

Aviation Science and Technology Master Program Course List

No	Course Code	Course Name	T	P	C	ECTS
1	HBT 5000	Specialization Field Course (Master)	6	0	0	6
2	HBT 5010	Master Seminar	0	2	0	6
3	HBT 5020	Master Thesis	0	1	0	24
4	HBT 5030	Aircraft Performance and Operations Analysis	3	0	3	6
5	HBT 5040	Rotary Wing Aerodynamics and Aeroacoustics	3	0	3	6
6	HBT 5050	The Effect of Light Aircraft Construction Techniques on Performances	3	0	3	6
7	HBT 5060	Airline Operations and Planning	3	0	3	6
8	HBT 5070	Modeling and Simulation of Flight Systems	3	0	3	6
9	HBT 5080	Advanced Thermodynamic Analysis of Gas Turbine Engines	3	0	3	6
10	HBT 5090	Active Control of Aircraft Vibrations	3	0	3	6
11	HBT 5100	Performance Optimization of Aircraft Propulsion Systems	3	0	3	6
12	HBT 5110	Space Physics	3	0	3	6
13	HBT 5120	Material Selection in Aviation	3	0	3	6
14	HBT 5130	Structure and Properties of Aircraft Materials	3	0	3	6
15	HBT 5140	Damage Analysis of Aircraft Materials	3	0	3	6
16	HBT 5150	Satellite Communication Systems	3	0	3	6
17	HBT 5160	High Temperature Materials in Aircraft	3	0	3	6
18	HBT 5170	Nanotechnology in Aviation	3	0	3	6
19	HBT 5180	Finite Elements Method in Aviation	3	0	3	6
20	HBT 5190	Artificial Intelligence Applications in Aviation	3	0	3	6
21	HBT 5200	Fuel Cells in Space Technologies	3	0	3	6
22	HBT 5210	Payload Carriage	3	0	3	6
23	HBT 5220	Intuitive Systems in Aviation	3	0	3	6
24	HBT 5230	Sustainable Energy Use in Aviation	3	0	3	6

25	HBT 5240	Aircraft Diagnostic Methods	3	0	3	6
26	HBT 5250	Air Rail Systems	3	0	3	6
27	HBT 5260	Remote Sensing in Aviation	3	0	3	6
28	HBT 5270	Unmanned Aerial Vehicle Ground Station Management	3	0	3	6
29	HBT 5280	Aviation Communication Systems	3	0	3	6
30	HBT 5290	Flight Control	3	0	3	6
31	HBT 5300	Electrical Drive in Aviation	3	0	3	6
32	HBT 5310	Routing of Aircraft	3	0	3	6
33	HBT 5320	Flight Tests	3	0	3	6
34	HBT 5330	Aviation Software Applications	2	2	3	6
35	HBT 5340	Aviation Transport Security	3	0	3	6
36	HBT 5350	Advanced Human Factors	3	0	3	6
37	HBT 5360	Unmanned Vehicle Systems Traffic Modeling	3	0	3	6
38	HBT 5370	Aviation Law	3	0	3	6
39	HBT 5380	Aviation Policies	3	0	3	6
40	HBT 5390	Airworthiness	3	0	3	6
41	HBT 5400	Optimization in Aviation and Aerospace Sciences	3	0	3	6
42	HBT 5410	Aviation Safety Incidents	3	0	3	6
43	HBT 5420	Inspection and Repair in Unmanned Aerial Vehicles	3	0	3	6
44	HBT 5430	Unmanned Aerial Vehicles Design and Project	2	2	3	6
45	HBT 5440	Unmanned Aerial Vehicles Biomimetic	3	0	3	6
46	HBT 5450	Aviation Meteorology	3	0	3	6
47	HBT 5460	Simulation Theory with Artificial Intelligence in Aviation	3	0	3	6
48	HBT 5470	Optimization with Artificial Intelligence in Aviation	3	0	3	6
49	HBT 5480	Radar Absorber Material Technology	3	0	3	6
50	HBT 5490	Electricity Generation and Distribution in Commercial Airplanes	3	0	3	6
51	HBT 5500	Renewable Energy Sources in Aviation	3	0	3	6