MOSCOW AVIATION INSTITUTE
(NATIONAL RESEARCH UNIVERSITY)

SPACECRAFT ENGINEERING

Field of training	24.03.01 Rocket Complexes and Cosmonautics	**Department**	601
Program	Spacecraft engineering	**Form of attendance**	intramural

*The courses are listed starting form the second year of studies
To find the necessary course please refer to the table:
** the courses with non-integral numbers (e.g. 22.1, 22.2) are similar and only one of them is taught. The availability of the course is determined on a year-to-year basis

YEAR	SEMESTERS
1	1 2
2	3 4
3	5 6
4	7 8

№	Course title	Department	Semester	Total number of credits
1	Physical Education	519	3	0,5
2	Foreign Languages	ДП1	3	2
4	Philosophy	517	3	2
5	Theory of Probability and Mathematical Statistics	804	3	3
6	Physics	801	3	2
7	Theoretical Mechanics	802	3	3
8	Differential Equations	802	3	3
9	Theory of Mechanisms and Machines	ТПЛА	3	3
10	Materials Science	903	3	3
11	Strength of Materials	902	3	3

№	Course title	Department	Semester	Total number of credits
1	Physical Education	519	5	0,5
2	Foreign Language	ДП1	5	2
3	Economics	507	5	3
4	Numerical Methods	806	5	3
5	Computational Mathematics	806	5	3
6	Methods of Mathematical Modeling	601	5	3
7	Machine Parts and Design Basics	ТПЛА	5	3
8	Construction Mechanics and Strength of Aircraft	602	5	2
9	Engine Installations and Power Systems of Spacecraft	208	5	3
10	Fundamentals of the Spacecraft Theory of Flight	601	5	3
11	Fundamentals of Spacecraft Devices	601	5	2
1	Physical Education	519	6	0,5
2	Foreign Language	ДП1	6	2
3	Physical Education	519	6	0,5
4	Computer Technologies	601	6	2
5	Economics and Organization of Industry	509	6	3
6	Health and Safety	614	6	2
7	Construction Mechanics and Strength of Aircraft	602	6	2
8	Fundamentals of Spacecraft Devices	601	6	4
9	Fundamentals of Space Systems Engineering Development	601	6	3
10	Thermal Design of Spacecraft	601	6	3
11	Reliability and Efficiency of Aircraft	601	6	2
12	Internship	601	6	6

№	Course title	Department	Semester	Total number of credits
1	Fundamentals of Management	501	7	2
2	Sociology	514	7	2
3	Computer techologies	601	7	3
4	Electrical Technology and Electronics	301	7	3
5	Technology of Spacecraft Production	601	7	4
6	Spacecraft design	601	7	3
7	Spacecraft Onboard Systems	601	7	3
8	The Theory of Motion of Space Vehicles	601	7	3
1	Technology of Spacecraft Production	601	8	3
2	Design of Space Vehicles and Complexes	601	8	3
3	Spacecraft Design	601	8	3
4	Organization and Provision of Flight	610	8	3
5	Undergraduate Practice	601	8	6