Course Title	**Aviation Information Systems and Digitalization**				
Course Code	AVM124				
Course Type	Compulsory				
Level	Bachelor (1st cycle)				
Year / Semester	1st Year / 2nd Semester				
Instructor's name	TBA				
ECTS	5	Lectures / week	3 Hours/ 14 Weeks	Laboratories / week	None
Course Purpose and Objectives	The purpose of the Aviation Information Systems course is to provide the students with an understanding of what are Information Systems and how they can be applied within the aviation industry. The course provides a comprehensive understanding of current Information Systems and their applications in a business environment as well as the processes through which such systems are developed. It then goes on to analyze the issues relating to information management within the aviation sector and to outline the systems that are used to enable it. It finally involves the students in studying the possible applications of Information Systems in current and future aviation operations.				
Learning Outcomes	Upon successful completion of this course students should be able to: • Define the term Information Systems and the components that constitute it • Explain the major components of the information technology infrastructure of an organization: hardware and software, data resources, telecommunications and networks and the Internet • Differentiate knowledge management and describe how knowledge management supports organizational decision-making and affects strategic success • Describe the process of developing an information system • Analyse the information management needs within an aviation related environment • Describe the technologies and the software solutions that can be used in aviation and the ways in which they can be applied • Evaluate modern technologies, their possible applications in aviation and their benefits				

Prerequisites	AVM110	Co-requisites	None
Course Content	The material included in this course cover the following subjects: • **Introduction to Information System** o An Introduction to Information Systems in Organizations. o Hardware and Software. o Database Systems and Business Intelligence. o Telecommunications, Internet, Intranets and Extranets. • **Business Information Systems.** o Electronic and Mobile Commerce and Enterprise Systems. o Information and Decision Support Systems. o Knowledge Management and Specialized Information Systems. • **Systems Development** o Information Systems development process • **Information Management in Aviation** o Structure of Aviation Operational Information o Management of Aviation Operational Information o Innovations in Aviation Operational Information • **Technologies for Aviation** o Information driven and technology-enabled solutions for airlines and passengers o Internet based applications o Mobile applications o Social media o Specific Software packages for passenger reservations, crew and aircraft scheduling, route profitability, engineering stock control and compliance audit. • **The digitalization of aviation processes and the impact on:** o Operations management (Systems like AIMS, LIDO, FlySMart etc.) o Commercial management (SABRE, AirRM etc.) o Passenger relations • **Future technologies and applications** o Analysis of new technologies o Application of new technologies in aviation related operations o Benefits of these applications		
Teaching Methodology	Face-to face		

Bibliography	• **R. Stair & G. Reynolds***. Fundamentals of Information Systems*. Course Technology, 2013 • **K. C. Laudon & J. P. Laudon.** *Management Information Systems*, Prentice Hall, 2013 • **Thomas L. Seamster, Barbara G. Kanki.** *Aviation Information Management: From Documents to Data.* Ashgate Publishing. 2002. ISBN 978-1-138-25828 • **Nawal K. Taneja.** *The Passenger Has Gone Digital and Mobile: Accessing and Connecting Through Information and Technology.* Routledge 2016. ISBN 9781409435020 • Aviation Information Systems Manual
Assessment	Examinations 70% Assignments 20% Participation 10% 100%
Language	English