APPROVED

Vice Rector for Education

__________ Kozorez D.A.

MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION

MOSCOW AVIATION INSTITUTE (NATIONAL RESEARCH UNIVERSITY)

CURRICULUM

Year of Application 2021/22
Direction of Training 24.04.01 Spacecraft Engineering
Graduate 24.04.01.M2 Aerospace engineering

Graduation Department 601
Degree: Master
Form of Attendance Full Time
Program Duration: 2 years

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	Contact hours	Exam. Session	Practice	State Final C.	Holidays	TOTAL
1	-	-	-	-	..	..	..	..	..	..	..	..	..	..	..	..	..	..	::	::	::	=	=	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	::	::	::	::	=	=	=	=	=	=	33	7			8	48
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	::	::	::	=	=	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	::	::	///	///	///	///	///	///	=	=	=	=	35	5		6	6	52
3	=	=	=	=	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					4	4
																																																					68	12		6	18	104

Designation: Contact Hours [.] Examinations [::] Practice [X] Final Project [///] Holidays [=] Final State Certification [Г] Contact hours and Distributed Practice [..]

Course Supporting Department	#	Item	Semesters: Examination	Assessments	Course Projects	Cours Works	Number of Credits	Total hours: Total	Contact Hours: Total	Including: Lectures	Laboratory Tuto	Tutorials	SIWA	SIW	Preparation for Examin
		Block 1. Disciplines					**60**	**2 160**	**972**	**438**	**350**	**184**		**900**	**216**
		Compulsory section					**20**	**720**	**318**	**74**	**232**	**12**		**366**	
ДП1	1	Foreign Language		1,2,3			8	288	116	2	114			172	
517	2	Philosophy and Methodology of Science and Technology		2			2	72	38	20	18			34	
601	3	Scientific Workshop on Spacecraft Engineering		3,4			4	144	70		70			74	
201	4	Continuum Mechanics	2				4	144	56	32	12	12		52	36
505	5	Project Management		2			2	72	38	20	18			34	
		Section formed by the participants of educational relations					**40**	**1 440**	**654**	**364**	**118**	**172**		**534**	
208	6	Numerical Methods	2				3	108	38	20	18			34	36
601	7	Engineering Development of Space Systems	3	4	4		7	252	122	70	52			94	36
601	8	Ergonomics in Space Technology	1				3	108	42	34		8		30	36
601	9	Structures Technology		2			3	108	56	44	12			52	
101	10	Fundamentals of Aircraft Structure, part 1	1				3	108	42	30		12		30	36
601	11	Fundamentals of Aircraft Structure, part 2	2				3	108	56	36	20			16	36
602	12	Structure Strength		1			3	108	42	30		12		66	
		Elective Disciplines					***15***	***540***	***256***	***100***	***16***	***140***		***212***	***54***
601	13.1	Theory of Spaceflight		3		3	3	108	36	20	16			72	
601	13.2	Flight Dynamics		3		3	3	108	36	20	16			72	
601	14.1	Engineering Design Methods		3		3	3	108	54	42		12		54	
601	14.2	Design of Composite Structures		3		3	3	108	54	42		12		54	
203	15.1	Computer Analysis and Simulation Tools	2				4	144	76	20		56		32	36
601	15.2	Computer Technology in Engineering Development	2				4	144	76	20		56		32	36
601	16.1	Information Technology in Aircraft Engineering	3				5	180	90	18		72		54	36
601	16.2	Information and Computer Technologies in Design	3				5	180	90	18		72		54	36
		Block 2. Practice					**51**	**1 836**						**1 836**	
		Compulsory section													
		Learning Practices													
		Production Practices													
		Section formed by the participants of educational relations					**51**	**1 836**						**1 836**	
		Learning Practices					**39**	**1 404**	**390**				**390**	**1 014**	
601		Research Practices		2			6	216	60				60	156	
601		Educational and introductory practice		1			6	216	60				60	156	
601		Research Work		1,2,3,4			27	972	270				270	702	
		Production Practices					**12**	**432**	**120**				**120**	**312**	
601		Professional Practice		3			6	216	60				60	156	
601		Undergraduate Practice		4			6	216	60				60	156	
		Block 3. Final State Certification					**9**	**324**	**35**				**35**	**289**	
601		**Final state certification**		**4**			**9**	**324**	**35**				**35**	**289**	
601		Preparation for Graduation Qualification Work, procedure of Graduation Qualification Work Defence		4			9	324	35				35	289	
		Total					**120**	**4 320**	**1 517**	**438**	**350**	**184**	**545**	**2 515**	

Chief of Division on Education Methodological

Head of the School

Head of Departmer