Study plan No.	**2021/2022**		**University Specialization**	**Management Information Systems**	
Course No.	**0506416**		**Course name**	**Business Intelligence and Big Data**	
Credit Hours	**3**		**Prerequisite Co-requisite**	**0506111**	
Course type	☐ MANDATORY UNIVERSITY REQUIREMENT	☐ UNIVERSITY ELECTIVE REQUIREMENTS	☐ FACULTY MANDATORY REQUIREMENT	☐ Support course family requirements	☐ Mandatory requirements / ✓ Elective Requirements
Teaching style	☐ **Full online learning**		**Blended learning**	✓**Traditional learning**	
Teaching model	☐ **2Synchronous: 1asynchronous**		✓**face to face : 1synchronous**	**Traditional**	

Faculty member and study divisions information (to be filled in each semester by the subject instructor)

Name	Academic rank	Office No.	Phone No.	E-mail	
Division number	**Time**	**Place**	**Number of students**	**Teaching style**	**Approved model**

Brief description

The objectives of this course are: to understand business intelligence systems, tools and techniques, business intelligence concepts and methodologies, understand the issues in implementing BI.

Learning resources

Course book information (Title, author, date of issue, publisher ... etc)	Sharada R., Delen D. and Turban E. Business Intelligence, Analytics, and Data Science: A Managerial Perspective. Pearson, 4th Edition (2017). ISBN: 978-0134633282			
Supportive learning resources (Books, databases, periodicals, software, applications, others)	Turban, Sharda, and Delen, Decision Support and Business Intelligence Systems, 9/e.2018			
Supporting websites				
The physical environment for teaching	✓Class room	☐ Labs	✓Virtual educational platform	☐ Others
Necessary equipment and software				
Supporting people with special needs				
For technical support				

Course learning outcomes (S *= Skills, C= Competences K= Knowledge,)*

No.	Course learning outcomes	The associated program learning output code
	Knowledge	
K1	Describe the business intelligence methodology and concepts and the major implementation issues	
K2	Help understand basic Concepts , Architectures, Processes and Operation of Data Warehousing	
K3	Define Data Mining Technologies ,Objectives, Benefits and Applications	
K4	Explain the need for connecting BI systems with other IS	
	Skills	
S1	To deeply describe the challenges in today's business environment	
S2	To appreciate the role of IT in the decision making process	
S3	To clearly present the business intelligence concepts and methodology	
S4	To identify the Big Data and Data Mining Technologies, Objectives Benefits and applications	
	Competences	
C1	Explain the need for connecting BI systems with other IS	
C2	To explore the local market in the Data Mining Technology	
C3	To analyse the role of IT in the decision making process	
C4	To examine the major BI implementation issues	

Mechanisms for direct evaluation of learning outcomes

Type of assessment / learning style	Fully electronic learning	Blended learning	Traditional Learning (Theory Learning)	Traditional Learning (Practical Learning)
First exam	0	**0**	%20	0
Second / midterm exam	%30	**%30**	%20	30%
Participation / practical applications	0	**0**	10	30%
Asynchronous interactive activities	%30	**%20**	0	0
final exam	%40	**%50**	%50	40%

Note: Asynchronous interactive activities are activities, tasks, projects, assignments, research, studies, projects, work within student groups ... etc, which the student carries out on his own, through the virtual platform without a direct encounter with the subject teacher.

Schedule of simultaneous / face-to-face encounters and their topics

Week	Subject	learning style*	Reference **
1+2	Chapter 1: Introduction to Business Intelligence Changing Business Environment and Computerized Decision Support A Framework for Business Intelligence: Definition, History, Architecture, and Benefits	**Lecture**	
3	Chapter 1 : Introduction to Business Intelligence Successful BI Implementation Major BI Tools and Techniques	**Lecture**	
4+5	Chapter 2 : Data Warehousing DW definitions and concepts DW process DW Architectures Chapter 2 : Data Warehousing Data Integration and the Extraction, Transformation, and Load	**Lecture**	
6+7	Chapter 4 : Data Mining DM concepts and definitions DM applications DM process	**Lecture**	
8+9	Chapter 4 : Data Mining DM methods Artificial Neural Networks for Data Mining DM Software Tools	**Lecture**	
10	Chapter 5 : Text and Web Mining Text Mining definitions and concept Natural Language processing	**Lecture**	
11+12	Chapter 6 : Business Intelligence Implementation: Integration and Emerging Trends Implementation Overview	**Lecture**	
13+14	Chapter 6 : Business Intelligence Implementation: Integration and Emerging Trends BI and Integration	**Lecture**	
15	Implementation: Integration and Emerging Trends Connecting BI systems to Database	**Lecture**	

	Connecting BI to other Enterprise Systems		
16	**Final Exam**		

*** Learning styles: Lecture, flipped learning, learning through projects, learning through problem solving, participatory learning ... etc.**

**** Reference: Pages in a book, database, recorded lecture, content on the e-learning platform, video, website ... etc.**