

MASTER ISE CURRICULUM

Ver: 10/2016

Code	Course	No. of Credits			Semester
		Theory	Practice	Total	
Part 1: Foundation (4 credits)				4	
PE500	Philosophy*	4	0	4	1
Part 2: Basement knowledge				11	
<i>Compulsory (2 credits)</i>					
ISE002IU	Research Methodology	2	0	2	1
<i>ISE Compulsory courses (9 credits)</i>				9	
ISE501IU	Production and Service Analysis	2	1	3	1
ISE502IU	Deterministic Optimization Models	2	1	3	1
ISE503IU	Stochastic Models	2	1	3	1
Part 3: Specialized knowledge				15	
<i>3.1 Compulsory courses of Industrial Engineering field</i>				9	
ISE504IU	System Modeling and Simulation	2	1	3	2
ISE505IU	Multi Criteria Decision Making	2	1	3	1
ISE508IU	Production Planning and Scheduling	2	1	3	2
<i>3.2 Compulsory course of Supply Chain and Logistics field</i>				9	
ISE504IU	System Modeling and Simulation	2	1	3	2
ISE505IU	Multi Criteria Decision Making	2	1	3	1

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ISE509IU	Supply Chain Systems	2	1	3	2
<i>3.3 Compulsory course of Operations Research field</i>				9	
ISE505IU	Multi Criteria Decision Making	2	1	3	1
ISE514IU	Computational Methods of Operation Research	2	1	3	2
ISE515IU	Network and Combinational Optimization Algorithms	2	1	3	2
<i>3.4 Specialized elective courses ***</i>					
<i>(student can choose any course on the list which can fulfill 6 credits on the tracks of Industrial Engineering, Supply Chain and Logistics, Quantitative and computational in Finance , and Operational Research).</i>				6	
ISE506IU	Inventory Control and Management	2	1	3	2
ISE507IU	Facility Layout and Location	2	1	3	2
ISE513IU	Integer Programming	2	1	3	2
ISE601IU	Engineering Economics	2	1	3	2
ISE602IU	Statistical Model and Regression Analysis	2	1	3	2
ISE603IU	Total Quality Management	2	1	3	2
ISE604IU	Maintenance Management	2	1	3	2
ISE605IU	Transportation Economics	2	1	3	2
I SE606IU	Risk Management	2	1	3	2
ISE607IU	Derivative Securities	2	1	3	2
ISE608IU	Fixed Income Securities	2	1	3	2

Code	Course	No. of Credits			Semester
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ISE609IU	Project Management	2	1	3	2
ISE610IU	Lean Production	2	1	3	2
ISE611IU	Enterprise Resources Planning	2	1	3	2
ISE612IU	Experimental Design	2	1	3	2
Part 4: Thesis (12 credits)		0	12	12	3
<i>Thesis</i>		0	0	3	
Total (part I+II+III+IV)			42		

Note:

* For foreign students, the Philosophy course will be replaced by Vietnamese History Culture course

** Regarding elective courses, besides the elective courses in particular specialized knowledge which are provided in table above, students can select any course from other specialities in the Master Program of ISE.