Course title	Data Analysis and Decision Making				
Course code	DAM302				
Course type	Elective				
Level	Postgraduate				
Year / Semester	2nd/3rd				
Teacher's name	Dr Pavlos Panayi				
ECTS	7.5	**Lectures / week**	1-2	**Laboratories / week**	0
Course purpose and objectives	This course is designed to help participants understand how managers use business analytics to solve business problems and to support managerial decision making.				
Learning outcomes	Upon successful completion of this course, the student should be able to: ▪ Gain an understanding of how managers use business analytics to formulate and solve business problems and to support managerial decision making. ▪ Become familiar with the processes needed to develop, report, and analyze business data. ▪ Learn how to use and apply Excel and Excel add-ins to solve business problems. ▪ Gain improved insight about business operations and make better, fact-based decisions.				
Prerequisites	None		**Required**	None	
Course content	▪ Foundations of Business Analytics ▪ Descriptive analytics ▪ Data visualization ▪ Descriptive analytics ▪ Probability Distributions and Data Modeling ▪ Sampling and Estimation ▪ Statistical Inference ▪ Predictive Analytics ▪ Forecasting Techniques ▪ Introduction to Data Mining ▪ Spreadsheet Modeling and Analysis ▪ Simulation and Risk Analysis ▪ Linear Optimization ▪ Decision Analysis				
Teaching methodology	Face to Face				

Bibliography	▪ Business Analytics Methods, Models, and Decisions James R. Evans University of Cincinnati 3rd ▪ Sharda, R., Delen, D. and Turban, E. (2021) Business Intelligence, Analytics, and Data Science: A Managerial Perspective, 4th edition ▪ Microsoft Excel Data Analysis and Business Modeling (Office 2021 and Microsoft 365), 7th edition
Assessment	Final Exam: 50% Assignments: 40% Attendance and Participation: 10%
Language	English