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
- 106349 Advanced Probability
- 106380* Modern Algebra 1
- 106393* Matrix Theory
- 106396* Graph Theory
- 106383* Algebraic Topology
- 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

**Physics**
- 116031 Quantum Information Theory
- 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 2017-2018