processing using arrays and vectorized computation	9
5	High-level data structures for data analysis	6
6	Fundamental mechanics of interacting with the data contained in a high-level data structure	7.5
7	Data wrangling	6
8	Plotting and visualization of data	6
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Explain the use of classes and related object-oriented concepts.	Lectures Note taking	Exams Quizzes
1.2	Describe the fundamental concepts related to data analysis.	Lectures Note taking	Exams Quizzes
1.3	Explain the basic constructs of contemporary packages, data structures, and manipulation tools involved in data analysis.	Lectures Note taking	Exams Quizzes
2.0	**Skills**		
2.1	Design and implement hierarchies of concrete classes, abstract classes and interfaces.	Case-based learning Group work	Exams Lab exercises
2.2	Implement applications that perform import and export of data using built-in libraries.	Case-based learning Group work	Exams Lab exercises
2.3	Create plots as well as static and interactive visualizations.	Case-based learning Group work	Exams Lab exercises
2.4	Demonstrate the ability to work under guidance as well as independently to design and develop business applications.	Case-based learning Group work	Group project Lab exercises
2.5	Use at least one tool for visualization of data.	Case-based learning Group work	Group project Lab exercises
3.0	**Values**		
3.1	Demonstrate effective time management, leadership and organization skills while working with individuals, teams, and large groups.	Group work	Group project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz 1	5th	5 %
2	Quiz 2	12th	5 %
3	Midterm exam	9th	20 %
4	Lab exercises	All weeks	25%
5	Group project	14th	15 %
6	Final exam	16th	30 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:
4 weekly office hours College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	1. Python for Data Analysis: Data Wrangling with pandas, NumPy, and Jupyter, Wes McKinney, O'Reilly Media, 3rd edition (2022): ISBN-13: 978-1098104030, ISBN-10: 109810403X 2. Learning Python, Mark Lutz, O'Reilly Media, 5th Edition (2013), ISBN:
Essential References Materials	Intro to Python for Computer Science and Data Science: Learning to Program with AI, Big Data and The Cloud, Paul J. Deitel, Harvey Deitel, 1st Edition (2019), ISBN: 978-0135404676
Electronic Materials	w3schools.com (Python Tutorial)
Other Learning Materials	The Python Standard Library documentation (docs.python.org)

2. Facilities Required

Item	Resources
Accommodation (.etc ,demonstration rooms/labs ,laboratories ,(Classrooms	Lecture room with multimedia facility
Technology Resources (.etc ,software ,Smart Board ,data show ,AV)	Data show Laptop Internet access
Other Resources list ,if specific laboratory equipment is required .e.g ,(Specify requirements or attach a list)	Lab containing enough computers installed with required software to support the students.

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course	Course Faculty	Moderation (QMS Annex G

Evaluation Areas/Issues	Evaluators	Evaluation Methods
learning outcomes		and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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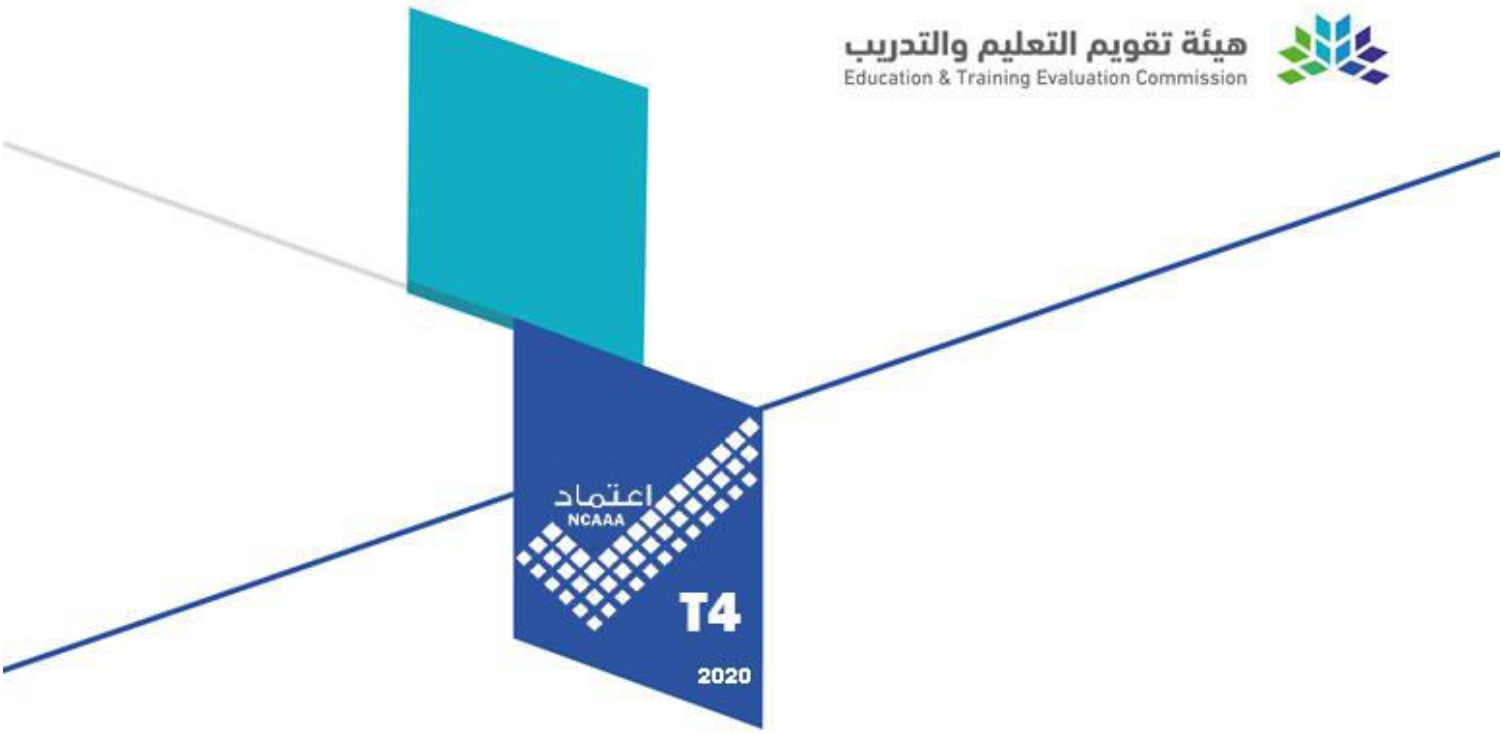

Course Specifications

Course Title:	Systems Analysis and Design
Course Code:	0677302
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours:
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 5/ Year 3
4. Pre-requisites for this course (if any)**:** Enterprise Data Management – 0607206
5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course presents the structured systems analysis and design methodology and, on the techniques, and tools used in analyzing and designing information systems. It enables students to perform information requirements analysis including information gathering and agile modeling and prototyping.

This course also discusses the analysis process and enables students to construct Data Flow Diagrams (DFD), Context diagrams, Decision Tables, and Decision Trees, and how to manage software development projects.

2. Course Main Objective

The aim of this course is to expose the foundation of system analysis and design to the students. It includes established and evolving methodologies for the analysis and design of information systems.

Course objective:

At the end of the course the students will be able to**:**

- Describe the necessary concepts to provide the skills required to do analysis
- Introduce general system analysis concepts & design
- Determine the requirements for an information system
- Design the different diagrams (context, functional and DFDs) of the system
- Be familiar with a variety of information systems analysis and problem-solving tools and approaches.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe the fundamental concepts related to analysis and design of information systems.	K2
1.2	Explain the various system analysis and design methodologies.	K2
1.3	Describe the fundamentals of information systems project management.	K2
2	**Skills:**	
2.1	Ability to develop an information systems development project plan.	S1
2.2	Ability to effectively use the requirements gathering techniques.	S1
2.3	Ability to use systems analysis techniques effectively.	S1
2.4	Demonstrate effective oral and written communication skills.	S5
3	**Values:**	
3.1	Demonstrate effective time management, leadership and organization skills while working with individuals, teams, and large groups.	V1

C. Course Content

No	List of Topics	Contact Hours
1	Course outline	1.5
2	Systems, Roles, and Development Methodologies	3
3	Understanding and Modeling Organizational Systems	4.5
4	Project Management	4.5
5	Information Gathering: Interactive Methods	4.5
6	Information Gathering: Unobtrusive Methods	4.5
7	Agile Modeling and Prototyping	4.5
8	Using Data Flow Diagrams	6
9	Analyzing Systems Using Data Dictionaries	3
10	Process Specifications and Structured Decisions	4.5
11	Object-Oriented Systems Analysis and Design Using UML	4.5
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.1	Describe the fundamental concepts related to analysis and design of information systems.	Lectures Note taking Peer teaching	Exams Quizzes
1.2	Explain the various system analysis and design methodologies.	Lectures Note taking Peer teaching	Exams Quizzes
1.3	Describe the fundamentals of information systems project management.	Lectures Note taking Peer teaching	Exams Quizzes
2.0	**Skills**		
2.1	Ability to develop an information systems development project plan.	Case-based learning Group work	Assignment Case study
2.2	Ability to effectively use the requirements gathering techniques.	Case-based learning Group work	Assignment Case study
2.3	Ability to use systems analysis techniques effectively.	Case-based learning Group work	Assignment Case study
2.4	Demonstrate effective oral and written communication skills.	Group work	Group project
3.0	**Values**		
3.1	Demonstrate effective time management, leadership and organization skills while working with individuals, teams, and large groups.	Group work	Group project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2*5%)	5th, 10th	10%
2	Report-1 (Homework assignment 1)	4th	5 %
3	Report-1 (Homework assignment 2)	8th	5 %
4	Mid Term Exam	9th	20 %
5	Group Project/ Case Study	14th	20%
6	Final exam	16th	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours
College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Systems Analysis and Design, Kendall, K.E., Kendall, J.E. 10th Edition (2018), Prentice-Hall. ISBN-13: 978-0134785554

	ISBN-10: 013478555X
Essential References Materials	1. Bennett, S., McRobb, S. & Farmer, R. (2010) Object-Oriented Systems Analysis and Design using UML, McGraw Hill. 2. Hoffer J A, et al, (2004, 4th Ed), "Mastering Systems Analysis & Design", Prentice Hall Journal of Emerging Trends in Computing and Information Sciences (CIS)
Electronic Materials	N/A
Other Learning Materials	N/A

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture Rooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5

Date	29-10-2020

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Education & Training Evaluation Commission

Course Specifications

Course Title:	Project - I
Course Code:	0677303
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 2
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 6 / 3rd year
4. Pre-requisites for this course (if any)**:** 0677302 Systems Analysis and Design
5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	30	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	30
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	30

B. Course Objectives and Learning Outcomes

1. Course Description:

The purpose of this course is to provide students with an opportunity to apply the knowledge they have acquired, their intellectual abilities and practical skills to solve real life business problems. The students are required to carry out a research or a systems development project. This part of the project will comprise the initial activities pertaining to the problem definition and solution design**.**

2. Course Main Objective:

The purpose of this course is to integrate the various components of knowledge, skills, and competencies acquired within the program and provide the students with an opportunity to practice their knowledge.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Recognize the economic, social, and environmental issues involved in	K1

CLOs		Aligned PLOs
	design and development of business solutions or research.	
1.2	Describe the organizational performance/ efficiency issues to be undertaken.	K4
1.3	Describe the activities involved in the system development lifecycle.	K2
1.4	Outline the role of advanced technologies in achieving business objectives.	K3, K4
2	**Skills:**	
2.1	Analyze the requirements of a project.	S1, S2
2.2	Design a solution to a given business problem.	S3, S4
2.3	Demonstrate effective oral and written communication skills.	S5
2.4	Demonstrate innovation in proposing and developing business solutions.	S2, S6
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2
3.3	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	V3

C. Course Content

No	List of Topics	Contact Hours
1	Defining the problem	3
2	Development of the project plan using a Gantt chart	3
3	Project feasibility study	3
4	Information gathering	3
5	Requirements analysis and prioritization	3
6	Building and evaluating the solution prototypes	6
7	Solution design	6
8	Evaluation of the final design	3
Total		30

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Recognize the economic, social, and environmental issues involved in design and development of business solutions or research.	Group work	Final report Oral assessment Presentations
1.2	Describe the organizational performance/ efficiency issues to be undertaken.	Group work	Final report Oral assessment Presentations
1.3	Describe the activities involved in the	Group work	Final report

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	system development lifecycle.		Oral assessment Presentations
1.4	Outline the role of advanced technologies in achieving business objectives.	Group work	Final report Oral assessment Presentations
2.0	**Skills:**		
2.1	Analyze the requirements of a project.	Group work	Final report Presentations
2.2	Design a solution to a given business problem.	Group work	Final report Presentations
2.3	Demonstrate effective oral and written communication skills.	Group work	Final report Oral assessment Presentations
2.4	Demonstrate innovation in proposing and developing business solutions.	Group work	Final report Presentations
3.0	**Values:**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Final report Presentations
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Final report Presentations
3.3	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	Group work	Final report Presentations

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Project-I report		75%
2	Presentation and oral examination		25 %
3	Total		100%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

Students in need of academic accommodation may consult the faculty during office hours and are required to give reasonable notice prior to requesting accommodation.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Systems Analysis and Design, Kendall, K.E., Kendall, J.E. 10th Edition (2018), Prentice-Hall. ISBN-13: 978-0134785554 ISBN-10: 013478555X Systems Analysis and Design, Alan Dennis, Barbara Haley Wixom, Roberta M. Roth, 7th Edition (2018), Wiley.
Essential References Materials	Instructor handouts
Electronic Materials	Links will be distributed to students during class
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (.etc ,demonstration rooms/labs ,laboratories ,(Classrooms	**Accommodation** demonstration ,laboratories ,(Classrooms (.etc ,rooms/labs
Technology Resources (.etc ,software ,Smart Board ,data show ,AV)	**Technology Resources** (.etc ,software ,Smart Board ,data show ,AV)
Other Resources list ,if specific laboratory equipment is required .e.g ,(Specify requirements or attach a list)	**Other Resources** if specific laboratory equipment is .e.g ,(Specify list requirements or attach a list) ,required

