Course Syllabus

Code - Course Title	**İŞL440 - Data Analytics, Business Intelligence and Process**
Course Type	VI. SEMESTER
Laboratory + Practice	2+0
ECTS	**5.0**
Language of Instruction	İngilizce
Course Type	Required Courses

Mode of Delivery	It is expected that students will be an active discussants in every session and lecturer explains briefly important stuffs that are related to discussed topics and raises relevant questions or issues. There will be lab sessions where the students are expected to work on Data Analytics tasks about International Trade.Note: Due to the pandemic situation, lab sessions will be conducted online. Students will download the relavent softwares to their computers. Necessary support will be provided.
Prerequisites	Software and Computer Access: Students are required to have access to 3 softwares either in their own PCs or in class labs. Due to the covid, if the labs are not available and if you don’t have an access to a personel computer, please inform the tutor so that we can find a accommodation. Installing instructions will be provided in the first course. Lab courses (online) will be hands-on training on these softwares. In addition, students are expected to deliver assignments by using these softwares. Trial versions (free of charge) of mentioned softwares will be sufficient for the training purposes.2 Assignments: One assignment will be delivering a dashboard on data visualization tool on a sample foreign trade data. The other assignment will be short research article on one of the course topics.Final Exam: Final exam will consist of multiple choice and short answer questions covering topics discussed in the class during the semester.Attendance: Complete attendance to course is highly recommended. Students have to attend, at least, 60% of course and Labs to be able to take final exam.Grading: Your grade in the course will be assigned according to the following scale;Assignments:60% (There will be 2 assignments and they have 30% weight each)Final Exam :40% (consisting of multiple choice and short answer questions)
Courses Recomended	There is no recommended optional programme component for this course.
Work Placement	Not Applicable

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		• Disruptive Technologies • Blockchain, Drones, VR, AR, AI, 3D Printing, IoT	
Week - 2		Data, Data Processing and Applications • What is Data, Data Structures • Big Data, Streaming Data • Data Analytics, Data Science • Real Business Cases of Data Processing, Visualization	
Week - 3		Database Types, Server, Cloud • Presentation – Guest Speaker • Data Storage and Databases • Types of Database • Database Management	
Week - 4		Robotic Process Automation • Presentation – Guest Speaker • Robotic Process Automation	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 5		ERP Systems • Presentation – Guest Speaker • What is ERP • ERP Demonstration and Business use cases	
Week - 6		Lab1 - Data Analytics – Data Analytic Tool • Introduction to Data Analysis • Assignment I – Create your own flow	
Week - 7		Lab2 - Data Analytic – Data Analytic Tool • Development of Use Cases on International Trade • Assignment I continue – Create your own flow	
Week - 8		Lab 3 - Data Visualization • Introduction to Data Visualization • Assignment I continue – Create your own Dashboard	
Week - 9		Lab 4 - Robotic Process Automation (RPA) • Introduction to RPA Development • Mini RPA development	
Week - 10		Machine Learning & Artificial Intelligence • Introduction to ML/AI • Mini ML/AI development	
Week - 11		Security & Privacy • Digital Ethics • Data Security • GDPR & KVKK	
Week - 12		Assignment 1 and 2 delivery by students and Feedback from Instructor, Course Review	
Week - 13		Final Exam	
Week - 14		Final Exam	

Learning Outcomes

#	Learning Outcome
1	Students will have great insights about how they can combine their technological knowledge with business life.
2	Students will increase productivity by analysing data, creating business intelligence solutions, automating business processes.
3	Students will learn effective data analytics to plan and execute business operations.

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.