# 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:**
- 6.7710: 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
- 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