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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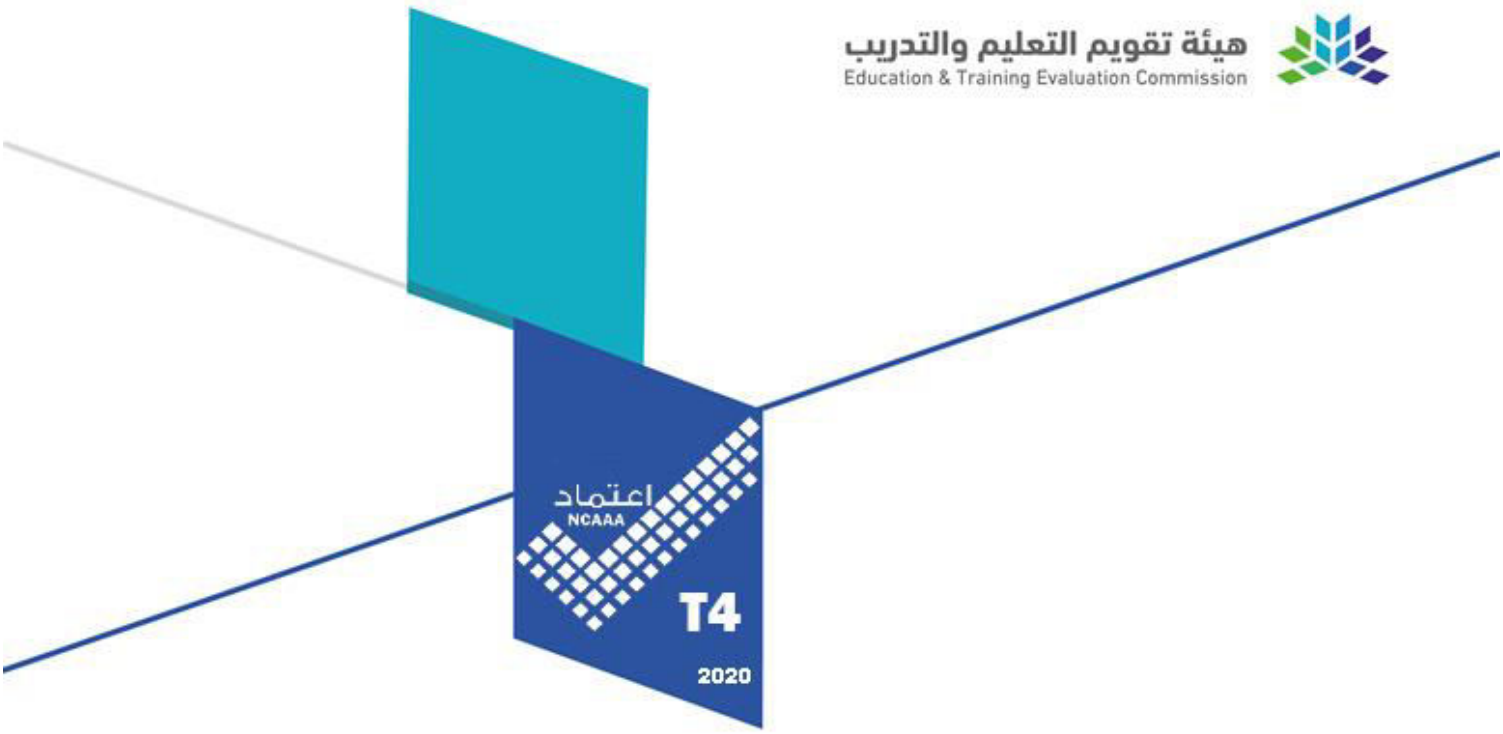
Education & Training Evaluation Commission



Course Specifications

Course Title:	Web Systems Development
Course Code:	0677304
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours:
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 6 / 3rd Year
4. Pre-requisites for this course (if any)**:** 0677301 - Advanced Business Programming
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	%100
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

The course covers the essential technologies used to design and develop web-based business applications. The topics covered include the front-end technologies such as HTML, CSS, and JavaScript. It also includes the back-end technologies such as PHP, Python, and web services.

2. Course Main Objective

The purpose of this course is to introduce the technologies for the development of web-based business applications.

Course objectives:

At the end of the course the students will be able to**:**

- Describe the structure of a Web application.
- Use front-end technologies to develop websites.
- Use server-side programming frameworks to implement the business logic.

- Integrate applications with databases using server-side technologies.
- Describe the fundamentals of Web services.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe the fundamentals of client-side technologies for web application development.	K2
1.2	Describe the fundamentals of server-side technologies for web development.	K2
1.3	Describe the fundamental concepts of web services technology.	K2
2	**Skills:**	
2.1	Ability to design an interactive website.	S3
2.2	Ability to integrate web applications to databases.	S4
2.3	Demonstrate effective oral and written communication skills.	S5
2.4	Demonstrate the ability to develop innovative web-based solutions in a business setting.	S6
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	V3

C. Course Content

No	List of Topics	Contact Hours
1	Course outline	1.5
2	Introduction to web technology	6
3	Hypertext Markup Language (HTML)	7.5
4	Cascading Style Sheets (CSS)	6
5	JavaScript	7.5
6	Server-side programming technology	9
7	Web services	7.5
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe the fundamentals of client-side technologies for web application development.	Lectures Note taking Peer teaching	Exams Quizzes
1.2	Describe the fundamentals of server-side technologies for web development.	Lectures Note taking Peer teaching	Exams Quizzes
1.3	Describe the fundamental concepts of web services technology.	Lectures Note taking	Exams Quizzes

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
		Peer teaching	
2.0	**Skills**		
2.1	Ability to design an interactive website.	Group work	Group Project
2.2	Ability to integrate web applications to databases.	Group work	Group Project
2.3	Demonstrate effective oral and written communication skills.	Group work	Group Project
2.4	Demonstrate the ability to develop innovative web-based solutions in a business setting.	Group work	Group Project
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Group Project
3.2	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	Group work	Group Project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2*5%)	5th, 10th	10%
2	*Deliverable-1 (Group Project Phase-1)	4th	5 %
3	*Deliverable-2 (Group Project Phase-2)	8th	10 %
4	Midterm Exam	9th	25 %
5	Group Project	14th	20 %
6	Final exam	16th	30%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours
College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Learning PHP, MySQL & JavaScript: With jQuery, CSS & HTML5 by Robin Nixon, 5th Edition (2018), O'Reilly Media, ISBN: 978149979105.
Essential References Materials	Deitel, P. J. & Deitel, H. M. (2012). Internet and World Wide Web How to Program. (5th ed.). Upper Saddle River, NJ: Pearson Education.
Electronic Materials	w3schools.com
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Laptop

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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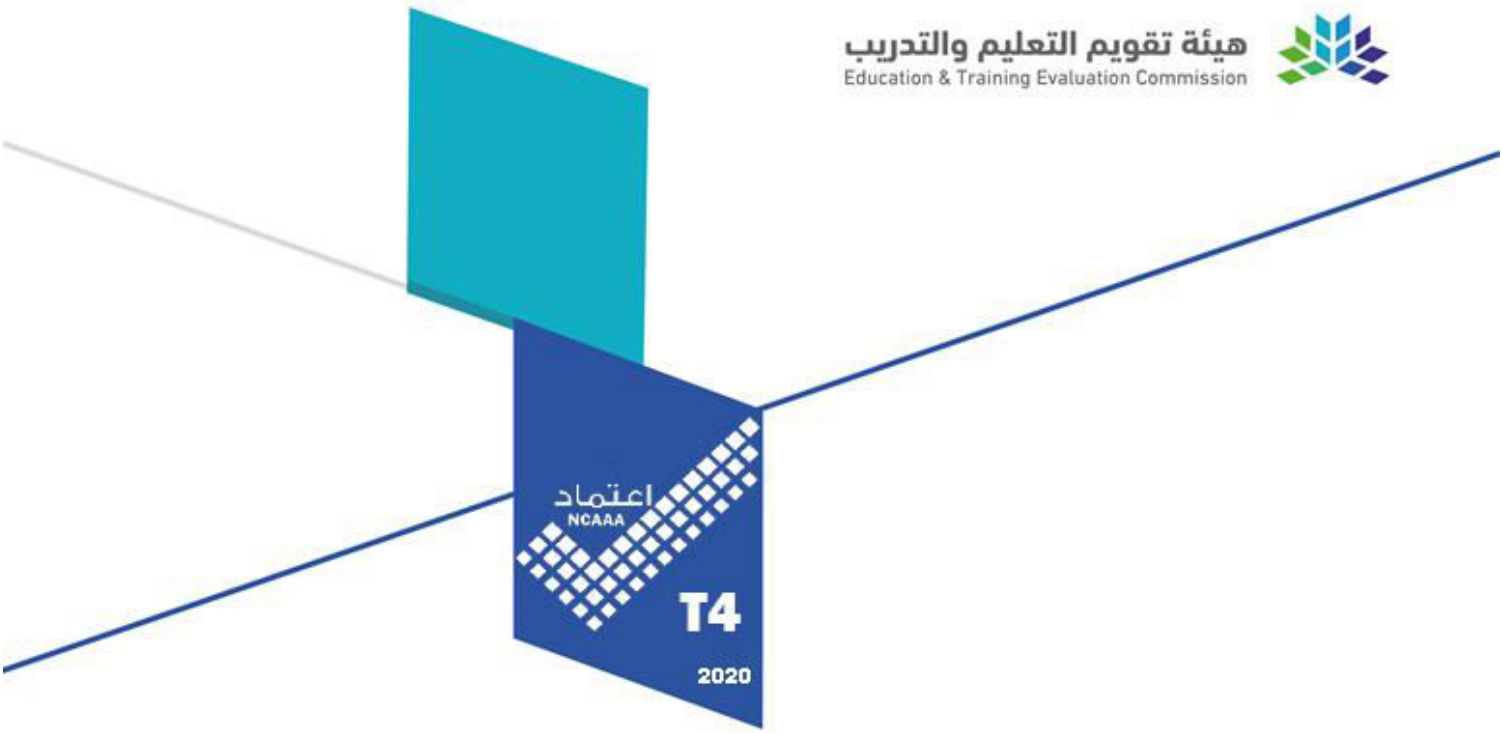
Education & Training Evaluation Commission



Course Specifications

Course Title:	Fundamentals of Blockchain
Course Code:	0677305
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3 Hours
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ☐ Elective ■
3. Level/year at which this course is offered: Level 5 / 3rd year
4. Pre-requisites for this course (if any)**:** 0677206 – Enterprise Data Management
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	45	100%
2	Blended		
3	E-learning		
4	Distance learning		
5	Other		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	45
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course discusses the basic concepts of Blockchain technology. It covers topics such as data encryption, distributed ledgers, cryptocurrency, hash function, proof of work, proof of stake, and Blockchain network. It also covers Blockchain applications including smart contracts, challenges in fiat currency, community fractures, scams and feuds.

2. Course Main Objective

The aim of this course is to present the fundamentals of Blockchain technology.

Course Objectives:

At the end of the course the students will be able to:

- Explain the fundamental concepts of Blockchain technology
- Describe and explain the key components of Blockchain technology
- Explain the structure of a Blockchain network

- Explain the concepts of cryptocurrency and Hyperledger
- Explain the concepts of centralized and decentralized application identity
- Explain the impact of Blockchain technology on world economy
- Describe how Blockchain can impact the daily life

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding:**	
1.1	Describe and discuss the basic concepts of Blockchain technology, Blockchain components, cryptocurrency and Hyperledger.	K2
1.2	Explain the concept of decentralized applications and how they are related to Blockchain technology.	K4
2	**Skills:**	
2.1	Apply the acquired knowledge to propose solutions for the adoption of Blockchain technology	S2
2.2	Design applications architecture based on Blockchain technology.	S3, S4
2.3	Demonstrate effective oral and written communication skills.	S5
2.4	Demonstrate the ability to propose innovative solutions based on Blockchain technology.	S6
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to Blockchain Technology	3
2	Key Concepts of Blockchain Technology	4.5
3	Blockchain Network Structure	4.5
4	Blockchain Networks and Technologies	4.5
5	Second Generation Blockchain Applications	7.5
6	Blockchain Application Expandation	6
7	World Economy and Blockchain	4.5
8	Frontiers in Blockchain	6
9	Blockchain and The Inhibitors	4.5
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe and discuss the basic concepts of Blockchain technology, Blockchain components, cryptocurrency and Hyperledger.	Lectures Peer teaching Note taking	Exams Quizzes Project/Case study

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.2	Explain the concept of decentralized applications and how they are related to Blockchain technology.	Lectures Peer teaching Note taking	Exams Quizzes Project/Case study
2.0	**Skills**		
2.1	Apply the acquired knowledge to propose solutions for the adoption of Blockchain technology.	Lectures Peer teaching Note taking Case-based learning Group work	Exams Quizzes Project/Case study
2.2	Design applications architecture based on Blockchain technology.	Lectures Peer teaching Note taking Case-based learning Group work	Exams Quizzes Project/Case study
2.3	Demonstrate effective oral and written communication skills.	Assignments Group work	Project/Case study
2.4	Demonstrate the ability to propose innovative solutions based on Blockchain technology.	Group work	Project/Case study
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Project/Case study
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Project/Case study

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2%5)	3rd, 11th	10 %
2	*Deliverable-1 (Group Project Phase-1)	6th	5 %
3	*Deliverable-2 (Group Project Phase-2)	10th	5%
4	Midterm Exam	9th	25 %
5	Group Project/case study	14th	15 %
6	Final Exam	16th	40 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Introduction to Blockchain Technology: The many faces of blockchain technology in the 21st century, Tiana Laurence, 2019 ISBN-13: 978-9401804998 ISBN-10: 9401804990
Essential References Materials	Architecture for Blockchain Applications Xiwei Xu, ngo Weber, Mark Staples 2018 ISBN 978-3-030-03034-6
Electronic Materials	IBM Blockchain (https://www.ibm.com/sa-en/blockchain)
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

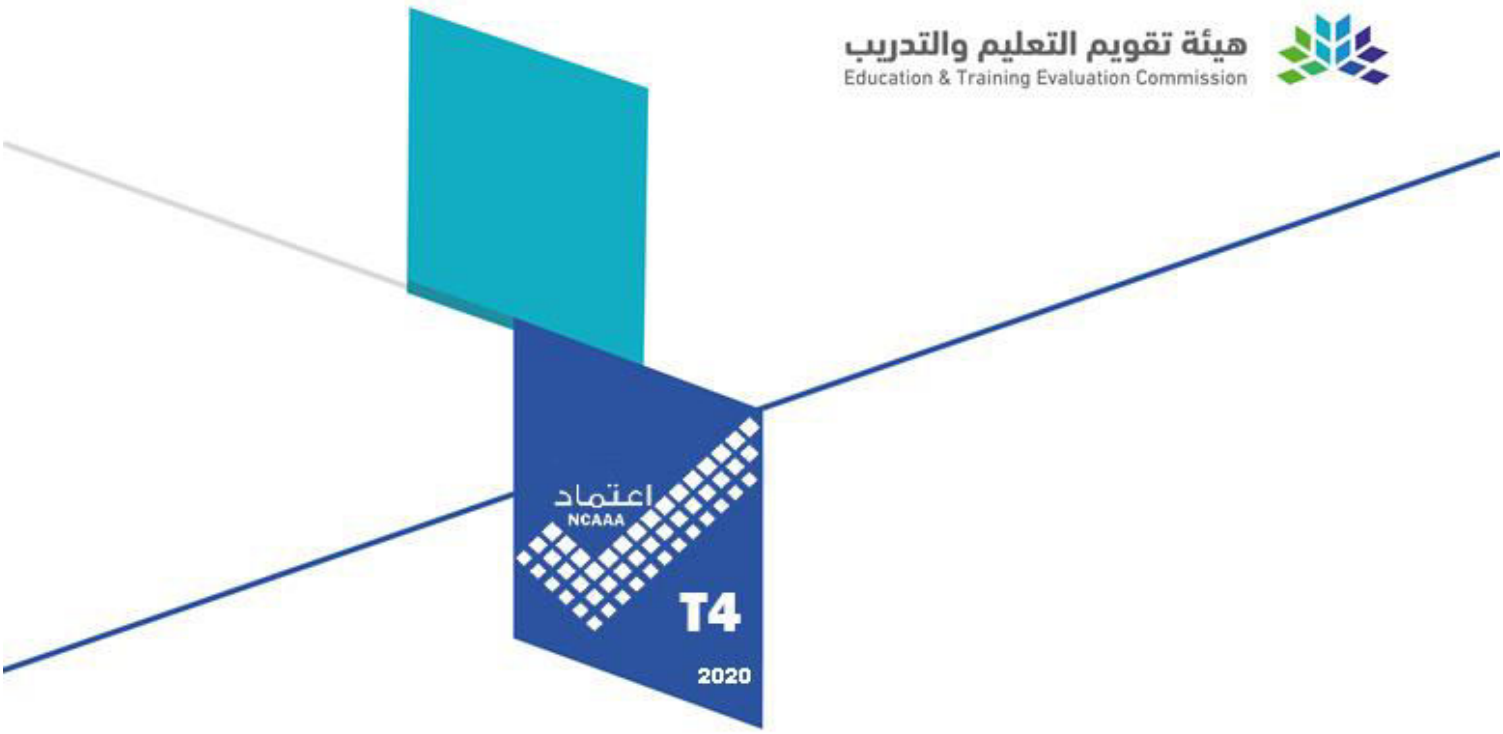
Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission



Course Specifications

Course Title:	Blockchain Applications
Course Code:	0677306
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3 hours
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ☐ Elective ■
3. Level/year at which this course is offered: Level 6 / 3rd year
4. Pre-requisites for this course (if any)**:** 0677305 - Fundamentals of Blockchain
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course focuses on functional part and the role of Blockchain applications architecture. It covers the Blockchain functions such as data store, computational elements, communication mechanisms. It also deals with managing assets, exerting control, as well as the design process of a Blockchain application. Furthermore, the course describes MDE methods for business processes and registries of assets. The course also covers the non-functional aspects of Blockchain applications such as cost estimation, performance, dependability and security.

