UNIVERSITY OF CALIFORNIA AT BERKELEY

DEGREE REQUIREMENTS FOR THE MASTER OF ENGINEERING DEGREE

DEPARTMENT OF INDUSTRIAL ENGINEERING AND OPERATIONS RESEARCH

Normative Time 9 months or 2 semesters
Minimum Number of Units to Complete Degree 25 Semester Units
Minimum Number of IEOR Units 12 Semester Units (must be in 200 series and letter-graded)

All students are required to take the new M. Eng. Core Courses: IEOR 240 and IEOR 241.

Students must take two additional graduate IEOR courses. For guidance, we propose the following concentrations.

**Decision Analytics** – Provides students with a broad understanding of cutting-edge approaches to quantitative analysis and managerial decision-making applicable across a wide range of industries.

Course Requirements: IEOR 240, IEOR241, and any two of IEOR220, IEOR231, IEOR250, IEOR251, IEOR252, IEOR253, IEOR 254

**Risk Management & Finance** – Prepares students for careers in finance, energy, and other industries where risk management is critical.

Course Requirements: IEOR240, IEOR241, IEOR221 and one of IEOR222 or IEOR231

**Simulation & Modeling** – Prepares students for careers as analysts focusing on production and distribution systems, service systems, product or process design, or marketing in a wide range of industries.

Course Requirements: IEOR 240, IEOR241, IEOR231 and one of IEOR250, IEOR251, IEOR252, IEOR253, or IEOR 220

See the IEOR web site for tentative schedule of classes.

**CORE LEADERSHIP CURRICULUM UNITS**

Students must enroll in 8 Semester Units (must be in 200 series). These must consist of:

2 Semester Units – E295: Capstone Integration (taken for a letter grade)
3 Semester Units – E271: Engineering Leadership I (taken for a letter grade)
3 Semester Units – E272: Engineering Leadership II (taken for a letter grade)
OPTIONAL – Innovation Lecture Series (taken S/U)
CAPSTONE PROJECT UNITS (E296M A-B)

Students must enroll in 5 Semester Units of 296M A-B (letter graded), which can be counted towards the 25 unit total requirement. The semester enrollment restrictions for these courses are as follows:

- 2 Semester Units - Fall
- 3 Semester Units – Spring

Students are required to complete a capstone project. The project enables the student to integrate the core leadership curriculum with the concentration and gain hands-on industry experience.

MINIMUM GRADE POINT AVERAGES (GPAS)

All students are required to have a minimum overall Grade Point Average of 3.0.

MINIMUM UNITS YOU ARE REQUIRED IN ORDER TO BE REGISTERED EACH SEMESTER

Full time graduate students must enroll in at least 12 Semester units during the Fall and 13 Semester units during the Spring.

ADVANCEMENT TO CANDIDACY

Students should apply for Advancement to Candidacy at the beginning of their second semester. The form can be found on the department website.

ORAL PRESENTATION AND REPORT

An oral presentation and a written report of the capstone project are required by the end of the Spring Semester. The audience at the oral presentation can consist of the student’s IEOR Advisor, instructor(s), peers and industry partners.

Two committee members are needed for the report:

- Your IEOR Advisor
- IEOR or Outside Professor

Both members must also be members of the Berkeley Division of the Academic Senate.