SUBJECT SYLLABUS

ACADEMIC OVERVIEW
INTERNATIONAL SCHOOL OF ECONOMIC & ADMINISTRATIVE SCIENCES

COURSE NAME AND CODE: **Data Analysis for Decision Taking (4635ANDA)**
PROGRAM:
Bachelor of International Marketing & Logistics Administration (BIMLA)
LEVEL OF STUDY: **Undergraduate Programme**

GENERAL ACADEMIC INFORMATION			
LATEST UPDATE	2020-2		
ACADEMIC DEPARTMENT	Digital Skills		
SUBJECT TYPE	Mandatory		
LANGUAGE	Spanish		
SEMESTER	Programme	Semester	
	BIMLA	7	
NUMBER OF ACADEMIC CREDITS	2		

HOURS OF ACADEMIC WORK	96	**CONTACT HOURS**	32	**HOURS OF INDEPENDENT/AUTONOMOUS WORK**	64
LEARNING PREREQUISITES	• N/A				
INTERNATIONAL COMPONENT	• National and international standards, policies, regulations and mores related to the professional field. • Vocabulary and technical language to communicate in different cultural contexts. • International guests				
SUSTAINABLE DEVELOPMENT GOALS (SDG)	SDG: 4. Quality Education				
COURSE DETAILS					
COURSE DESCRIPTION	The data analysis will allow students to create structures and manage data through informed decisions, using statistical and quantitative analysis, explanatory and predictive models. The data analysis will guide students to obtain organizational achievements and digital transformation through decisions oriented towards process optimization and answering to the current needs of society. Power BI is the tool of preference to build dashboards or boards which allow for decision taking through data and truthful information in a corporate process, with the end of not only automizing the creation of reports, but also to have them in the cloud for a simultaneous consult independent of the context. More and more companies are joining the implementation of analytical models for decision taking, and the development of these skills in their workers. To be able to have an optimal development in the course and accomplish the intended learning results, the recommendation is for students to have a computer with an operating system Windows and Office 2013 or higher or MacBook with a virtual machine and office 2013 or higher. This with the end goal of developing activities in class and of independent work.				
KEY WORDS:	Data Analysis, Statistics				

	EICEA ILOS or Programme ILOS	Course ILOS	Type	Content	Teaching and Learning strategy	Assessment Method
COMPETENCES DEVELOPED	ILO 01 ILO 02 BIMLA ILO08	**Build** analytical models based in data analysis tools in the formation context of each student.	Skill	-Introduction to analytics: Presentation of basic analytics concepts (descriptive, predictive, and prescriptive), applications, national and international contexts, and the importance of decision taking. -Challenge based learning -Check the governments “open data” web page to understand how to access ample information which is in reach of citizens. -Guide students in the initial building of simple analytical models -Introduction to data analysis tools -ETL processes (extract, transform and load) Explain the restrictions of the ETL process in Excel -Design of analytics models: Information sources, types of data, types of variables, basic descriptive statistics elements. Development of analytics models: ETL Processes -Student reflection on the advantages that analytics has on informed decision taking. -Introduction to DAX language (Data Analysis Expressions)	Projects Based Learning	Formative Assessment

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<tr><td></td><td>Share the built models to facilitate informed decision taking</td><td>Skill</td><td>-Visual Analytics
-Integration of analytics models in the cloud
-Final project presentation</td><td>Projects Based Learning</td><td>Formative and Summative Assessment</td></tr>
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ILO01: Global Vision: Demonstrate an understanding of multicultural environments both in local and global contexts.

ILO02: Critical Thinking: Evaluate information using critical and analytical reasoning to address changing economic and business situations.

BIMLA ILO08: Understanding marketing tendencies and demonstrating ability to identify critical components in value chains.
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<tr><td>BIBLIOGRAPHY</td><td>

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Catrysse, M., Hermans, B. & Puers, R. (2004). An inductive power system with integrated bi-directional data-transmission sensors and Actuators A: Physical,Volume 115, Issues 2–3,2004,Pages 221-229,ISSN 0924-4247,https://doi.org/10.1016/.sna.2004.02.016.
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Davenport, T., Harris, J. (2017) Competing on analytics: the new science of winning.
Gonzales, R, & Wareham, J. (2019). Analysing the impact of a business intelligence system and new conceptualizations of system use. Journal of Economics, Finance and Administrative Science, 24(48), 245-368. https://dx.doi.org/https://doi.org/10.1108/JEFAS-05-2018-0052
Iñigo, C. (2013). Estudio comparative de las herramientas de Business Intelligence: Empoderando el criterio de selección a las pymes. Researchgate.
Lyon, William. (2019). Microsoft Power BI Desktop: A free and user-friendly software programme for data visualisations in the Social Sciences. Historia, 64(1), 166-171. https://dx.doi.org/10.17159/2309-8392/2019/v64n1a8
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