2. Course Main Objective

The aim of this course presents the technical aspects of Blockchain applications.

Course Objectives:

At the end of the course the students will be able to**:**

- Describe and discuss the architecture of Blockchain applications
- Describe the design process of Blockchain applications

- Evaluate model-driven engineering for Blockchain applications.
- Describe the blockchain patterns.
- Explain the impact of using blockchain applications on the cost, performance, and security of systems.

Evaluate the impact of Blockchain technology on different fields such as agriculture, medical, etc.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe the fundamentals of Blockchain-based applications and their functionality.	K4
1.2	Explain the impact of Blockchain applications on cost, performance, and security of systems.	K4
2	**Skills :**	
2.1	Design applications using Blockchain patterns.	S3, S4
2.2	Analyze the various functions of Blockchain applications.	S4
2.3	Demonstrate effective oral and written communication skills.	S5
2.4	Demonstrate the ability to propose innovative solutions based on Blockchain technology.	S2, S6
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.3	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Architecting Blockchain-Based Applications	6
2	Design Process for Applications on Blockchain	3
3	Blockchain Patterns	6
4	Model-Driven Engineering for Blockchain Applications	4.5
5	Quality impact of using Blockchain: cost	4.5
6	Quality impact of using Blockchain: Performance	4.5
7	Quality impact of using Blockchain: Dependability and Security	4.5
8	Case Study: AgriDigital	4.5
9	Case Study: SecureVote	4.5
10	Case Study: originChain	3
Total		**45**

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.1	Describe the fundamentals of Blockchain-based applications and their functionality.	Lectures Peer teaching Note taking	Exams Quizzes Project/ Case study
1.2	Explain the impact of Blockchain applications on cost, performance, and security of systems.	Lectures Peer teaching Note taking	Exams Quizzes Project/ Case study
2.0	**Skills**		
2.1	Design applications using Blockchain patterns.	Lectures Peer teaching Note taking Case-based learning Group work	Exams Quizzes Project/case study
2.2	Analyze the various functions of Blockchain applications.	Lectures Peer teaching Note taking Case-based learning Group work	Exams Quizzes Project/ Case study
2.3	Demonstrate effective oral and written communication skills.	Group work	Project/ Case study
2.4	Demonstrate the ability to propose innovative solutions based on Blockchain technology.	Group work	Project/ Case study
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Project/ Case study
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Project/ Case study

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2*5)	3rd, 11th	10 %
2	*Deliverable-1 (Group Project Phase-1)	6th	5 %
3	*Deliverable-2 (Group Project Phase-2)	10th	5%
4	Midterm Exam	9th	25 %
5	Group Project/case study	14th	25 %
6	Final Exam	16th	30 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Architecture for Blockchain Applications Xiwei Xu, ngo Weber, Mark Staples 2019 ISBN-13: 978-3030030346 ISBN-10: 3030030342
Essential References Materials	Introduction to blockchain technology, Tiana Laurence, 2019
Electronic Materials	IBM Blockchain (https://www.ibm.com/sa-en/blockchain)
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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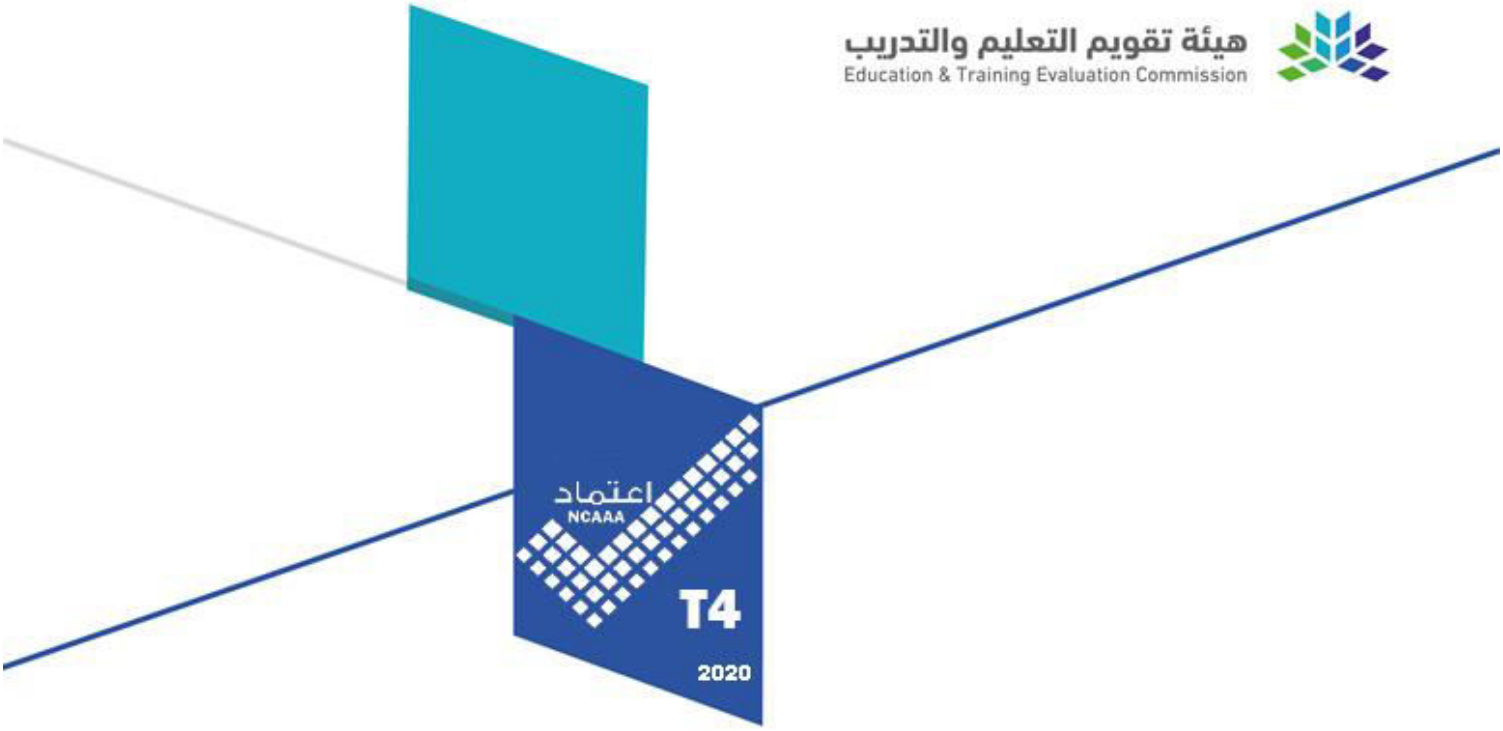
Education & Training Evaluation Commission



Course Specifications

Course Title:	Introduction to Business Analytics
Course Code:	0677307
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3 Hours
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ☐ Elective ■
3. Level/year at which this course is offered: 3rd year/ Level 5
4. Pre-requisites for this course (if any)**:** 0676201 - Statistics for Business
5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course enables the student to gain an understanding of the complete data analytics lifecycle, from problem definition to solution deployment. Various industry-specific examples and case studies are discussed. Particularly, the student learns how data analytics, data visualization, and data science methodologies can be used to drive better business decisions. This course also prepares the students for IBM Course Certification.

2. Course Main Objective

The main purpose of this course is to present the fundamental concepts and principles of Data Analytics.

Course Objectives:
At the end of the course the students will be able to**:**

- Discuss various concepts and principles of Data Analytics
- Deal with different types of data
- Describe the importance of data visualization for decision making

- Propose solutions for business problems using the main concepts of Data Analytics
- Incorporate various Data Analytics elements

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe the Data Analytics life cycle.	K3
1.2	Describe how data analytics, data visualization, and data science methodologies can be used to drive better business decisions.	K3
2	**Skills:**	
2.1	Choose appropriate techniques to deal with different types of data.	S1
2.2	Identify appropriate visualization tools for decision making.	S1
2.3	Demonstrate the ability to incorporate various Data Analytics elements.	S1, S3
2.4	Demonstrate the ability to propose innovative solutions based on Data Analytics concepts.	S6
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Data Analytics Overview	9
2	Dealing with Different Types of Data	9
3	Data Visualization for Decision-making	9
4	Data Science, Data Analytics, and Machine Learning	9
5	Data Science Methodology	9
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe the Data Analytics life cycle.	Lectures Peer teaching Note taking	Exams Quizzes Assignments
1.2	Describe how data analytics, data visualization, and data science methodologies can be used to drive better business decisions.	Lectures Peer teaching Note taking	Exams Quizzes Assignments
2.0	**Skills**		
2.1	Choose appropriate techniques to deal with different types of data.	Case-based learning Group work	Exams Assignments

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
			Group Project
2.2	Identify appropriate visualization tools for decision making.	Case-based learning Group work	Exams Assignments Group Project
2.3	Demonstrate the ability to incorporate various Data Analytics elements.	Group work	Exams Group Project
2.4	Demonstrate the ability to propose innovative solutions based on Data Analytics concepts.	Group work	Exams Group Project
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Group Project
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Group Project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2*5%)	3rd, 10th	10%
2	Report-1 (Homework assignment 1)	4th	5 %
3	Report-1 (Homework assignment 2)	8th	5 %
4	Mid Term Exam	9th	20 %
5	Group Project	14th	20%
6	Final exam	16th	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

4 weekly office hours
College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Essentials of Business Analytics, Jeffrey D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann, David R. Anderson, Dennis J. Sweeney, Thomas A. Williams, 2nd edition, 2016, Cengage Publishing, ISBN: 978-130562734

Essential References Materials	Data Science for Business, Foster Provost and Tom Fawcett, 2nd Edition, O'Reilly Media ISBN: O'Reilly Media
Electronic Materials	Links to the electronic material provided by the instructor.
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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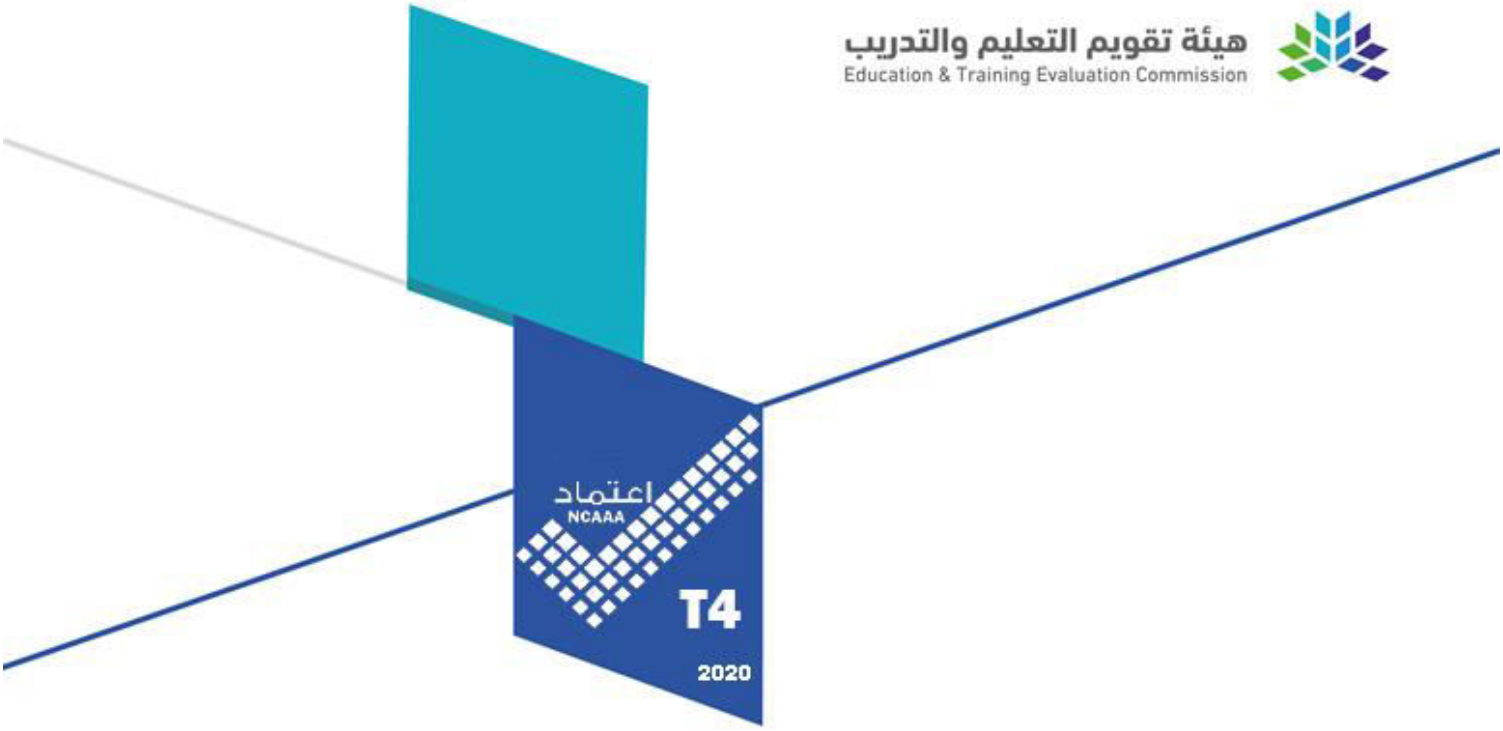
Education & Training Evaluation Commission



Course Specifications

Course Title:	Business Analytics Applications
Course Code:	0677308
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3 Hours
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ☐ Elective ■
3. Level/year at which this course is offered: Level 6/ 3rd year
4. Pre-requisites for this course (if any)**:** 0677307 - Introduction to Business Analytics
5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course introduces the concepts of data understanding, preparation and modeling. Students acquire the knowledge and skills to build a Data Analytics application using appropriate tools such as Google Analytics or Power BI.

