

SUMMER 2019 ELECTIVES

READ CAREFULLY: The courses listed below are approved electives for MSFE, MSBA, MS&E, MSIE and MSOR students. Courses with an asterisk (*) are not approved for the MSFE degree. If a course of your interest is not listed, you must obtain written approval from an advisor (info@ieor.columbia.edu). Include the course title, description and syllabus in your email. Courses below 4000-level (i.e. 3000, 2000, 1000 levels) are not permissible and do not count towards the MS degree.

Industrial Engineering and Operations Research

IEOR E4721 Financial Correlations – Modeling, Trading, Risk Management and AI, Class 5/28-7/12

IEOR E4722 Modeling and Market-Making in Foreign Exchange (1.5 credits), Class 5/29-7/10 [CANCELLED]

[IEOR E4723 Alternative Investments](#) (1.5 credits), Class 6/3-7/15

[IEOR E4999 Fieldwork](#)

Business School (register via [cross-registration](#); MSE & MSBA students register via [BOSS](#))

See: [Pre-Approved List of CBS Electives](#)

Computer Science (register via SSOL; [schedule](#))

COMS S4701 Artificial Intelligence

COMS S4705 Natural Language Processing

COMS S4771 Machine Learning (may not be taken, if already completed IEOR E4525 Machine Learning)

COMS S4995 Fundamentals of Game Design

COMS S4995 Deep Learning (may not be taken, if already completed IEOR E4720 Deep Learning)

CSEE S4824 Computer Architecture

CSOR S4231 Analysis of Algorithms

Economics (register via SSOL; [schedule](#))

*ECON S4251 Industrial Organization

*ECON S4280 Corporate Finance

*ECON S4400 Labor Economics

*ECON S4415 Game Theory (may not be taken, if already completed IEOR E4407; will count as an Analysis Elective for MSE students)

*ECON S4465 Public Economics

Mathematics (register via SSOL; [schedule](#))

MATH S4061 Introduction to Modern Analysis I

MATH S4062 Introduction to Modern Analysis II

Statistics (register via SSOL; [schedule](#))

STAT S4199 Statistical Computing in SAS

STAT S4206/5206 Statistical Computing and Introduction to Data Science

STAT S4221/5221 Time Series Analysis

STAT S4241/5241 Statistical Machine Learning (may not be taken, if already completed IEOR E4525 Machine Learning or COMS 4771 Machine Learning)

STAT S4261/5261 Statistical Methods in Finance