



In His Name the Most High

**The program for Master of Science
In Aerospace Engineering-Space Engineering**

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
Spacecraft Dynamics and Control	45780	3
Satellite System Design	45782	3
Launch Vehicle System Design	45781	3
Modeling Aerospace Dynamic Systems	45747	3
Advanced Orbital Mechanics	45784	3

Table 2: Elective Technical Courses

Course name	Course no.	Units
Space Systems Engineering	45785	3
Attitude and Orbit Determination	45783	3
Advanced Attitude Dynamics and Control		3
Applications of Remote Sensing	45777	3
Space Structure Materials	45932	3
Space Propulsion	45779	3
System Identification	46749	3
Flight Simulation	45745	3
Advanced Automatic Control	45710	3
Optimal Control 1	45765	3
Guidance & Navigation 1	45715	3
Guidance & Navigation 2	45716	3
Liquid Rocket Engine Design	45428	3
Missile Flight Dynamics	45725	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
Control System Design	45730	3
Nonlinear System Analysis	45748	3
Heuristic Optimization Algorithms	45770	3
Max. one course from:		
<ul style="list-style-type: none"> • other technical courses in the group, • technical courses in other groups, • any other course approved by the group. 		