2. Course Main Objective

The main purpose of this course is to introduce the students to using data analytics tools to improve decision making.

Course Objectives:
At the end of the course the students will be able to**:**

- Discuss various models of Business Analytics.
- Use various types of Data Analytics tools.
- Incorporate various Data Analytics tools such as Google Analytics into a website.
- Describe the usefulness of Data Analytics applications in different business sectors.
- Describe the latest trends in Data Analytics.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Define the Data Analytics framework.	K3
1.2	Describe Data Analytics applications in different business sectors.	K3
2	**Skills :**	
2.1	Model business problems using Data Analytics techniques.	S1
2.2	Use Data Analytics tools to improve decision making.	S1, S4
2.3	Demonstrate the ability to use the latest trends in Data Analytics applications.	S1, S3
2.4	Demonstrate the ability to propose innovative solutions based on Data Analytics concepts.	S6
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Overview of the Data Analytics Framework	6
2	Introduction to Google Analytics (Part 1)	6
3	Introduction to Google Analytics (Part 2)	6
4	Customizing, configuring and using conversions with Google Analytics (part 3)	6
5	Introduction to Power BI	6
6	Data Analytics Applications in Different Sectors	6
7	Using Data Analytics in the entertainment industry, education and healthcare	4.5
8	Data Analytics latest trends	4.5
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Define the Data Analytics framework.	Lectures Peer teaching Note taking	Exams Quizzes Assignments
1.2	Describe Data Analytics applications in different business sectors.	Lectures Peer teaching Note taking	Exams Quizzes Assignments
2.0	**Skills**		
2.1	Model business problems using Data Analytics techniques.	Case-based learning Group work	Exams Assignments Group Project
2.2	Use Data Analytics tools to improve decision making.	Case-based learning Group work	Exams Assignments Group Project
2.3	Demonstrate the ability to use the latest trends in Data Analytics applications.	Group work	Exams Group Project
2.4	Demonstrate the ability to propose innovative solutions based on Data Analytics concepts.	Group work	Exams Group Project
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Group Project
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Group Project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2*5%)	3rd, 10th	10%
2	Report-1 (Homework assignment 1)	4th	5 %
3	Report-1 (Homework assignment 2)	8th	5 %
4	Mid Term Exam	9th	20 %
5	Group Project	14th	20%
6	Final exam	16th	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	• Google analytics breakthrough: from zero to business impact Alhlou, Feras**,** John Wiley & Sons, Inc, 2016, **ISBN-13:** 978-1119144014 **ISBN-10:** 1119144019 • Learn Power BI : A Beginner's Guide to Developing Interactive Business Intelligence Solutions Using Microsoft Power BI. Deckler, Greg, Packt Publishing, Limited, 2019 ISBN: 978-1838644482
Essential References Materials	Google Analytics Academy Web site https://analytics.google.com/analytics/academy/course/6
Electronic Materials	None
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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Education & Training Evaluation Commission

اعتماد NCAAA T4 2020

Course Specifications

Course Title:	Global Information Systems
Course Code:	0677309
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ☐ Elective ■
3. Level/year at which this course is offered: Level 6 / 3rd year or Level 7 / 4th year
4. Pre-requisites for this course (if any)**:** 0677201- Management Information Systems
5. Co-requisites for this course (if any)**:**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course introduces the student to global information systems along with the managerial issues pertaining to their development. The emphasis is placed upon the interaction of many technological, political, and cultural issues and on how advances in information technology might change the business conduct in the future.

2. Course Main Objective

The main purpose of this course is to provide the students with the fundamentals concepts of global information systems.

Course objectives:

At the end of this course, students will be able to:

- Identify and understand the issues surrounding global information systems.
- Appreciate the notion of information as a critical corporate resource
- Understand today's leading-edge information technologies around the world
- Understand how information and technology can be used to deliver distinctive organizational competencies and competitive advantages in the global market
- Analyze international business issues.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe fundamental concepts related to global information systems	K2
1.2	Describe the global organizational strategies pertaining to information systems	K2
2	**Skills :**	
2.1	Ability to define business strategies for organizations working in a global setting	S2
2.2	Ability to anticipate the strategic use of information resources in the context of a global business.	S2
2.3	Demonstrate effective oral and written communication skills.	S5
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to Global Information Systems	6
2	Strategic Use of Information Resources	9
3	Organizational Strategy and Information Systems	9
4	Governance of the Information Systems Organization	6
5	Information Systems Sourcing	6
6	Privacy and Ethical Considerations in Global Information Management	9
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe fundamental concepts related to global information systems.	Lectures	Exams Quizzes Assignments
1.2	Describe the global organizational strategies pertaining to information systems.	Lectures	Exams Quizzes Assignments
2.0	**Skills**		
2.1	Ability to define business strategies for	Case-based learning	Exams

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	organizations working in a global setting.	Group work	Assignments Project
2.2	Ability to anticipate the strategic use of information resources in the context of a global business.	Case-based learning Group work	Exams Assignments Project
2.3	Demonstrate effective oral and written communication skills.	Group work	Project
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz * 2	3rd, 9th	10%
2	Report -1: (Assignment 1)	4th	5 %
3	Mid Term Exam	7th	20 %
4	Report -2: (Assignment 2)	10th	5 %
5	Project	13th	20 %
6	Final Exam	End of semester	40 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours and by appointment

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Managing and Using Information Systems: A Strategic Approach, Author(s): Keri E. Pearlson; Carol S. Saunders, Publisher: Wiley, 7th edition, Year: 2019, ISBN-13: 978-1119560562
Essential References Materials	None
Electronic Materials	None
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

Course Specifications

Course Title:	Business Intelligence
Course Code:	0677310
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours:	**3**
2. Course type	
a.	University ☐ College ☐ Department ■ Others ☐
b.	Required ☐ Elective ■
3. Level/year at which this course is offered:	Level 5 / 3rd year OR Level 6 / 3rd year OR Level 7 / 4th year
4. Pre-requisites for this course (if any)**:**	0677201 – Management Information Systems
5. Co-requisites for this course (if any)**:**	

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course focuses on the applications of business intelligence and data mining techniques to support the decision-making process of modern enterprises. Critical to the success of BI systems is the use of data warehouses and data mining. Coverage includes the roles of business intelligence and data mining, design and development of enterprise data warehouse, and the multidimensionality in business intelligence. The course covers topics related to data mining process, usage of artificial intelligence techniques in data mining (artificial neural networks) and other advanced intelligent systems such as machine learning and genetic algorithm.

2. Course Main Objective

The purpose of this course is to introduce the concepts of Business Intelligence (BI) and make the students achieve a profound understanding and applying of BI systems in terms of its

tools, current practices and impacts.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding:**	
1.1	Describe the fundamentals of business intelligence technologies.	K2
1.2	Describe fundamental concepts and technologies related to data mining, data warehousing, and intelligent systems.	K2
1.3	Explain the role of Business Intelligence (BI) in supporting modern enterprises.	K4
2	**Skills:**	
2.1	Ability to identify appropriate business intelligence tools for decision making.	S4
2.2	Demonstrate effective oral and written communication skills.	S5
2.3	Demonstrate the ability to propose innovative solutions based on business intelligence techniques.	S6
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	The Essentials of Business Intelligence	6
2	Data Warehousing	7.5
3	Data Mining for Business Intelligence	7.5
4	Text and Web Mining	9
5	Artificial Neural Networks for Data Mining	9
6	Advanced Intelligent Systems	6
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe the fundamentals of business intelligence technologies.	Lectures Peer teaching Note taking	Exams Quizzes
1.2	Describe fundamental concepts and technologies related to data mining, data warehousing, and intelligent systems.	Lectures Peer teaching Note taking	Exams Quizzes
1.3	Explain the role of Business Intelligence (BI) in supporting modern enterprises.	Lectures Peer teaching Note taking	Exams Quizzes

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
2.0	**Skills**		
2.1	Ability to identify appropriate business intelligence tools for decision making.	Case-based learning Group work	Group project/ Case study
2.2	Demonstrate effective time management, leadership and organization skills while working with individuals, teams, and large groups.	Group work	Group project/ Case study
2.3	Demonstrate effective oral and written communication skills.	Assignments Group work	Group project/ Case study
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Group project/ Case study
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Group Project/Case study

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2*5%)	5th,10th	10%
2	Report-1 (Homework assignment 1)	4th	5%
3	Report-1 (Homework assignment 2)	8th	5%
4	Midterm Exam	9th	20%
5	Group Project	14th	20%
6	Final exam	16th	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours
College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Business Intelligence and Analytics- Systems for Decision Support Ramesh Sharda, Dursun Delen, Efraim Turban, Global Edition, 10/E 2014, Pearson ISBN-13: 978-0133050905 ISBN-10: 0133050904

Essential References Materials	• The Microsoft Data Warehouse Toolkit: With SQL Server 2008 R2 and the Microsoft Business Intelligence Toolset, 2nd edition, by Joy Mundy, Warren Thornthwaite, Ralph Kimball, published by Wiley publishing, Inc. Pub. Date: March 2011 • Modern Data Warehousing, Mining, and Visualization by George M. Marakas; Prentice Hall-2003. • Business Intelligence for the Enterprise by Mike Biere, IBM Press, 2003.
Electronic Materials	N/A
Other Learning Materials	N/A

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture room with multimedia facility
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	N/A

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

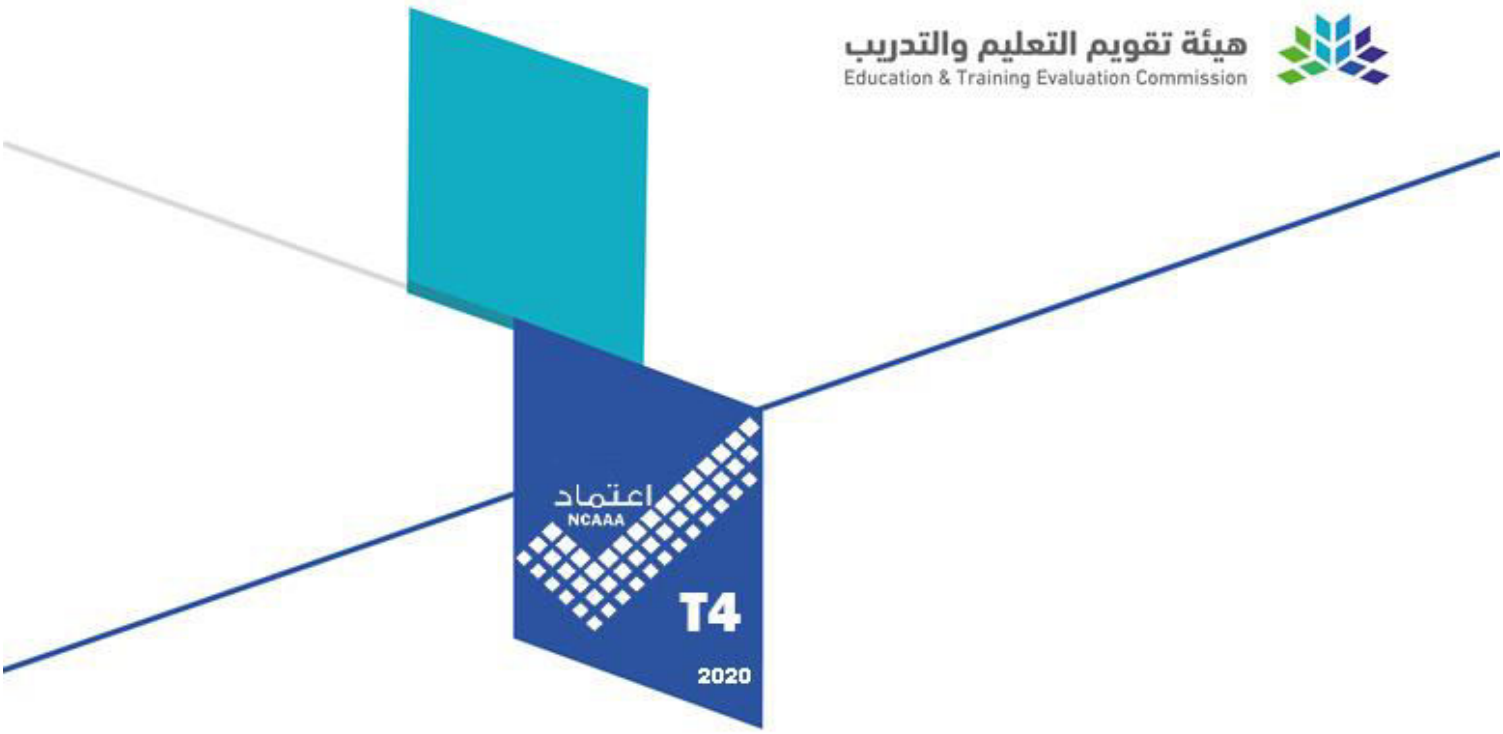
Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL

Reference No.	5
Date	29-10-2020

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission



Course Specifications

Course Title:	Business Process Reengineering
Course Code:	0677311
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours:
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ☐ Elective ■
3. Level/year at which this course is offered: Level 6 / 3rd year or Level 7 / 4th year
4. Pre-requisites for this course (if any)**:** 0677207- Integrated Enterprise Systems
5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course examines the major aspects of developing, analyzing, improving, and managing business processes. The focus is on processes, as opposed to functions. Virtually all businesses are made up of a series of sequential and/or parallel business processes, many of which cut across functional and organizational boundaries. The ability to understand, design, and manage these complex processes is a critical skill. Topics include Business Processes, Business Process Lifecycle, Evolution of Enterprise Systems Architectures, Business Process Modeling and Business Process Management Architecture

2. Course Main Objective:

The purpose of this course is to introduce the concept and methodologies of business process improvement and reengineering and discuss the current business process improvement standards.

3. Course Learning Outcomes

CLOs	Aligned PLOs

CLOs		Aligned-PLOs
1	**Knowledge and Understanding**	
1.1	Define metrics used to measure the current and reengineered processes	K1
1.2	Record process related data such as Process boundary, inputs and outputs, and main activities.	K2
2	**Skills:**	
2.1	Explain the difference between various process improvement and management techniques (such as TQM, BPR, Six Sigma, and etc.).	S1
2.2	Evaluate the improvement potential as a result of reengineering a process	S2
2.3	Demonstrate effective oral and written communication skills.	S5
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to Business Processes	9
2	Business Architecture	9
3	Modeling Business Processes	9
4	Human Performance Analysis	9
5	Business Process Management Notation -2	9
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Define metrics used to measure the current and reengineered processes.	Lectures Peer teaching Note taking	Exams Quizzes Assignments
1.2	Record process related data (Process boundary, inputs and outputs; main activities; business rules and decision points; activity/process owners; applications and technology infrastructure).	Lectures Peer teaching Note taking	Exams Quizzes Assignments
2.0	**Skills**		
2.1	Explain the difference between various process improvement and management techniques (such as TQM, BPR, Six Sigma, and etc.).	Case-based learning Group work	Exams Group project
2.2	Evaluate the improvement potential as a result of reengineering a process	Case-based learning Group work	Exams Group projects

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
2.3	Demonstrate effective oral and written communication skills.	Group work	Group projects
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Group projects

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz * 2	3rd, 9th	10%
2	Report -1: (Assignment 1)	4th	5 %
3	Mid Term Exam	7th	20 %
4	Report -2: (Assignment 2)	10th	5 %
5	Project	13th	20 %
6	Final Exam	End of semester	40 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

Students in need of academic accommodations may consult the faculty during office hours and are required to give reasonable notice prior to requesting an accommodation.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Business Process Management: Concepts, Languages, Architectures 3rd Edition (2019), by Mathias Weske ISBN-13: 978-3662594315 ISBN-10: 3662594315
Essential References Materials	Mathias Weske, Business Process Management: Concepts, L Languages, Architectures 2nd ed. 2012, Hardcover ISBN 978-3-642-28615-5.
Electronic Materials	None
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture room with multimedia facility

Item	Resources
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Smart Board Laptop
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد NCAAA T4 2020

Course Specifications

Course Title:	Principles of Information Retrieval
Course Code:	0677312
Program:	Management Information System
Department:	Management Information System
College:	School of Business
Institution:	King Feisal University

Table of Contents

A. Course Identification

1. Credit hours: 3 hours
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ☐ Elective ■
3. Level/year at which this course is offered:
4. Pre-requisites for this course (if any)**:** 0677206- Enterprise Data Management
5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course introduces the students to the methods used in the search for and discovery of information in digital libraries and web information systems. Methods covered include Boolean retrieval techniques, index construction, vector space model, evaluation of information retrieval systems and relevance feedback.

