**GAU, School of Aviation, Aviation Management**

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| **Course Unit Title** | | Air Traffic Control | |
| **Course Unit Code** | | AVM405 | |
| **Type of Course Unit** | | Compulsory, Aviation Management | |
| **Level of Course Unit** | | 4rd Year BSc | |
| **National Credits** | | 3 | |
| **Number of ECTS Credits Allocated** | | 5 ECTS | |
| **Theoretical (hour/week)** | | 3 | |
| **Practice (hour/week)** | | - | |
| **Laboratory (hour/week)** | | - | |
| **Year of Study** | | 4 | |
| **Semester when the course unit is delivered** | | 7 | |
| **Course Coordinator** | |  | |
| **Name of Lecturer (s)** | |  | |
| **Name of Assistant (s)** | |  | |
| **Mode of Delivery** | | Face to Face and E-learning activities | |
| **Language of Instruction** | | English | |
| **Prerequisities and co-requisities** | | - | |
| **Recommended Optional Programme Components** | | Basic background of Aviation Issues | |
| **Objectives of the Course:** | | | |
| * Teaching air traffic control procedures * Discuss the application of developing technology to aspects of the ATC; * Explain the different roles and responsibilities of staff in ATC. | | | |
| **Course Description** | | | |
| The course provides the concepts of air traffic management with a special focus on air navigation management of aviation operations. The philosophy of air space management and important elements of air traffic control will be thought within the light of general aviation approaches. It aims for the students to perceive the basics principles of the air traffic control with important procedures and implementations. The course begins with the air traffic services information and continues with the airspace management considerations of flight. The course includes air navigation procedures in terms of air traffic control within the context of theoretical knowledge. | | | |
| **Course Contents** | | | |
| Week |  | | Exam**s** |
| 1 | Introduction to Air Traffic Management (ATM) | |  |
| 2 | Air Traffic Services (ATS) | |  |
| 3 | Air Traffic Control System | |  |
| 4 | Air Traffic Control Services | |  |
| 5 | Airspace Structure | | Quiz #1 |
| 6 | Air Space Management (ASM) | |  |
| 7 | New applications of old technology, Exercises, Tutorials and Revision Class | |  |
| 8 | Midterm Exam | | Midterm |
| 9 | Air Traffic Flow Management (ATFM) | |  |
| 10 | Air Traffic Flow Management (ATFM) | |  |
| 11 | Aeronautical Information Services | |  |
| 12 | Radar Separation | | Quiz #2 |
| 13 | Operation in the National Airspace System | |  |
| 14 | Oceanic and International Air Traffic Control , Revision, Exercises and Tutorial Class | |  |
| 15 | Final Exam | | Final |
| **Recommended Sources** | | | |

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| **Textbook:** Michael S. NOLAN, Delmar Cengage Learning, “Fundamentals of Air Traffic Control 5th Edition”, USA, 2011  **Supplementary Material(s):** | | | | | |
| **Assessment** | | | | | |
| Attendance | 5% |  |  |  |  |
| Assignments | 5% |  |  |  |  |
| Project-Seminar | 10% |  |  |  |  |
| Midterm Exam | 30% | Written |  |  |  |
| Quizzes | 5% |  |  |  |  |
| Final Exam | 45% | Written |  |  |  |
| Total | 100% |  |  |  |  |
| **ECTS Allocated Based on the Student Workload** | | | | | |
| Activities | | | Number | Duration (hour) | Total Workload(hour) |
| Hours per week (Theoretical) | | | 15 | 3 | 45 |
| Presenting of observations and tutorials as report | | | 5 | 5 | 25 |
| Preparation of the homeworks | | | 5 | 5 | 25 |
| Quizzes | | | 2 | 11 | 22 |
| Supervision | | | 1 | 17 | 17 |
| Final Exam | | | 1 | 22 | 22 |
| Total Workload | | | | | 156 |
| Total Workload/30 (h) | | | | | 5.2 |
| ECTS Credit of the Course | | | | | 5 |