

**Master's Degree Program in Operations Research**

Students pursuing a Master's degree in operations research must complete the three basic subjects listed below, their equivalents, or more advanced courses (at MIT or elsewhere).

6.7210J/15.081J	Introduction to Math Programming <b>OR</b> 6.7200J/15.093J Optimization
6.3702	Introduction to Probability
15.095	Machine Learning Under a Modern Optimization Lens or by taking another suitable statistics subject such as 6.7910J/9.520J, 6.7900, 14.382, 15.680 plus four additional graduate level subjects approved by the SM advisor.

Students may substitute approved graduate level courses for the three basic courses, but must take **at least** seven MIT graduate courses in all cases. One out of the seven required SM courses may be an MBA-level course in a functional area of management (finance, operations management, or marketing). In addition, OR students must satisfy a Writing Exam and/or English Evaluation Test requirement.

Master's degree candidates in Operations Research are required to write a thesis based on independent, usually applied, research. SM students are required to present their research to the OR Community at the end of their second year, prior to their graduation. The presentation should be scheduled for at least an hour and an announcement should be sent to the ORC students and faculty via email two weeks in advance. Students generally allow for a two-year program. Students must maintain a GPA of 4.5 or better.

Master's degree candidates are encouraged to take additional OR-related subjects focusing on an application area. Application areas that have been of interest to OR students in the past include transportation, logistics, finance, manufacturing, public systems, and operations management, among many others.

Students currently registered in the ORC's master's degree program should follow the procedures detailed below.

1. Discuss procedural guidelines and policies with Laura Rose, the Academic Administrator, (lrose@mit.edu, Rm. E40-107, x3-9303), as early in the program as possible.
2. Complete a Graduate Student Petition (available at [orc.mit.edu/academics/forms](http://orc.mit.edu/academics/forms)) using the following format:

**First Paragraph:** *"I submit my petition for an interdepartmental program leading to a Master's degree in Operations Research. I expect to be on the [choose one] February / May / September degree list in 20\_\_."*

**Subject Information:** Subject Numbers      Subject Titles      Subject Units  
(**Note: List complete subject information and any waived subjects.**)

**Thesis Area:** A short description of the thesis area with title (if known)

**Thesis Supervisor:** Name of thesis supervisor, or indicate "not known" if applicable

3. Sign petition and email it to Laura Rose. Petition will be reviewed by SM Advisor for approval.