2. Course Main Objective

At the end of this course, students will be able to:

- Apply IR principles to locate relevant information in large collections of data
- Explain the basic concept and processes of information retrieval systems.
- Describe the common algorithms and techniques for document indexing and retrieval, query processing, etc.
- Explain How the IR systems are evaluated.
- Describe the well-known probabilistic retrieval methods and ranking principle.
- Explain the meaning(s) and role(s) of information and human information interaction.
- Develop an understanding of information retrieval principles and systems.

- Use the techniques and algorithms existing in practical IR systems such as those in web search engines and the Amazon book/ Last.FM recommender systems.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Explain the basic concept and processes of information retrieval systems.	K1
1.2	Explain how the IR systems are evaluated.	K2
1.3	Describe the common algorithms and techniques for document indexing and retrieval, and query processing.	K4
1.4	Describe the well-known probabilistic retrieval methods and ranking principle.	K2
2	**Skills:**	
2.1	Ability to apply IR principles to locate relevant information in large collections of data	S1
2.2	Ability to use the techniques and algorithms existing in practical IR systems.	S3
2.3	Demonstrate strong oral and written communication skills.	S5
3	**Values:**	
3.1	Demonstrate time management and organization skills while working with individuals, teams, and large groups	V1

C. Course Content

No	List of Topics	Contact Hours
1	Boolean retrieval Techniques	4.5
2	The term vocabulary and postings lists	4.5
3	Index construction	4.5
4	Scoring, term weighting and the vector space model	4.5
5	Evaluation in information retrieval	9
6	Relevance feedback and query expansion	9
7	XML retrieval	4.5
8	Language models for information retrieval	4.5
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Explain the basic concept and processes of information retrieval systems.	Lectures Peer teaching Note taking	Exams Quizzes Assignments
1.2	Explain how the IR systems are evaluated.	Lectures Peer teaching Note taking	Exams Quizzes Assignments

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.3	Describe the common algorithms and techniques for document indexing and retrieval, and query processing.	Lectures Peer teaching Note taking	Exams Quizzes Assignments
1.4	Describe the well-known probabilistic retrieval methods and ranking principle.	Lectures Peer teaching Note taking	Exams Quizzes Assignments
2.0	**Skills**		
2.1	Ability to apply IR principles to locate relevant information in large collections of data	Case-based learning Group work	Exams Group project
2.2	Ability to use the techniques and algorithms existing in practical IR systems.	Case-based learning Group work	Exams Group project
2.3	Demonstrate strong oral and written communication skills.	Group work	Group project
3.0	**Values**		
3.1	Demonstrate time management and organization skills while working with individuals, teams, and large groups	Group work	Group project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz * 2	3rd, 9th	10%
2	Report -1: (Assignment 1)	4t	5 %
3	Mid Term Exam	7th	20 %
4	Report -2: (Assignment 2)	10	5 %
5	Project	13th	20 %
6	Final Exam	End of semester	40 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours

College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	C. D. Manning, P. Raghavan and H. Schütze: Introduction to Information Retrieval, 5th, 2012, Cambridge University Press; ISBN: 9781107666399

Essential References Materials	1. Modern Information Retrieval, Ricardo Baeza-Yates and Berthier Ribeiro-Neto, Addison-Wesley, 2000. 2. Managing Gigabytes (2nd Ed.) Ian H. Witten, Alistair Moffat and Timothy C. Bell. (1999), Morgan Kaufmann, San Francisco, California. 3. Pattern Recognition and Machine Learning, Christopher M. Bishop, Springer (2006). 4. International Journal of Multimedia Information Retrieval, Springer Publisher International Journal of Information Retrieval Research (IJIRR)
Electronic Materials	None
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (.etc ,demonstration rooms/labs ,laboratories ,(Classrooms	Lecture rooms
Technology Resources (.etc ,software ,Smart Board ,data show ,AV)	Data show Laptop Internet access
Other Resources ,if specific laboratory equipment is required .e.g ,(Specify list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

Course Specifications

Course Title:	Decision Support Systems
Course Code:	0677313
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours:	**3 hours**
2. Course type	
a.	University ☐ College ☐ Department ■ Others ☐
b.	Required ☐ Elective ■
3. Level/year at which this course is offered:	Level 5 / 3rd Year OR Level 6 / 3rd Year OR Level 7 / 4th Year
4. Pre-requisites for this course (if any)**:**	0677201 - Management Information Systems
5. Co-requisites for this course (if any)**: None**	

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	3	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course covers topics relating to decision support systems (DSS) concepts and technical and managerial issues associated with the development and use of decision support systems, expert systems, Business Intelligence systems. It focuses on decision theory, model management, and intelligent. The Knowledge-based expert systems part of the course focuses on knowledge acquisition, representation, reasoning, management of uncertainty, and using advanced intelligent systems over the web. In addition, coverage includes decision-making framework and Artificial Intelligence applications.

2. Course Main Objective

The purpose of this course is to provide students with the fundamental knowledge of decision support systems for managers and information system developers.

Course objectives:

At the end of this course, students will be able to:

- Articulate the role of decision support systems and expert systems in modern organizations.
- Apply decision theory and other management science techniques to analyze problems
- Formulate and use analytical models for organizational problem solving
- Describe the decision-making process and how it can be enhanced by information, and by mathematical models
- Design and develop decision support systems and expert systems
- Describe and know when to use the various methods of inference, and conduct manual backward and forward chaining inferences

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe the fundamental concepts of decision-making process and decision support systems.	K1
1.2	State essential phenomena such as sensitivity analysis, what-if analysis, modeling process, inference, reasoning, and knowledge representation.	K2
2	**Skills:**	
2.1	Compare decision support systems and expert systems.	S1
2.2	Explain decision theory, analytical models and other management science techniques to analyze problems.	S1, S2
2.3	Demonstrate written and oral communication skills.	S5
3	**Values:**	
3.1	Demonstrate effective communication, time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	An Overview of Business Intelligence, Analytics, and Decision Support	6
2	Foundations and Technologies for Decision Making	6
3	Data Warehousing	6
4	Business Reporting, Visual Analytics, and Business Performance Management	6
5	Model-Based Decision Making: Optimization and Multi-Criteria Systems	4.5
6	Modelling and Analysis: Heuristic Search Methods and Simulation	4.5
7	Automated Decision Systems and Expert Systems	6
8	Knowledge Management and Collaborative Systems	6
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe the fundamental concepts of decision-making process and decision support systems.	Lectures Peer teaching Note taking Work-along exercises Concept maps	Exams Quizzes Work-along exercises
1.2	State essential phenomena such as sensitivity analysis, what-if analysis, modeling process, inference, reasoning, and knowledge representation.	Lectures Peer teaching Note taking Work-along exercises Concept maps	Exams Quizzes Work-along exercises
2.0	**Skills**		
2.1	Compare decision support systems and expert systems.	Lectures Peer teaching Note taking Work-along exercises Case-based learning Group work	Exams Quizzes Case study
2.2	Explain decision theory, analytical models and other management science techniques to analyze problems.	Lectures Peer teaching Note taking Work-along exercises Case-based learning Group work	Exams Quizzes Case study
2.3	Demonstrate written and oral communication skills.	Lectures Peer teaching Note taking Work-along exercises Case-based learning Group work	Exams Quizzes Case study Group Project
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups	Group work	Group project
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Group Project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz * 2	3rd, 9th	10%
2	Report -1: (Assignment 1)	4th	5%
3	Mid Term Exam	7th	20%
4	Report -2: (Assignment 2)	10th	5%
5	Project	13th	20%
6	Final Exam	End of the semester	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

4 weekly office hours.
College academic advising.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Business Intelligence and Analytics- Systems for Decision Support Ramesh Sharda, Dursun Delen, Efraim Turban, Global Edition, 10_E 2014 Pearson ISBN-13: 978-0133050905 ISBN-10: 0133050904
Essential References Materials	1. Decision Support and Business Intelligence Systems by Turban, Sharda, and Delen; 9th edition. Pearson Prentice Hall-2010 2. Decision Support Systems and intelligent Systems, Efraim Turban, Jay E Aronson, Ting-Peng Liang, Ninth Edition, Prentice Hall, 2010. 3. International Journal of Decision Support Systems (IJDSS), INDERSCIENCE Publisher 4. Decision Support Systems Journal, Elsevier Publisher 5. P. Daniel, Decision Support Systems: Concepts and Resources for Managers
Electronic Materials	N/A
Other Learning Materials	N/A

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop

Item	Resources
	Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	N/A

G. Course Quality Evaluation

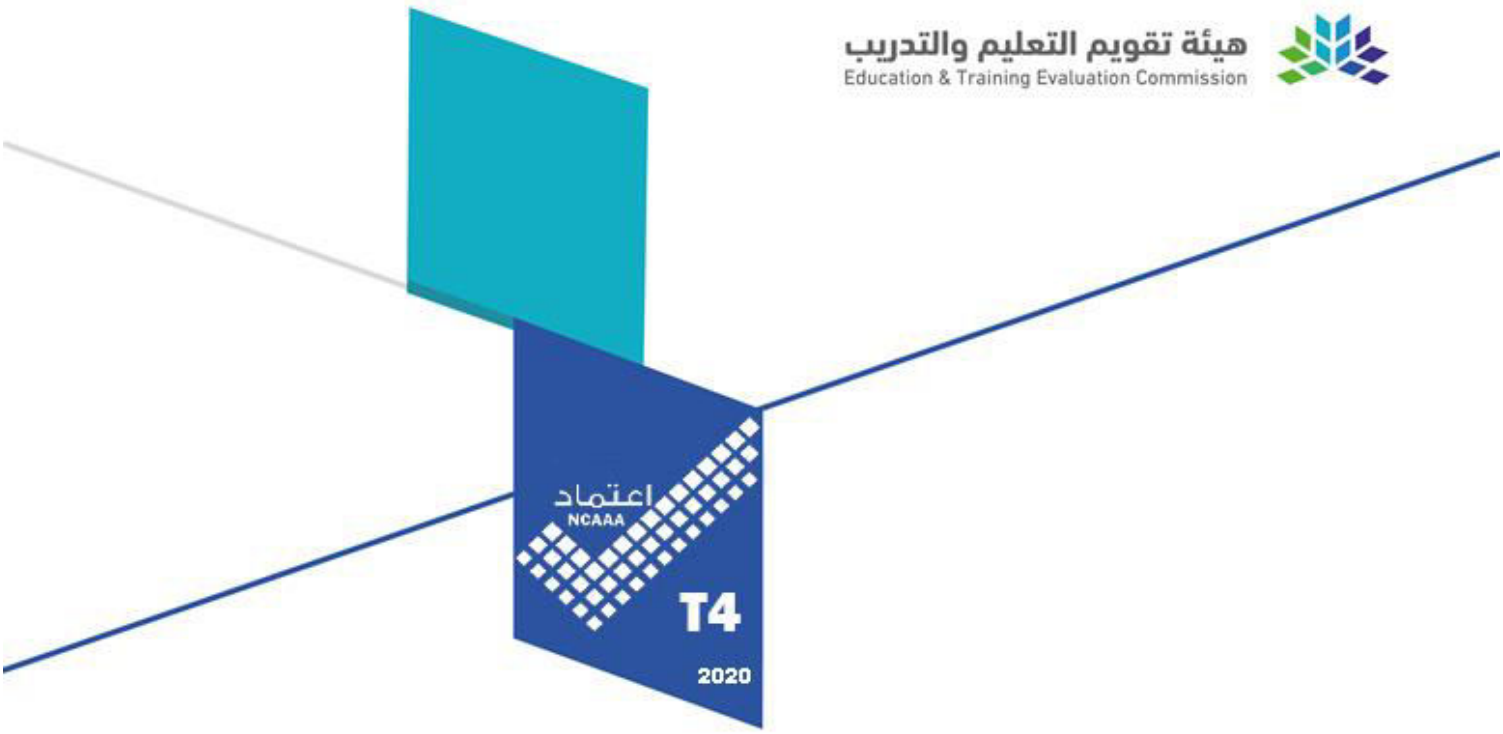
Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission



Course Specifications

Course Title:	Data Communication and Networks
Course Code:	0677314
Program:	Management Information Systems
Department:	Management Information Systems
College:	Business Administration
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours:	**3**
2. Course type	
a.	University ☐ College ☐ Department ■ Others ☐
b.	Required ☐ Elective ■
3. Level/year at which this course is offered:	Level 5 / 3rd Year OR Level 6 / 3rd Year OR Level 7 / 4th Year
4. Pre-requisites for this course (if any)**:**	0677201 - Management Information Systems
5. Co-requisites for this course (if any)**:**	None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course aims to provide the student with the fundamentals of data communications, distributed applications, network management and security as they relate to the business environment, business management and staff. It provides up-to-date coverage of key issues for businesses such as, high-speed networks, mobile networking and TCP/IP technologies from a business perspective.

2. Course Main Objective

The purpose of this course is the expose the students with the principles of data communications and networking. Also, to give the students insights into the design and evaluation method of computer networks using current trend in hardware and software.

Course objective:

At the end of the course the students will be able to:

- Recall layered network models with specific emphasis on the internet (TCP/IP) model

in the context of the business environments.

