**COURSES IN BASIC SCIENCES**

**Theoretical course requirement:**

From the list of courses given below, the student should study at least one, as part of the requirements for the Master's degree.

**Industrial Engineering and Management**

096327  Nonlinear Models in Operations Research  
096575  Non-Cooperative Games  
097334  Integer Programming  
098311  Optimization 1  
098413  Stochastic Processes  
098414  Theory of Statistics  
098416  Theory of Probability  

**Mathematics**

106156  Mathematical Logic  
106173* Game Theory  
106300* Combinatorial Optimization  
106349* Advanced Probability  
106380  Modern Algebra 1  
106393* Matrix Theory  
106396* Graph Theory  
108324  Elements of Modern Analysis for Electrical Engineering  
108327  Functional Analysis for Electrical Engineering

**Computer Science**

236308*  algebraic graph theory and combinatorial designs  
236313*  Complexity Theory  
236359  Algorithms 2  
236374  Probabilistic Methods and Algorithms  
236508*  Cryptography and Complexity  
236518*  Communication Complexity  
236718  Combinatorial Optimization

**Physics**

116031*  Quantum Information Theory  
117140  Math. Methods in Physics-Groups  
118081  Theory of Gravitation or 118130 Introduction to General Relativity  
118122  Quantum Mechanics 3  
118128* Advanced Solid State Physics or 118138 Graduate Solid State  
118132  Quantum Field Theory 1  
118137*  Atom Photon Interactions

* Courses marked * will not be given 2015-2016