

Standard Master program in Mechanics (Mechanics of Fluids)

(Dated October 29th, 2015)

The total minimum required number of credits:	64 credits
- General courses (required):	07 credits
- Fundamental and core courses:	39 credits
+ <i>Required</i> :	18 credits
+ <i>Elective</i> :	21/45 credits
- Master thesis:	18 credits

Available curriculum

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
I	General courses		7				
1.	PHI5001	<i>Philosophy</i>	3	30	15		
2.	ENG5001	<i>General English</i>	4	30	30		
II	Fundamental and core courses		39				
II.1.	Required		18				
3.	ENG6001	<i>English for Academic purposes</i>	3	45			
4.	MAT6036	<i>Advanced Mechanics of Continuous Media</i>	3	45			
5.	MAT6037	<i>Advanced Partial Differential Equations</i>	3	45			

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
6.	MAT6045	<i>Advanced Numerical Methods in Mechanics</i>	3	33	6	6	
7.	MAT6052	<i>Advanced Fluid Mechanics</i>	3	32	9	4	
8.	MAT6113	<i>Theory of Mass Transfer and Diffusion</i>	3	30	9	6	MAT6037 MAT6052
II.2.	Elective		21/45				
9.	MAT6107	<i>Gas dynamics</i>	3	39	6	0	
10.	MAT6040	<i>Nonlinear Oscillations</i>	3	21	9	15	
11.	MAT6042	<i>Tensor Calculus in Mechanics</i>	3	32	13	0	
12.	MAT6041	<i>Advanced Differential Equations</i>	3	25	17	3	
13.	MAT6108	<i>Mechanics of Multibody Systems</i>	3	37	8	0	
14.	MAT6109	<i>Applied Functional Analysis</i>	3	35	10	0	
15.	MAT6110	<i>River and Sea Dynamics</i>	3	30	9	6	MAT6052
16.	MAT6111	<i>Theory of Motion Control</i>	3	33	8	4	
17.	MAT6054	<i>Advanced Fortran Programming Language</i>	3	28	12	5	
18.	MAT6139	<i>Thermodynamics of Irreversible Processes</i>	3	34	7	4	
19.	MAT6114	<i>Theory of Turbulence</i>	3	31	12	2	MAT6052

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
20.	MAT6053	<i>Computational Fluid Mechanics</i>	3	31	10	4	MAT6045
21.	MAT6115	<i>Theory of Hydrodynamic Stability</i>	3	30	9	6	MAT6052
22.	MAT6116	<i>Perturbation Methods in Fluid Mechanics</i>	3	32	4	9	MAT6052
23.	MAT6059	<i>Dimensional Analysis and Similarities</i>	3	32	7	6	MAT6052
III	Master Thesis		18				
24.	MAT6150	Master thesis	18				
	Total		64				