Where do Industrial Engineering & Operations Research majors go?

According to the 2015 Graduating Student Survey (with a 76.7% response rate for undergraduates in the department):

- 97.2% of graduates were employed or going to graduate school.
  - 84.2% were employed
  - 13.0% had secure plans to attend grad school

Examples of organizations that have hired IEOR majors in recent years:

Graduate schools that IEOR majors have attended in recent years:

- Columbia University
- Cornell University
- École Polytechnique
- Imperial College London
- Tepper School of Business at Carnegie Mellon University
- The University of Tokyo

What can you do with a degree in IEOR?

Alumni from the department work in fields as varied as consulting, entrepreneurship, finance, logistics and supply chain management, operations and production management, systems engineering, and other business areas. This work can be in the public (government agencies, not for profit agencies, education) or private sector (banks, manufacturers, hospitals, transportation companies, consulting firms, utilities). The Operations Research program prepares graduates for professional employment as operations research analysts, as well as for graduate studies in operations research or busi-
ness. The Industrial Engineering undergraduate program provides the technical skills and intellectual discipline needed by graduates to become leaders in industrial engineering and related business professions. Use CCE’s Industry Exploration pages and the What Can I Do With This Major resource to learn more about career options.

What do employers want?

In addition to your technical skills, which might include programming, analytics software, and systems engineer tools, top skills/qualities sought by employers include:

1. Ability to work in a team structure
2. Ability to make decisions and solve problems
3. Ability to verbally communicate with persons inside and outside the organization
4. Ability to plan, organize, and prioritize work
5. Ability to obtain and process information
6. Ability to analyze quantitative data
7. Technical knowledge related to the job
8. Proficiency with computer software programs
9. Ability to create and/or edit written reports
10. Ability to sell or influence others

Source: National Association of Colleges and Employers, 2015 Job Outlook

Your major can demonstrate relevant coursework and knowledge to a prospective employer, but your studies aren’t the only aspect of your experience that employers are evaluating. They select people who they believe can do the job (have the right skills), want the job (have demonstrated an interest in the field) and are a personality fit for the team and organization.

What value do IEOR majors bring?

The curriculum helps you to develop the ability to do the following, including:

- Apply knowledge of mathematics, science, and engineering.
- Design and conduct experiments, as well as to analyze and interpret data.
- Assess practical situations and academic problems, formulate models of the problems represented or embedded therein, design potential solutions, and evaluate their impact.
- Design a system, component, or process to meet desired needs within realistic constraints.
- Function on multidisciplinary teams.
- Communicate solutions and recommendations effectively through written, oral, and electronic presentations.
- Identify, formulate, and solve engineering problems.
- Understand the historical development of industrial engineering tools and techniques, the contemporary state of the art, and the need for lifelong learning within their profession.
- Use the techniques, skills, and modern engineering tools necessary for engineering practice.
- Understand ethical issues and professional and managerial responsibilities.

What if I’m an International Student?

For international students at Columbia under student visas, selecting your major can play a significant role if you plan to work in the US after completion of your degree. STEM (Science, Technology, Engineering, Mathematics) students can receive a 24-month extension of optional practical training after the initial period of authorized post-completion OPT. Students with questions about this should visit the International Student & Scholars Office (ISSO), view ISSO's Work Opportunities for Students in F-1 Status site (columbia.edu/cu/isson/visa/F-1/index.html) and view CCE’s International Students webpage at careereducation.columbia.edu/students/International-Students.