- Recall the major types of networks in business: LANs, WANs, intranets and extranets.
- Describe network components and be aware of key trends in networking.
- Analyze the benefits and limitation of the current technologies and choose among them the most suitable for the business environment.
- Identify potential network security issues in the business workplace.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe fundamental concepts of networking and its related terminologies namely: LAN design, common WAN configurations, wireless networks, and data networks security.	K2
1.2	Recall layered network models with specific emphasis on the internet (TCP/IP) model in the context of the business environments.	K2
2	**Skills:**	
2.1	Explain the procedures to install and troubleshoot basic hardware and software required to communicate in a simple network and optimize the network design.	S1
2.2	Plan a scheme for IP addressing, and the operation of NAT in a LAN configuration.	S1
2.3	Demonstrate written and oral communication skills.	S5
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Networking: How We Got Here	3
2	Network Standards	3
3	Network Security	6
4	Network Management	6
5	Physical Layer Propagation	3
6	Switched Wired Networks	3
7	Wireless Networks I	6
8	Wireless Networks II	6
9	TCP/IP Internetworking	4.5
10	Internetworking II	4.5
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe fundamental concepts of networking and its related terminologies namely: LAN design, common WAN configurations, wireless networks, and data networks security.	Lectures Peer teaching Note taking Work-along exercises Concept maps	Exams Quizzes Work-along exercises
1.2	Recall layered network models with specific emphasis on the internet (TCP/IP) model in the context of the business environments.	Lectures Peer teaching Note taking Work-along exercises Concept maps	Exams Quizzes Work-along exercises
2.0	**Skills:**		
2.1	Explain the procedures to install and troubleshoot basic hardware and software required to communicate in a simple network and optimize the network design.	Case-based learning Group work	Group project
2.2	Plan a scheme for IP addressing, and the operation of NAT in a LAN configuration.	Case-based learning Group work	Group project
2.3	Demonstrate written and oral communication skills.	Case-based learning Group work	Group project
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group project	Group project
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group project	Group project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz * 2	3rd, 9th	10%
2	Report -1: (Assignment 1)	4th	5%
3	Mid Term Exam	7th	20%
4	Report -2: (Assignment 2)	10th	5%
5	Project	13th	20%
6	Final Exam	End of semester	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student

consultations and academic advice: Students in need of academic accommodations may consult the faculty during office hours and are required to give reasonable notice prior to requesting an accommodation.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Business Data Networks and Security. Raymond R. Panko and Julia L. Panko 11th Edition, 2018 Pearson Prentice Hall ISBN-13: 978-0134817125 ISBN-10: 0134817125
Essential References Materials	1. FitzGerald, J., Business Data Communications and Networking, 11th edition, 2011, John Wiley, ISBN 978-1-1180-8683-4 2. Forouzan, Data Communications and Networking", 4th Edition, 2006, Mcgraw- Hall, ISBN 0073250325 3. International Journal of Business Data Communications and Networking (IJBDCN), IGI Global Publisher 4. International Journal of Communication Networks and Distributed Systems (IJCNDS), INDERSCINCE Publisher 5. International Journal of Sensor Networks and Data Communications
Electronic Materials	http://networking-academy.net/
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture room with multimedia facility
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey

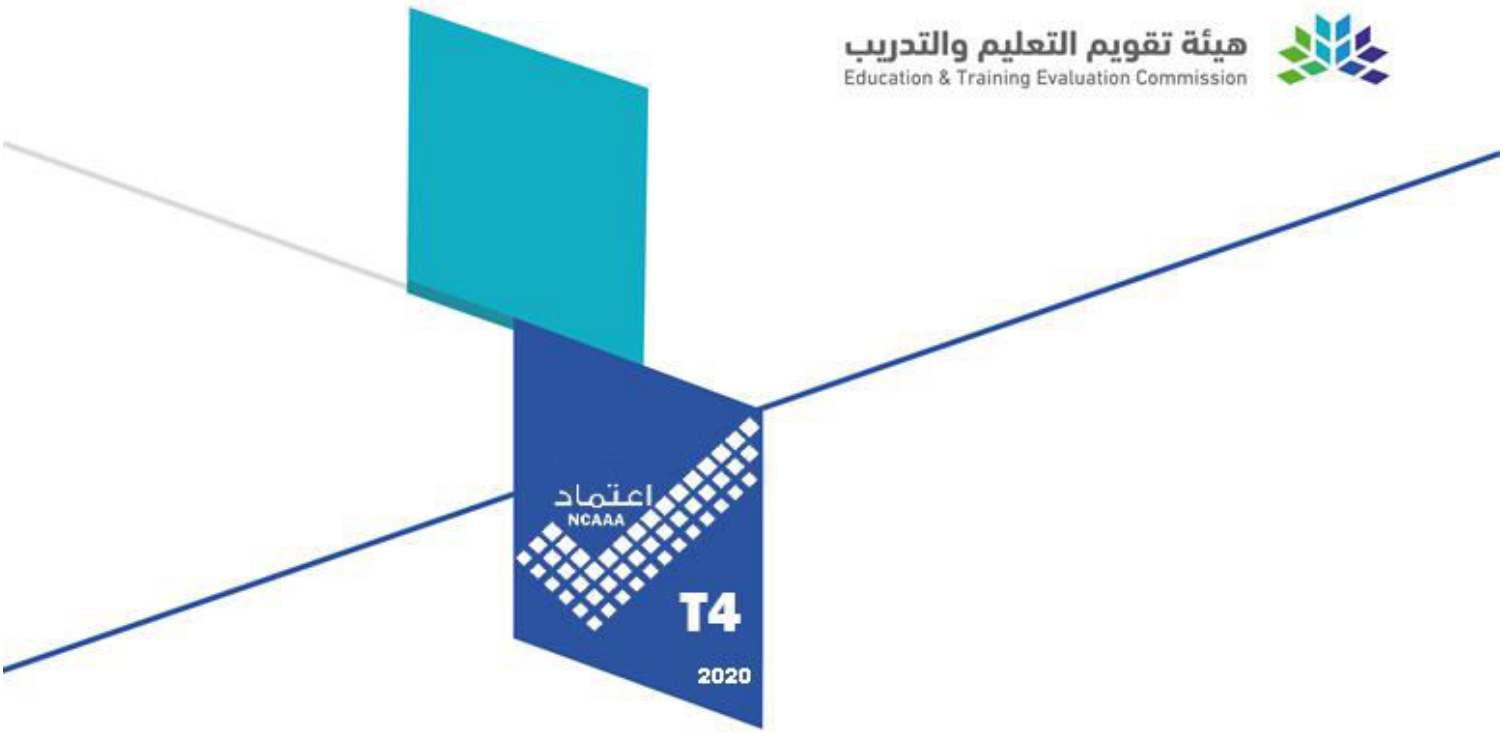
Evaluation Areas/Issues	Evaluators	Evaluation Methods
		(QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission



Course Specifications

Course Title:	Selected Topics in Information System
Course Code:	0677401
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3 Hours
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 7 / 4th year
4. Pre-requisites for this course (if any)**:** 0677301 – Advanced Business Programming
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

The course provides the students with an insight into emerging technologies and recent issues from diverse areas related to management information system. The course may cover topics such as distributed and mobile computing, big data and information modeling, cloud computing, and cyber security.

2. Course Main Objective

The main objective of the course is to present the recent problems, developments, contemporary practices and solutions in the field of information systems.
At the end of the course the students will be able to**:**

- Recognize recent approaches and methods in the field of information system development.
- Identify the issues in the practice and application of information systems in various domains.
- Conduct independent research in contemporary topics in information system

development and applications.
- Write a review article on current and recent of information system topics.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Explain the importance of the emerging technologies.	K4
1.2	Describe the recent problems in the field and various approaches to deal with them.	K4
2	**Skills :**	
2.1	Ability to adopt emerging technology approaches in different application domains.	S1
2.2	Ability to evaluate the effectiveness of emerging technologies for various business scenarios.	S4
2.3	Ability to propose innovative solutions based on emerging technologies.	S2, S6
2.4	Demonstrate effective oral and written communication skills.	S5
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Topics are to be determined by the course instructor with the approval of department council.	45
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Explain the importance of the	TBD	TBD

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	emerging technologies.		
1.2	Describe the recent problems in the field and various approaches to deal with them.	TBD	TBD
2.0	**Skills**		
2.1	Ability to adopt emerging technology approaches in different application domains.	TBD	TBD
2.2	Ability to evaluate the effectiveness of emerging technologies for various business scenarios.	TBD	TBD
2.3	Ability to propose innovative solutions based on emerging technologies.	TBD	TBD
2.4	Demonstrate effective oral and written communication skills.	TBD	TBD
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	TBD	TBD
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	TBD	TBD

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	TBD	TBD	TBD

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours
College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	No required book. The specific content related to the selected topics is to be determined by the course instructor.

Essential References Materials	Google Scholar, ACM Digital Library, IEEE Computer Society, Web of Science, DBLP, Inspec, CompendexInternational Journal of Intelligent Information and Database Systems (IJIIDS).
Electronic Materials	N/A
Other Learning Materials	N/A

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	N/A

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد NCAAA T4 2020

Course Specifications

Course Title:	Management Information Systems Ethics
Course Code:	0677402
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 5/ Year 3
4. Pre-requisites for this course (if any)**:** 0677201 - Management Information Systems
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course is intended to give students a chance to reflect on the social, and professional impact of computer technology by focusing on ethical issues faced by and brought about by computing professionals, including those related to networking and the internet, intellectual property, privacy, security, reliability, and liability.

2. Course Main Objective

The course presents the ethical issues involved in the development and use of information systems.

Course objectives:

At the end of the course the students will be able to**:**

- Identify the ethical issues surrounding computers, their causes, and those moral rules which may have been compromised in a given context.
- Select a solution and work through the situation to determine what to do in ethical

decision making.

- Develop a sense of moral responsibility in professional practice.

Describe professional ethics related to technical material use.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding:**	
1.1	Describe the necessity of protecting intellectual property in terms of technological innovation.	K1
1.2	Define ethical practices related to information technology.	K1
2	**Skills:**	
2.1	Evaluate the consequences of Internet regulations.	S1
2.2	Explain issues concerning liability exposures for the information technology professional and how these problems can be mitigated.	S1
2.3	Demonstrate effective oral and written communication skills.	S5
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Course outline	1.5
2	An Overview of Ethics.	4.5
3	Ethics for IT Workers and IT Users.	4.5
4	Computer and Internet Crime.	6
5	Privacy.	3
6	Freedom of Expression	3
7	Intellectual Property.	4.5
8	Software Development.	6
9	The Impact of Information Technology on Productivity and Quality of Life.	3
10	Social Networking.	4.5
11	Ethics of IT Organizations	4.5
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe the necessity of protecting intellectual property in terms of technological innovation.	Lectures Peer teaching Note taking	Exams Quizzes Assignments

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.2	Define ethical practices related to information technology.	Lectures Peer teaching Note taking	Exams Quizzes Assignments
2.0	**Skills**		
2.1	Evaluate the consequences of Internet regulations.	Case-based learning Group work	Exams Assignments Group projects
2.2	Explain issues concerning liability exposures for the information technology professional and how these problems can be mitigated.	Case-based learning Group work	Exams Assignments Group projects
2.3	Demonstrate effective oral and written communication skills.	Group work	Group projects
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Group projects
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Group projects

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2*5%)	3rd, 8th	10%
2	Report-1 (Homework assignment 1)	4th	5 %
3	Report-2 (Homework assignment 2)	10th	5 %
4	Mid Term Exam	9th	25 %
5	Group Project	14th	15 %
6	Final exam	16th	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:
Students in need of academic accommodations may consult the faculty during office hours and are required to give reasonable notice prior to requesting an accommodation.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Ethics in Information Technology, George Reynolds, Cengage, 6th Edition, (2018), ISBN: 978-1337405874

Essential References Materials	1. Mike Quinn, Ethics for the Information Age, 5/E, 2013, Addison-Wesley, 2. Marsha Cook Woodbury, Computer and Information Ethics, 2nd ed., Champaign, Ill.: Stipes Publishing Company, 2010. 3. Journal of Information, Communication and Ethics in SocietyInternational Journal of Information Ethics (IJIE), IRIE Publisher
Electronic Materials	N/A
Other Learning Materials	N/A

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture room with multimedia facility
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Scientific papers, Wikipedia, and case studies

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL

Reference No.	5
Date	29-10-2020

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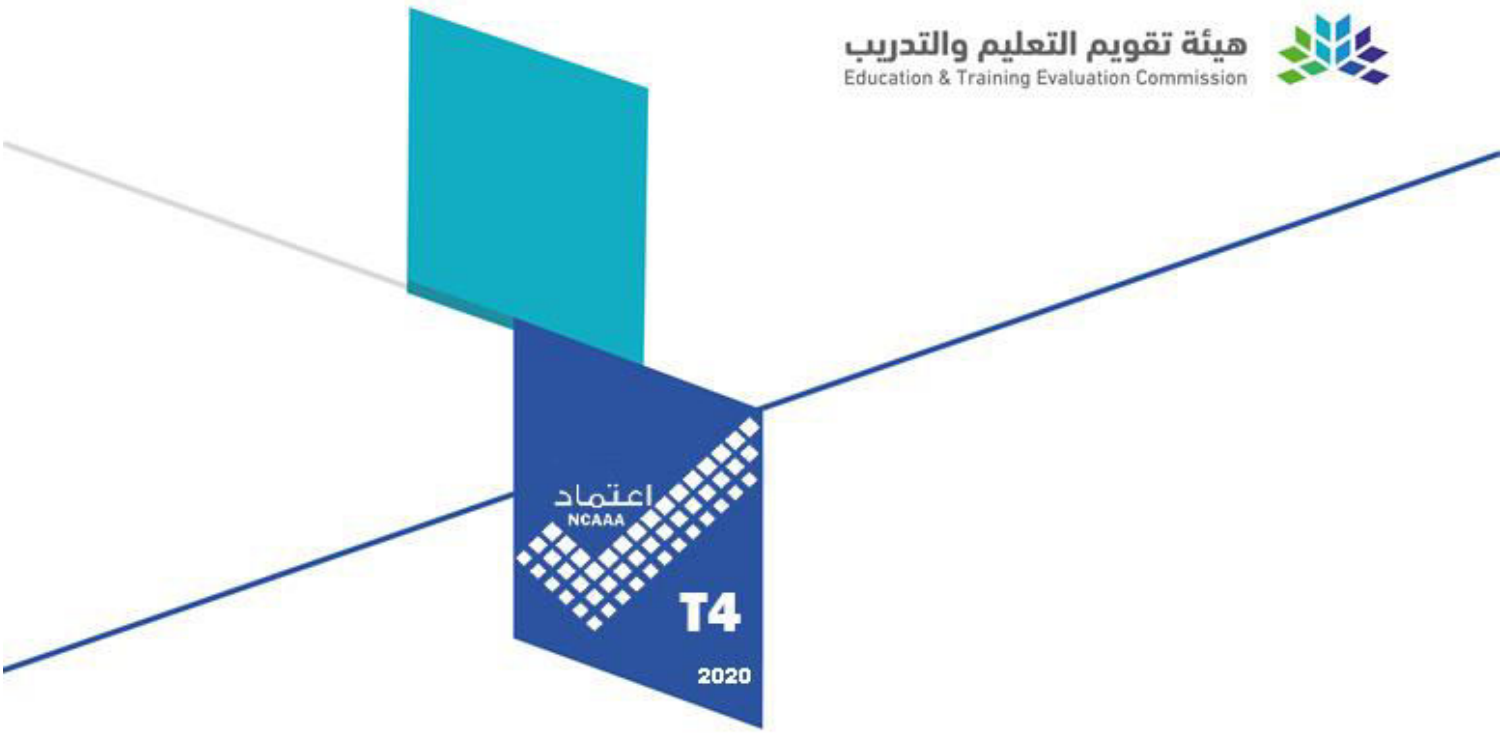
Education & Training Evaluation Commission



Course Specifications

Course Title:	Information Systems Security
Course Code:	0677403
Program:	Management Information Systems
Department:	Management Information Systems
College:	Business Administration
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 7 / Year 4
4. Pre-requisites for this course (if any)**:** 0677201 - Management Information Systems
5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

The objective of this course is to prepare students to be able to identify, assess, respond to, and mitigate threats to fulfill the security needs of a modern enterprise. To this end, we address a wide spectrum of topics including security planning, security architecture, human factors involved in security, policies, technical solutions, risk management, and physical security. In addition, students will have hands-on experience in how to work independently and in teams to deliver effective security solutions.

