



In His Name the Most High

**The program for Master of Science  
In Aerospace Engineering-Flight Dynamics and Control**

Course	Course no.	Min. units required
Advanced Mathematics 1	45510	3
Four courses from Table 1		12
Three courses from Table 2		9
MSc Thesis	45560	6
MSc Seminar or another course from Table 2	45600	2
Min. units required to complete the program		32

Table 1: Main Technical Courses

Course name	Course no.	Units
Guidance & Navigation 1	45715	3
Advanced Automatic Control	45710	3
Advanced Flight Dynamics 1	45705	3
Advanced Concepts in Aircraft Design or Advanced Aircraft Design	45736 45915	3 3
Modeling Aerospace Dynamic Systems	45747	3

Table 2: Elective Technical Courses

Course name	Course no.	Units
Flight Simulation	45745	3
Optimal Control 1	45765	3
Flight Test Principles	45720	3
Aerospace Technology Management	45540	3
Guidance & Navigation 2	45716	3
Avionics	45419	3
Missile Flight Dynamics	45725	3
Spacecraft Dynamics & Control	45780	3
Digital Control	45755	3
Adaptive Control	45760	3
Multivariable Control	45750	3
Fuzzy Control	45735	3
Neural Networks	45775	3
Optimal Control 2	45766	3
Missile Configuration Design	45734	3
Advanced Flight Dynamics 2	45706	3
Control System Design	45730	3
Helicopter Flight Dynamics	45740	3
Nonlinear System Analysis	45748	3
Heuristic Optimization Algorithms	45770	3
System Identification	45749	3
Max. one course from:		
<ul style="list-style-type: none"> <li>• other technical courses in the group,</li> <li>• technical courses in other groups,</li> <li>• any other course approved by the group.</li> </ul>		