

ANNEX 3

TABLE 1- Elective course UNIBO not included in first year curriculum

Students may also choose elective courses offered by other degree programmes, prior to the Degree Board approval

O	Embedded Electronic Systems	6
O	Simulation and Modeling in Fluid Dynamics	6
O	Spacecraft Orbital Dynamics and Control	6
O	Helicopters	6
O	Materials Chemistry	6
O	Fundamentals of Astrophysics	6

TABLE 2 - Elective courses at KTH *choose courses not included in the selected track

			Period
O	AG1321 Remote Sensing Technology	7,5	1
O	AH2923 Global Navigation Satellite Systems (GNSS)	7,5	3
O	EF2200 Plasma Physics	6	1
O	EF2240 Space Physics	6	1
O	EF2243 Solar System Physics	7,5	2
O	EF2245 Space Physics II	7,5	2
O	EF2260 Space Environment and Spacecraft Engineering	6	2
O	EF2262 Data Handling Systems for Satellites	6	Autumn
O	EF2264 Operation of Space Systems	6	Autumn
O	EH2720 Management of Projects	7,5	1
O	EL2520 Control Theory and Practice, Advanced Course	7,5	4
O	EL2620 Nonlinear Control	7,5	2
O	HL2035 Biomechanics and Neuronics	6	2
O	MJ2523 Aircraft Propulsion, General Course	6	1
O	MJ2524 Aircraft Propulsion, Advanced Course	6	2
O	SD2413 Fibre Composites - Analysis and Design	6	4
O	SD2414 Fibre Composites - Materials and Manufacturing	6	3
O	SD2415 Process Modelling for Composite Manufacturing	6	1
O	SD2805 Flight Mechanics	9	3
O	SD2806 Transonic and supersonic aircraft aerodynamics	6	1
O	SD2810 Aerolasticity	9	2
O	SD2830 Aircraft Performance and Air Traffic Management	6	2
O	SD2900 Fundamentals of Spaceflight	7,5	1
O	SD2905 Human Spaceflight	7,5	3
O	SD2910 Spacecraft Dynamics	9	4
O	SE2139 Fracture Mechanics	9	3
O	SG2212 Computational Fluid Dynamics	7,5	3
O	SG2215 Compressible Flow	7,5	4
O	SG2219 Advanced Compressible Flow	7,5	1
O	SH1003 Introductory Astronomy for Engineers	7.5	3

TABLE 3A

Track: Systems Engineering

O	EL2450 Hybrid and Embedded Control Systems	7,5
O	SF2842 Geometric Control Theory	7,5
O	SD2905 Human Spaceflight OPT	7,5
O	SF2822 Applied Nonlinear Optimization	7,5
O	SF2812 Applied Linear Optimization	7,5

TABLE 3B

Track: Systems Engineering

O	EH2720 Management of Projects
O	EL2820 Modelling of Dynamical Systems
O	SF2866 Applied Systems Engineering
O	EL2620 Nonlinear Control
O	SF2832 Mathematical Systems Theory

TABLE 4A- Elective courses for Aeronautics tracks

O	Rocket Propulsion	6
O	Spacecraft Subsystems and Space Mission Design	6
O	Advanced Guidance and Control or Aircraft and Spacecraft	6
O	Radio Communication and Radar Systems	6
O	Spacecraft Attitude Dynamics and Control	6

TABLE 4B- Elective courses for Space track

O	Design Methods in Aerospace Industry
O	Aerospace Technologies
O	Advanced Guidance and Control or Aircraft and Spacecraft
O	Experimental Methods in Aerodynamics
O	Unmanned Systems

7,5
7,5
7,5
7,5
7,5

6
6
6
6
6