2. Course Main Objective

At the end of the course students will be able to:

- Explain fundamental concepts of networks and information system security.
- Describe information security polices, strategies and architecture.
- Identify the threats posed to different components of an information system.
- Analyze, select, develop, implement, and maintain the various forms of security technology for safeguarding different components of an information system.

- Identify and describe the categories and operating models of networking security architectures and intrusion detection systems.
- Apply the basic principles of cryptography.
- Plan, execute, and maintain useful information security projects.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe key information systems security concepts, terminologies, and technologies.	K2
1.2	Distinguish between various types of threats and their impact on organizations.	K1
2	**Skills:**	
2.1	Develop and review key elements of an information systems security management program.	S1, S2
2.2	Select, develop, implement, and maintain effective security solutions and controls.	S2, S4
2.3	Demonstrate the ability to work productively in a security program.	S1
2.4	Demonstrate effective oral and written communication skills.	S5
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Network terminologies and concepts	3
2	Introduction to Information Security	3
3	The Need for Security	6
4	Planning for Security	3
5	Risk Management	6
6	Security Technology: Access Controls, Firewalls, and VPNs	6
7	Security Technology: Intrusion Detection and Prevention Systems, and Other Security Tools	6
8	Cryptography	6
9	Physical Security	3
10	Security and Personnel	3
Total		**45**

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.1	Describe key information systems security concepts, terminologies, and technologies.	Lectures, in-class discussion tutorials	Exams Assignments
1.2	Distinguish between various types of threats and their impact on organizations.	Lectures, in-class discussion tutorials	Exams Assignments
2.0	**Skills**		
2.1	Develop and review key elements of an information systems security management program.	Lectures, tutorials, handouts	Exams Assignments Project
2.2	Select, develop, implement, and maintain effective security solutions and controls.	Lectures, tutorials	Exams Assignments Project
2.3	Demonstrate the ability to work productively in a security program.	Group project	Group project
2.4	Demonstrate effective oral and written communication skills.	Group project	Group project
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group project	Group project
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group project	Group project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz * 2	3rd, 9th	10%
2	Report -1: (Assignment 1)	4th	5 %
3	Mid Term Exam	7th	20 %
4	Report -2: (Assignment 2)	10th	5 %
5	Project	13th	20 %
6	Final Exam	End of semester	40 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:
Students in need of academic accommodations may consult the faculty during office hours and are required to give reasonable notice prior to requesting an accommodation.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Principles of Information Security, 7th Edition by Michael E. Whitman and Herbert J. Mattord (2021). ISBN-13: 978-0357506431 ISBN-10: 035750643X
Essential References Materials	ISO/IEC 27001 Standard for Information Security Management Robert E.Crosslera Allen C.Johnston, Paul Benjamin Lowryc, Qing Hud, Merrill Warkentina, and Richard Baskervillee, Future Directions for Behavioral Information Security Research, Computers & Security, Volume 32, February 2013, Pages 90-101.
Electronic Materials	N/A
Other Learning Materials	Self-selected online tutorials related to exercises and project

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture room with multimedia facility
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show, smart board, and blackboard
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	N/A

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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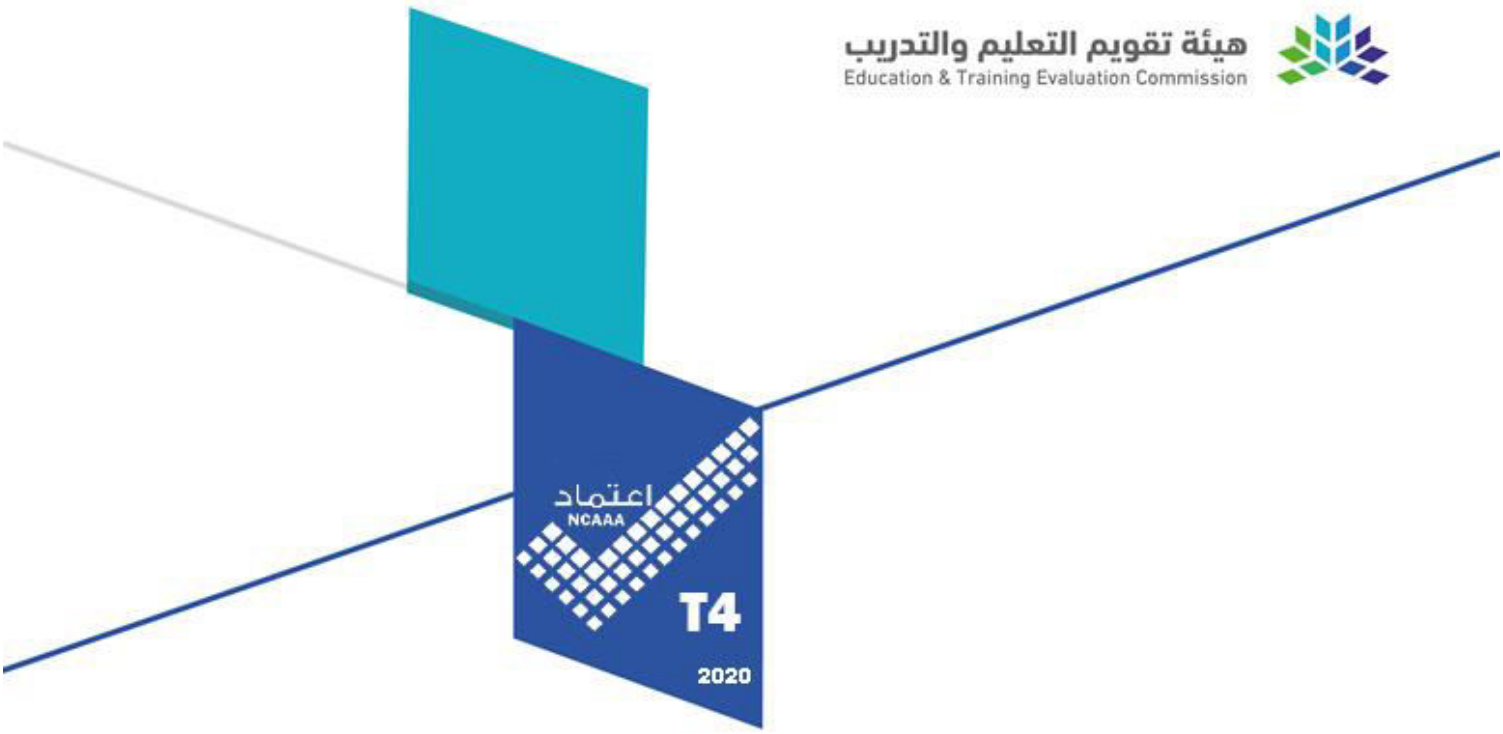
Education & Training Evaluation Commission



Course Specifications

Course Title:	Project - II
Course Code:	0677404
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours:3
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Level 7 / 4th year
4. Pre-requisites for this course (if any)**:** 0677303 - Project-I
5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description:

The purpose this course is to provide students with an opportunity to apply the knowledge they have acquired, their intellectual abilities and practical skills to solve real life business problems. The students are required to carry out a research or a systems development project. This part of the project will comprise the initial activities pertaining to the problem definition and solution design**.**

2. Course Main Objective:

The purpose of this course is to integrate the various components of knowledge, skills, and competencies acquired within the program and provide the students with an opportunity to practice their knowledge

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding:**	

CLOs		Aligned PLOs
1.1	Recognize the economic, social, and environmental issues involved in design and development of business solutions or research.	K1
1.2	Describe the organizational performance/ efficiency issues to be undertaken.	K4
1.3	Describe the activities involved in the system development lifecycle.	K2
1.4	Outline the role of advanced technologies in achieving business objectives.	K3, K4
2	**Skills:**	
2.1	Construct the required parts of a proposed solution.	S1, S2,
2.2	Verify and test a solution for its correctness.	S3, S4
2.3	Demonstrate effective oral and written communication skills.	S5
2.4	Demonstrate innovation in proposing and developing business solutions.	S6
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2
3.3	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	V3

C. Course Content

No	List of Topics	Contact Hours
1	Project supervision during the semester	45
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Recognize the economic, social, and environmental issues involved in design and development of business solutions or research.	Group work	Final report Oral assessment Presentations
1.2	Describe the organizational performance/ efficiency issues to be undertaken.	Group work	Final report Oral assessment Presentations
1.3	Describe the activities involved in the system development lifecycle.	Group work	Final report Oral assessment Presentations
1.4	Outline the role of advanced technologies in achieving business objectives.	Group work	Final report Oral assessment Presentations
2.0	**Skills:**		

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
2.1	Construct the required parts of a proposed solution.	Group work	Final report Oral assessment Presentations
2.2	Verify and test a solution for its correctness.	Group work	Final report Oral assessment Presentations
2.3	Demonstrate effective oral and written communication skills.	Group work	Final report Oral assessment Presentations
2.4	Demonstrate innovation in proposing and developing business solutions.	Group work	Final report Oral assessment Presentations
3.0	**Values:**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Final report Oral assessment Presentations
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Final report Oral assessment Presentations
3.3	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	Group work	Final report Oral assessment Presentations

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Project-II report		75%
2	Presentation and oral examination		25 %
3	Total		100%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

Students in need of academic accommodations may consult the faculty during office hours and are required to give reasonable notice prior to requesting an accommodation.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Systems Analysis and Design, Kendall, K.E., Kendall, J.E. 10th Edition (2018), Prentice-Hall.

	ISBN-13: 978-0134785554 ISBN-10: 013478555X Systems Analysis and Design, Alan Dennis, Barbara Haley Wixom, Roberta M. Roth, 7th Edition (2018), Wiley.
Essential References Materials	N/A
Electronic Materials	N/A
Other Learning Materials	N/A

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture room with multimedia facility
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Smart Board Laptop
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	N/A

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

Course Specifications

Course Title:	Blockchain System Development
Course Code:	0677405
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ☐ Elective ■
3. Level/year at which this course is offered: Level 7 / 4th year
4. Pre-requisites for this course (if any)**:** 0677306 – Introduction to Blockchain Applications
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	15
3	**Tutorial**	
4	**Others** (specify)	
	Total	60

B. Course Objectives and Learning Outcomes

1. Course Description

This course covers the design and implementation aspects of a Blockchain application. The students will be able to create and execute the Blockchain endpoints for different functions using state-of-the-art frameworks. The course also covers how to build a simple user interface to interact with a Blockchain system.

2. Course Main Objective

The aim of this course is to present the implementation aspects of Blockchain technology.

Course Objectives:

At the end of the course the students will be able to:

- Store transactions into blocks
- Add digital fingerprints to the blocks
- Chain the blocks
- Implement a proof-of-work algorithm

- Create interfaces
- Establish consensus and decentralization
- Build and run a Blockchain application

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Explain the different implementation aspects of decentralized Blockchain applications.	K2
1.2	Describe how a transaction is stored in blocks and how to add digital fingerprints to the blocks.	K4
2	**Skills:**	
2.1	Design and develop a Blockchain application.	S4
2.2	Link different applications with a Blockchain systems.	S4
2.3	Demonstrate effective oral and written communication skills.	S5
2.4	Propose innovative solutions to improve the security level and performance of the traditional enterprise systems.	S6
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2
3.3	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	V3

C. Course Content

No	List of Topics	Contact Hours
1	Storing transactions into blocks	3
2	Adding digital fingerprints to the blocks	6
3	Chaining the blocks	6
4	Implementing a proof-of-work algorithm	4.5
5	Adding blocks to the chain	4.5
6	Creating interfaces	4.5
7	Establishing consensus and decentralization	4.5
8	Build and running the Blockchain application	12
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Explain the different implementation aspects of decentralized Blockchain applications.	Lectures Peer teaching Note taking	Presentation and oral examination

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.2	Describe how a transaction is stored in blocks and how to add digital fingerprints to the blocks.	Lectures Peer teaching Note taking	Presentation and oral examination
2.0	**Skills**		
2.1	Design and develop a Blockchain application.	Group work	Final report Presentations
2.2	Link different applications with a Blockchain systems.	Group work	Final report Presentations
2.3	Demonstrate effective oral and written communication skills.	Group work	Final report Presentations
2.4	Propose innovative solutions to improve the security level and performance of the traditional enterprise systems.	Group work	Final report Presentations
3.0	**Values**		
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups.	Group work	Final report Presentations
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Final report Presentations
3.3	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	Group work	Final report Presentations

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Analysis, Design and Implementation	End of semester	75 %
2	Presentation and oral examination	End of semester	25 %

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours
College academic advising

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Instructor handouts

Essential References Materials	Introduction to blockchain technology, Tiana Laurence, 2019 Architecture for Blockchain Applications Xiwei Xu, ngo Weber, Mark Staples 2018 ISBN 978-3-030-03034-6
Electronic Materials	https://developer.ibm.com/technologies/blockchain/tutorials/develop-a-blockchain-application-from-scratch-in-python/ https://developer.ibm.com/technologies/blockchain/articles/from-vision-to-reality-creating-a-successful-blockchain-application
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms, laboratory
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5

Date	29-10-2020

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

Course Specifications

Course Title:	Knowledge Management
Course Code:	0677406
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Course Identification

1. Credit hours: 3
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ☐ Elective ■
3. Level/year at which this course is offered: Level 7 / 4th year
4. Pre-requisites for this course (if any)**:** 0677307 – Introduction to Business Analytics
5. Co-requisites for this course (if any)**:** **None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	45
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

This course introduces the students to knowledge management to fully leverage the intellectual assets of a firm. It covers the tools and techniques for knowledge acquisition, assessment, evaluation, management, organization and dissemination as well as emerging knowledge management systems.

2. Course Main Objective

The main purpose of this course is to introduce the knowledge management models, tools, and development methods.

At the end of the course the students will be able to**:**

- Describe how valuable individual, group, and organizational knowledge is captured, created, codified, shared, accessed, applied, and reused throughout the knowledge management cycle.

