MOSCOW AVIATION INSTITUTE (NATIONAL RSEARCH UNIVERSITY)

CURRICULUM

Year of Application 2018/19
Direction of Training 24.04.05 Aircraft and Spacecraft Engines
Graduate Program 24.04.05.M45 Heat Processes in Air Jet Engines

Graduation Department 204
Degree Master
Form of Attendance Intramural
Program Duration 2 years

Year	Weeks 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 Certification	Holidays	TOTAL
1	-	-	-	-	..	..	..	..	..	..	..	..	..	..	..	..	..	..	::	::	::	::	=	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	::	::	::	::	=	=	=	=	=	=	33	8			7	48
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	::	::	::	::	=	..	..	..	..	..	..	..	..	..	..	..	..	..	..	::	::	::	::	///	///	///	///	///	///	=	=	=	=	=	32	8		6	10	56
3	=	=	=	=	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
																																																					65	16		6	17	104

Designations: Contact Hours . Examination :: Practice X Final Project /// Holidays = Final State Certification Г Contact hours and ..

Course Supporting Department	#	Item	Semesters: Examination	Assessments	Course Projects	Course Works	Number of Credits	Total hours: Total	Contact Hours: Total	Including: Lectures	Laboratory Tutorials	Tutorials	SIWA	SIW	Preparation for Examination
		Block 1. Courses					**60**	**2 160**	**974**	**456**	**40**	**478**		**862**	**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**	**428**	**176**	**40**	**212**		**400**	**72**
		Primary Courses					***5***	***180***	***84***	***48***		***36***		***96***	
204	12	Structure Thermal Condition Analysis		2		2	2	72	28	18		10		44	
204	13	Navier Stokes Equations Computation		2			3	108	56	30		26		52	
		Specialised Courses					***20***	***720***	***344***	***128***	***40***	***176***		***304***	***72***
204	14	Matter Thermophysocal Properties Theory	3				3	108	54	18		36		18	36
204	15	Basics of Heat Engineering Theory	3				3	108	54	18		36		18	36
204	16	Air Jet Engines Chamber Internal Processes		3		3	3	108	54	24	8	22		54	
204	17	CFD Tools		3			3	108	54	16		38		54	
		Electives					***8***	***288***	***128***	***52***	***32***	***44***		***160***	
204	18.1	Numerical Simulation in Thermophysics		4			4	144	56	16	16	24		88	
204	18.2	Heat and Mass Exchange Numerical Simulation		4			4	144	56	16	16	24		88	
204	19.1	Selected Chapters on Thermophysics and Continuum Mechanics		3			4	144	72	36	16	20		72	
204	19.2	Convection-Radiation Heat Exchange in Turbulent Flow		3			4	144	72	36	16	20		72	
		Block 2. Practice					**51**	**1 836**						**1 836**	
		Practice and Research					**51**	**1 836**						**1 836**	
		Learning Practice					**12**	**432**						**432**	
204		Learning Research Practice		2			6	216						216	
204		Learning Introductory Practice		1			6	216						216	
		Production Practice					**15**	**540**						**540**	
204		Pre-Graduate Practice		4			9	324						324	
204		Research Practice		3			6	216						216	
		Research Activity					**24**	**864**						**864**	

204		Research in Semester		1,2,3,4			24	864						864	
		Block 3. Final State Certification					**9**	**324**						**324**	
204		**Final State Certification**					**9**	**324**						**324**	
		Total					**120**	**4 320**							

		Total per Semesters, Hours						**4 320**	**974**	**456**	**40**	**478**		**3 022**	**324**