

## AVIATION MANAGEMENT MASTER

### COURSE CONTENTS

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
AVN501	Safety and Risk in Transportation	(3,0,0)	3	7,5	Compulsary

Course is planned to construct solid understanding of safety and risk management in transportation, its regulations and requirements by means of economical, organizational dimensions and role of risk and safety management in transportation system in a historical perspective. The course is aimed to encourage students to develop competency in establishing and maintaining safety management and to see and manage risks beforehand in real operations, in accordance with appropriate regulations and advisory publications.

By the end of the course the students are expected to manage safety in any transport organization and comply with the necessities of regulations while their contribution to enhance safety culture is highly expected.

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
AVN502	Air Law and the Aviation Policies	(3,0,0)	3	7,5	Compulsary

This course enables students to recognize the international convention system, which is the basis of international air transportation, and the international agreements necessary for commercial activities operating in this system, and to understand and interpret how multidimensional aviation policies are determined. Upon completion of the course, students learn all dynamics of the global air transport, know how States determine their role in global and regional aviation, interpret the factors affecting air transport plans, understand and interpret official reports on production and market conditions in aviation.

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
AVN503	Logistics Management in Aviation	(3,0,0)	3	7,5	Elective

The course is intended to provide students with an advanced, theory-based understanding of the structure and processes of global aviation industry and its role in the context of global logistics and supply chain management. This course also provides an overview of airline management decision processes with a focus on economic issues and their relationship to operations planning models and decision support tools.

This course provides an overview of airline management decision processes with a focus on economic issues and their relationship to operations planning models and decision support tools. Several topics that will be emphasized in this course include the following: application of economic models of demand, pricing, costs, and supply to airline markets and networks, and it examines industry practice and emerging methods for fleet planning, route network design, scheduling, pricing and revenue management.

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
AVN504	Research Methods in Aviation Sciences	(3,0,0)	3	7,5	Compulsary

The aim of the course is to analyze scientific research methods and to examine the rise of modern science and development in scientific research. Those who successfully complete this course will comprehend;

The purpose and definition of science,

- Characteristics of scientific knowledge,
- Scientific knowledge and values system,
- The birth and development of modern science,
- Method in social sciences,
- Main research methods,
- Data collection methods,
- Understand measurement and test security issues and use them in their explorations.

In the course, they learn the topics of the researches done so far and can comment on each of them.

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
AVN510	Seminar	(3,0,0)	3	7,5	Compulsary

This course aims to teach research question development, literature review, research method and theoretical framework determination and practice. It enables students to adopt scientific thinking and teaches them to use scientific research methods in order to prepare for academic research and thesis writing process.

Students who successfully complete this course;

- will be able to build up knowledge related to their research topic;
- will be able to analyze theoretical and methodological approaches and terminology;
- will be able to apply the necessary research and writing skills;
- will be able to fulfill the principles of research ethics and labor theft;
- will be able to adequately evaluate their own work;
- will be able to present their research topic orally;
- will be able to produce an academic study at the expected standards.

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
AVN522	Airline Business Models	(3,0,0)	3	7,5	Compulsary

The Airline Business Models course provides an academic approach to knowledge transfer in which concepts such as strategic marketing, current issues, data-based strategies, and sustainability management are handled as an integral whole in airline transportation, which is rapidly developing in a highly

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					competitive environment in our country. In addition, it is aimed to strengthen the related course with case studies.
					On successfully completing this course unit, students will be able to:
					<ul style="list-style-type: none"> <li>• Comprehend strategic management;</li> <li>• Be able to discuss sustainability in air transport;</li> <li>• Utilize marketing methods in air transport;</li> <li>• Comprehend Statistical data in air transport economics;</li> <li>• Recognize and distinguish the characteristics of different Business Models in Airlines;</li> <li>• Be able to picture and comprehend today and the future of air transport business models.</li> </ul>

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
AVN526	Security Systems in Aviation	(3,0,0)	3	7,5	Elective Course
					Course is planned to construct an understanding of security and security systems required in air transportation, its regulations and requirements by means of economical, organizational dimensions and role of security management in air transportation system.
					Course aims to teach students the theory of security, legal requirements in aviation security as well as the law and policy in aviation security. Student will have deeply understanding about;
					-Evolution of security thinking
					-Role of International Organizations, Conventions, and Treaties in aviation.
					-Security Concept
					-Crime and Terrorism in Aviation
					-Implementation, scope and legal considerations in security.

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
AVN532	Aircraft Maintenance Management	(3,0,0)	3	7,5	Elective Course
					ICAO. Convention on International Civil Aviation. Operation of Aircraft. Airworthiness of Aircraft. National/International Airworthiness/Aviation Organizations. Continuing Airworthiness. Maintenance Standards. Maintenance Organizations. Continuing Airworthiness Management Organization. Certificate of Release to Service. Airworthiness Review Certificate. Related Regulations. Articles Reviews.

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AVN533	Airline Network, Fleet, and Schedule Planning	(3,0,0)	3	7,5	Elective Course

This course provides a survey of the processes of airline fleet planning as well as an overview of the airline scheduling process. During this course, we will follow the typical steps to assessing the right aircraft for the airline and understand how scheduling the aircraft is accomplished. As a survey course, we will not spend in-depth analysis on particular aircraft, but better understand the overall impact of sound fleet planning techniques and the complexity of airline scheduling as it pertains to management decisions.