- Discuss key knowledge management concepts such as intellectual capital, organizational learning and memory, knowledge taxonomy, and communities of practice using concept analysis.
- Compare and contrast major KM life cycle models.
- Demonstrate the ability to identify the major challenges and benefits of each phase of the KM cycle.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding:**	
1.1	Define the fundamental concepts of knowledge management.	K3
1.2	Describe the role of knowledge management in business.	K3
2	**Skills:**	
2.1	Identify the major challenges and benefits in each phase of the knowledge management cycle.	S4
2.2	Knowledge management application at the individual, group and corporate levels.	S4
2.3	Demonstrate the ability to use knowledge capture and creation tools.	S1
2.4	Demonstrate the ability to propose innovative solutions based on knowledge management concepts.	S6
3	**Values:**	
3.1	Demonstrating effective time management and organization skills while working with individuals, teams, and large groups.	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to Knowledge Management	6
2	The Knowledge Management Cycle	6
3	Knowledge Management Models	6
4	Knowledge Capture and Codification	6
5	Knowledge Sharing and Communities of Practice	6
6	Knowledge Application	6
7	Knowledge Management Tools	6
8	Knowledge Management Strategy	3
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Define the fundamental concepts of knowledge management.	Lectures Peer teaching	Exams Quizzes

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
		Note taking	Assignments
1.2	Describe the role of knowledge management in business.	Lectures Peer teaching Note taking	Exams Quizzes Assignments
2.0	**Skills**		
2.1	Identify the major challenges and benefits in each phase of the knowledge management cycle.	Case-based learning Group work	Exams Assignments Group Project/ Case Study
2.2	Knowledge management application at the individual, group and corporate levels.	Case-based learning Group work	Exams Assignments Group Project/ Case Study
2.3	Demonstrate the ability to use knowledge capture and creation tools.	Group work	Exams Group Project/ Case Study
2.4	Demonstrate the ability to propose innovative solutions based on knowledge management concepts.	Group work	Exams Group Project/ Case Study
3.0	**Values**		
3.1	Demonstrating effective time management, leadership and organization skills while working with individuals, teams, and large groups.	Group work	Group project
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Group work	Group project

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes (2*5%)	3rd, 10th	10%
2	Report-1 (Homework assignment 1)	4th	5%
3	Report-2 (Homework assignment 2)	8th	5%
4	Mid Term Exam	9th	20%
5	Group Project	14th	20%
6	Final Exam	16th	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

4 weekly office hours.
College academic advising.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Kimiz Dalkir, "Knowledge Management in Theory and Practice" third edition (2017) The MIT Press Cambridge, Massachusetts London, England. ISBN-13: 978-0262036870 ISBN-10: 0262036878
Essential References Materials	Detailed up-to-date handouts with references to material on the web handed out every week (there is no required textbook)
Electronic Materials	None
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show Laptop Internet access
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Faculty Students	Classroom Observation (QMS Annex O and P) Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020

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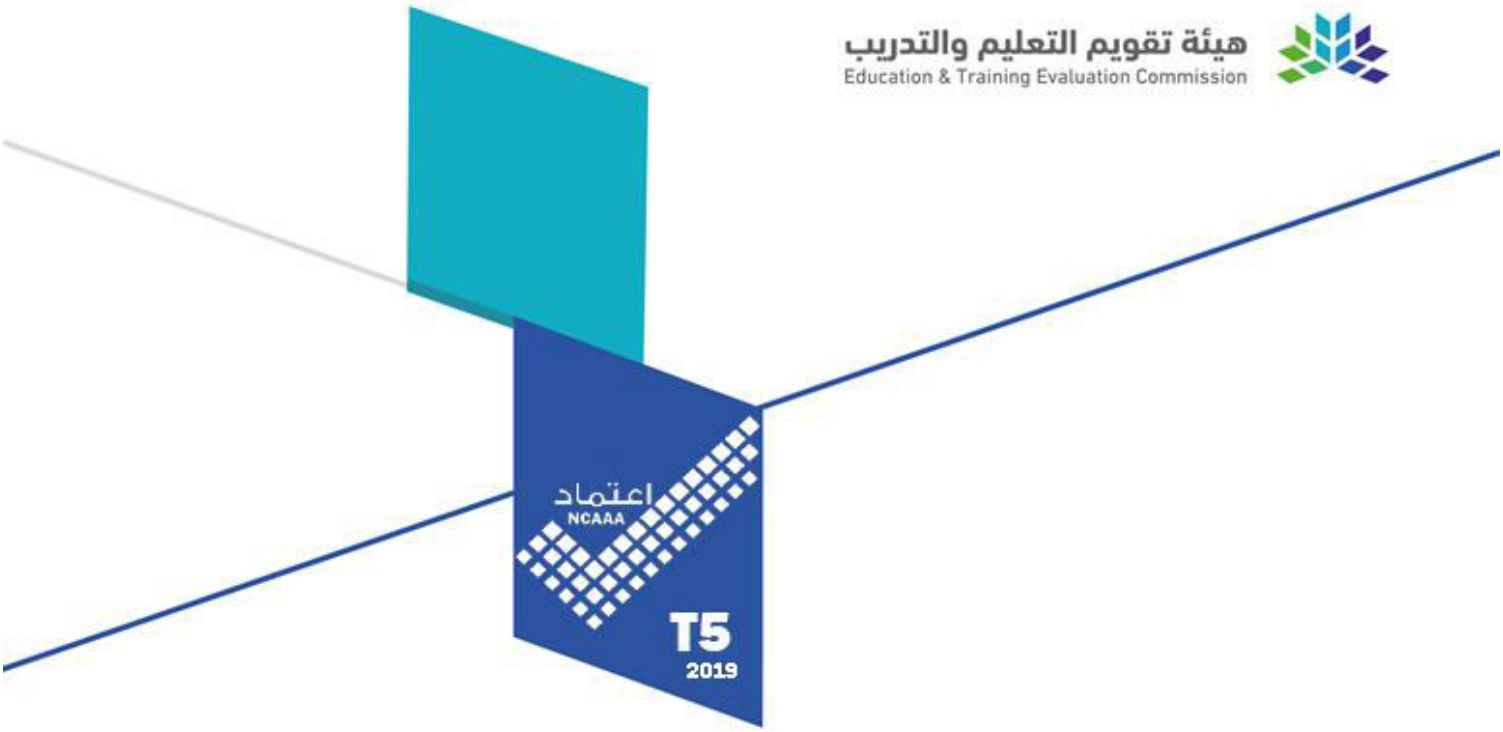
Education & Training Evaluation Commission



Field Experience Specifications

Course Title:	Cooperative Training
Course Code:	0677499
Program:	Management Information Systems
Department:	Management Information Systems
College:	School of Business
Institution:	King Faisal University

Table of Contents

A. Field Experience Identification

1. Credit hours: 6
2. Level/year at which this course is offered: 8th Level / 4th Year
3. Dates and times allocation of field experience activities. • Number of weeks: (16) weeks • Number of days: (5) days per week • Number of hours: (6) hours per day
4. Pre-requisites to join field experience (if any)**:** Students should have completed 120 credit hours.

B. Learning Outcomes, and Training and Assessment Methods

1. Field Experience Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Describe the organization structure and divisions as well as the functional domains.	K1
1.2	Describe the business processes and frameworks.	K1
1.3	Explain the role of different methodologies and development environments involved in systems development life cycle.	K2
1.4	Explain the use and benefits of various state-of-the-art tools and technologies in the work environment.	K3, K4
2	**Skills:**	
2.1	Analyze business problems.	S2, S4
2.2	Propose an improvement in the business process.	S1, S2
2.3	Prepare professional reports.	S4, S5
2.4	Demonstrate effective oral communication skills.	S5
2.5	Demonstrate innovation in proposing and developing business solutions.	S6, S3
3	**Values:**	
3.1	Demonstrate effective time management and organization skills while working with individuals, teams, and large groups	V1
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	V2
3.3	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	V3

2.Alignment of Learning Outcomes with Training Activities and Assessment Methods

Code	Learning Outcomes	Training Methods/Activities	Assessment Methods

Code	Learning Outcomes	Training Methods/Activities	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Describe the organization structure and divisions as well as the functional domains.	Workshops Hands-on experience Job shadowing	Oral presentation Reports Employer evaluation Academic supervisor evaluation
1.2	Describe the business processes and frameworks.	Workshops Hands-on experience Job shadowing	Oral presentation Reports Employer evaluation Academic supervisor evaluation
1.3	Explain the role of different methodologies and development environments involved in systems development life cycle.	Workshops Hands-on experience Job shadowing	Oral presentation Reports Employer evaluation Academic supervisor evaluation
1.4	Explain the use and benefits of various state-of-the-art tools and technologies in the work environment.	Workshops Hands-on experience Job shadowing	Oral presentation Reports Employer evaluation Academic supervisor evaluation
2.0	**Skills**		
2.1	Analyze business problems.	Workshops Hands-on experience Job shadowing	Oral presentation Reports Employer evaluation Academic supervisor evaluation
2.2	Propose an improvement in the business process.	Workshops Hands-on experience Job shadowing	Oral presentation Reports Employer evaluation Academic supervisor evaluation
2.3	Prepare professional reports.	Workshops Hands-on experience Job shadowing	Oral presentation Reports Employer evaluation Academic supervisor evaluation
2.4	Demonstrate effective oral communication skills.	Workshops Hands-on experience Job shadowing	Oral presentation Reports Employer evaluation Academic supervisor evaluation
2.5	Demonstrate innovation in proposing and developing business solutions.	Workshops Hands-on experience Job shadowing	Oral presentation Reports Employer evaluation Academic supervisor evaluation
3.0	**Values**		
3.1	Demonstrate effective time	Workshops	Employer evaluation

Code	Learning Outcomes	Training Methods/Activities	Assessment Methods
	management and organization skills while working with individuals, teams, and large groups.	Hands-on experience Job shadowing	
3.2	Demonstrate awareness of ethics, values and standards involved in design and development of business solutions.	Workshops Hands-on experience Job shadowing	Oral presentation Reports Employer evaluation Academic supervisor evaluation
3.3	Demonstrate the ability to take initiatives in acquiring knowledge and skills, as well as follow a self-committed plan.	Workshops Hands-on experience Job shadowing	Oral presentation Reports Employer evaluation Academic supervisor evaluation

3. Field Experience Learning Outcomes Assessment

a. Students Assessment Timetable

#	Assessment task*	Assessment timing (Week)	Percentage of Total Assessment Score
1	Employer evaluation	During whole semester	25%
2	Academic supervisor evaluation	During whole semester	25%
3	Final report	End of semester	30%
4	Oral presentation	End of semester	20%
5	Total		100%

***Assessment task** (i.e., Practical test, oral test, presentation, group project, essay, etc.)

b. Assessment Responsibilities

#	Category	Assessment Responsibility
1	**Teaching Staff**	Site visits Report evaluation Presentation evaluation
2	**Field Supervisor**	Student overall performance evaluation
3	**Others** (specify)	

C. Field Experience Administration

1. Field Experience Locations

a. Field Experience Locations Requirements

Suggested Field Experience Locations	General Requirements*	Special Requirements**
Aramco (Dhahran)	• A computer with the Internet access • A user account within the organization intranet to allow students to work on information systems in use	• A brochure about safety and risk management related to MIS field. • Directives/ guidelines related to intellectual properties and information confidentiality as well as protection of organization data and systems.
Tadawul (Riyadh)	Same as above.	Same as above.
King Fahad Hospital (Al-Ahsa)	Same as above.	Same as above.
Sharah Marketing (Al-Ahsa)	Same as above.	Same as above.
Maternity and Children Hospital (Al-Ahsa)	Same as above.	Same as above.
Abdulla Ahmed Nass & Partners Co. Ltd. (Dammam)	Same as above.	Same as above.
Al-Ahsa Hosbital	Same as above.	Same as above.
Desert stars (Khobar)	Same as above.	Same as above.
Beautyzone Poly Clinic (Al-Ahsa)	Same as above.	Same as above.
Directorate of Health Affairs-King Fahad Hospital (Al-Ahsa)	Same as above.	Same as above.
King Abdulaziz Hospital	Same as above.	Same as above.
Educational Management in Al-Ahsa	Same as above.	Same as above.

*Ex: provides information technology ,equipment ,laboratories ,halls ,housing ,learning sources ,clinics etc.

**Ex: Criteria of the training institution or related to the specialization, such as: safety standards, dealing with patients in medical specialties, etc.

b. Decision-making procedures for identifying appropriate locations for field experience

As the communication with potential participating companies takes long time, and they often do not have enough capacity to train our students. Therefore, the department in collaboration with the coop office actively searches for potential opportunities for cooperative training for students.

2. Supervisory Staff

a. Selection of Supervisory Staff

Selection Items	Field Supervisor	Teaching Staff
Qualifications	TBD	TBD
Selection Criteria	TBD	TBD

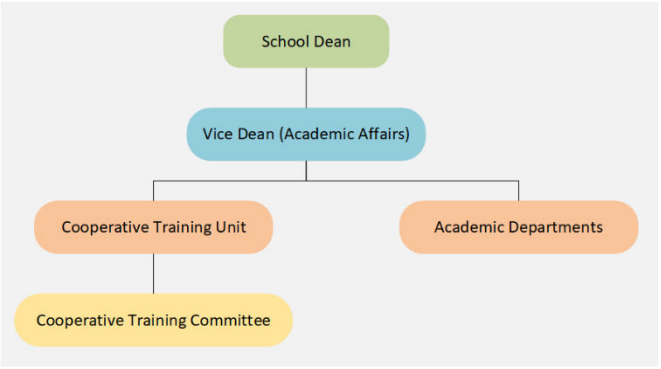
b. Qualification and Training of Supervisory Staff

(Including the procedures and activities used to qualify and train the supervisory staff on supervising operations, implementing training activities, the follow-up and evaluation of students, etc.)

3. Responsibilities

a. Field Experience Flowchart for Responsibility

including units, departments, and committees responsible for field experience, as evidenced by the relations between them.



b. Distribution of Responsibilities for Field Experience Activities

Activity	Department or College	Teaching Staff	Student	Training Organization	Field Supervisor
Selection of a field experience site	✓		✓		
Selection of supervisory staff	✓				
Provision of the required equipment				✓	
Provision of learning resources				✓	
Ensuring the safety of the site				✓	✓
Commuting to and from the field experience site		✓	✓		
Provision of support and guidance		✓			✓
Implementation of training activities (duties, reports, projects, ...)			✓		
Follow up on student training activities		✓			✓
Adjusting attendance and leave		✓			✓
Assessment of learning outcomes		✓			

Activity	Department or College	Teaching Staff	Student	Training Organization	Field Supervisor
Evaluating the quality of field experience		✓	✓		
Others (specify)					

4. Field Experience Implementation

a. Supervision and Follow-up Mechanism

- Communicate with the supervisor in the organization regarding the duties assigned to students.
- Regular field visits to ensure that the students are performing as required.
- Frequent communication with the students to follow up with their progress.

b. Student Support and Guidance Activities

- Attend meetings regularly
- Participate in individual and team-work tasks
- Understand and be able to use organization's information systems
- Perform routine tasks as assigned by employer
- Identify business processes and frameworks used in the organization
- Write reports and present achieved work and experience during training
- Apply and adhere to business ethics and safety requirements

5. Safety and Risk Management

Potential Risks	Safety Actions	Risk Management Procedures
Students safety risks (if applicable to the training environment)	As defined in the risk management plan of the organization.	A contract is signed with each employer which includes terms and conditions for the management of risk and responsibility of all parties.
Breach of intellectual property	Same as above	Same as above

D. Training Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Field experience objectives, contents and learning outcomes	Departmental study plan committee	Course review Course reports
Effectiveness of the academic supervision	Students	Course evaluation survey (QMS annex O and P)
Achievement of course learning outcomes	Academic supervisor	• Moderation (QMS Annex G and Annex H) • Learning Outcomes Matrix • Assessment Rubric

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Assessment	Academic supervisor	• Verification • Site visits • Assessment Rubric
Learning resources and facilities	Students Faculty	Course evaluation survey Course report
Student academic counseling and support	Students	Course evaluation survey
Course quality management	Program coordinator	Course report review

Evaluation areas (e.g., Effectiveness of Training and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Supervisory Staff, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

E. Specification Approval Data

Council / Committee	DEPARTMENT COUNCIL
Reference No.	5
Date	29-10-2020