

**A list of courses that can be used to satisfy the PhD core program requirements**

**Optimization Subjects:**

1.142J/15.094J	Robust Modeling, Optimization, and Computation
6.7210J/15.081J	Introduction to Mathematical Programming
6.7220J/15.084J	Nonlinear Optimization
6.7230J/18.456J	Algebraic Techniques and Semidefinite Optimization
15.083	Integer Optimization

**Applied Probability Subjects:**

6.7700J/15.085J	Fundamentals of Probability
6.7710	Discrete Stochastic Processes
6.7720J/15.070J	Discrete Probability and Stochastic Processes

**Statistics Subjects:**

6.7250	Optimization for Machine Learning
6.7800	Inference and Information
6.7810	Algorithms for Inference
6.7900	Machine Learning
6.7940	Dynamic Programming and Reinforcement Learning
6.7910J/9.520J	Statistical Learning Theory and Applications
9.521J/18.656J	Mathematical Statistics: A Non-Asymptotic Approach
15.095	Machine Learning Under a Modern Optimization Lens
HA STAT 211	Statistical Inference I

**OR Modeling Subjects:**

1.203J/15.073J, etc.	Applied Probability and Stochastic Models
6.7240	Game Theory with Engineering Applications
6.7260	Network Science and Models
6.7930/HST.956J	Machine Learning for Healthcare
15.072	Advanced Analytics Edge
15.094J/1.142J	Robust Modeling, Optimization, and Computation
15.764.1J/1.271J/IDS.250J	Inventory Theory and Supply Chains
15.764.2J/1.271J/IDS.250J	Revenue Management and Pricing
15.777	Healthcare Lab: Introduction to Healthcare Delivery in the US