

MOSCOW AVIATION INSTITUTE (NATIONAL RESEARCH UNIVERSITY)

CURRICULUM

Year of Application: 2018/19

Direction of Training: 24.04.05 Aircraft and Spacecraft Engines

Graduate: 24.04.05.M47 Air Jet Engines Advanced Manufacturing Processes

Graduation Department: 205

Degree: Master

Form of Attendance: Intramural

Program Duration: 2 years

Year	Weeks																																																				Contact hours	Exam. Session	Practice State Final Certification	Holidays	TOTAL		
	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							
1	-	-	-	-	33	8		7	48		
2	32	8	6	10	56
3	=	=	=	=	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							

Designations: Contact Hours [] Examination [::] Practice [X] Final Project [///] Holidays [=] Final State Certification [□] Contact hours and Distributed [..]

Course Supporting Department	#	Item	Semesters					Total hours							
			Examination	Assessments	Course Projects	Course Works	Number of Credits	Total	Contact Hours				SIW	Preparation for Examination	
									Total	Including					
										Lectures	Laboratory Tutorials	Tutorials			SIWA
		Block 1. Courses					60	2 160	966	464	502		870	324	
		General Studies					35	1 260	546	280	266		462	252	
		Primary Courses					35	1 260	546	280	266		462	252	
И-11	1	Foreign Language 3		1,2,3,4			8	288	130			130		158	
И-11	2	Aviation English		2			2	72	38			38		34	
501	3	Management		2			2	72	28	28				44	
517	4	Philosophy and Methodology of Science and Technology	1				3	108	28	28				44	36
204	5	Computational Methods		2			2	72	28	14		14		44	
201	6	Flow Dynamics	1				3	108	42	30		12		30	36

207	7	Stochastic Process Application	1			3	108	42	30		12		30	36
201	8	Air Jet Engines Analysis	1			3	108	42	30		12		30	36
201	9	Impeller Machines	2			3	108	56	40		16		16	36
203	10	Air Jet Engines Engineering	2			3	108	56	40		16		16	36
208	11	Mathematical Physics Equations	2			3	108	56	40		16		16	36
		Specialised Courses												
		Electives												
		Applied Studies				25	900	420	184		236		408	72
		Primary Courses				5	180	94	52		42		86	
205	12	Air Jet Engines Components Manufacturing and Assembly Processes		2		2	72	38	20		18		34	
207	13	Air Jet Engines Certification and Quality Management		2		3	108	56	32		24		52	
		Specialised Courses				20	720	326	132		194		322	72
205	14	Coating Processes	3			3	108	54	16		38		18	36
205	15	Coating Layer Quality	3			3	108	54	16		38		18	36
205	16	Engineering Application of Advanced Composite Materials		4		2	72	28	18		10		44	
205	17	Advanced Materials Processing		3		2	72	36	16		20		36	
204	18	Structure Strength and Thermal Condition Analysis		3	3	3	108	36	16		20		72	
		Electives				7	252	118	50		68		134	
205	19.1	Manufacturing and Testing Processes Research		4		2	72	28	18		10		44	
205	19.2	Air Jet Engines Test Planning		4		2	72	28	18		10		44	
205	20.1	PLM Tools in Air Jet Engines Manufacture		3		2	72	36	16		20		36	
205	20.2	IT for PLC Management		3		2	72	36	16		20		36	
205	21.1	Automated Manufacturing Processes		3		3	108	54	16		38		54	
205	21.2	Advanced Approaches for Manufacturing Processes Automation		3		3	108	54	16		38		54	
		Block 2. Practice				51	1 836						1 836	
		Practice and Research				51	1 836						1 836	
		Learning Practice				12	432						432	
205		Learning Research Practice		2		6	216						216	
205		Learning Introductory Practice		1		6	216						216	
		Production Practice				15	540						540	
205		Pre-Graduate Practice		4		9	324						324	
205		Research Practice		3		6	216						216	
		Research Activity				24	864						864	
205		Research in Semester		1,2,3,4		24	864						864	
		Block 3. Final State Certification				9	324						324	

205	Final State Certification					9	324						324	
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	Total					120	4 320							
	Total per Semesters, Hours						4 320	966	464		502		3 030	324

