

## EDUCATION PLAN

### I. IDENTIFICACION

<b>COURSE: Business Management</b>		
<b>Department: Business Management Department</b>		
<b>Discipline: Data Analytics and Business Intelligence</b>		<b>Code: DBI</b>
<b>Working Hours: 72</b>	<b>Academic year: 2024/1</b>	<b>Phase:</b>
<b>Professor: Omar Omar</b>		
<b>E-mail Contact: omarx02@gmail.com</b>		

### II. SUMMARY

Data Analytics and Business Intelligence; Data modeling; Dimensional Analysis; The relational model; Enterprise data architecture; Data presentation; Dashboards; Business Intelligence Tools and applications; Data Warehouse; The ETL process; Use of data analytics to address finance, marketing, human resources and production challenges; Innovation; Data and decision making;

### III. GOALS AND OBJECTIVES

- Manage the basic concepts of ICT
- Use IT to the benefit of the enterprise;
- **Business Intelligence;**
- **Data warehouse;**
- **ETL – Extract Transform and Load techniques;**
- **MS Excel as a BI tool;**
- **Power BI and other BI tools;**
- The relational model;
- The dimensional model;
- Entity-Relationships;
- Dashboards architecture;
- Dashboards building and use;
- Innovation within the context of data analytics;

### IV. DIDACTIC PROGRAM

1. The Role of ICT in the enterprise
2. Data and Decision Making
3. Data Analytics
4. Business Intelligence
5. Power BI
6. ETL
7. ICT tools to meet business needs
8. Strategic Information Management

### V. LEARNING METHODOLOGY

Synchronous and asynchronous classes;  
Asynchronous exercises and projects;  
Debates;  
Multimedia learning resources (music; movies; internet; etc.);  
Seminars;

#### IV. EVALUATION SYSTEM

Debates and classroom activities 10%;  
Exercises throughout the classes 40%  
Business Intelligence Projects 25%  
Final Project 25%;

#### V. BIBLIOGRAPHY

##### **BASIC BIBLIOGRAPHY**

##### **Power BI official documentation.**

KIMBALL, Ralph; Ross, Margy. **The Data Warehouse toolkit**, 3<sup>rd</sup> edition. Wiley, USA, 2013.

FERRARI, Alberto; RUSSO, Marco. **Introducing Microsoft Power BI**. Microsoft Press, Redmond, Washington, USA, 2016.

##### **SUPPLEMENTARY BIBLIOGRAPHY**

POWELL, Brett. **Microsoft Power BI Cookbook**. Packt, Birmingham – Mumbai, 2017.

HETLAND, Magnus Lie. **Beginning Python: From Novice to Professional**. 3<sup>rd</sup> edition, Apress, Norway, 2017.

HALL, Tim; STACEY, J-P. **Python 3 for absolute beginners**. Apress, USA, 2009.