Where do Earth & Environmental majors go?

According to the 2014 Graduating Student Survey (with a 84.6% response rate for undergraduates in the department):

- 81.8% of graduates are employed or going to graduate school.
  - 72.2% were employed
  - 9.1% had secure plans to attend graduate school

Examples of organizations that have hired Earth & Environmental Engineering majors in recent years:

Graduate schools that Earth & Environmental Engineering majors have attended in recent years:

- University of Pennsylvania
- Columbia University
- The Pennsylvania State University

What can you do with a degree in Earth & Environmental Engineering?

Earth and environmental engineers contribute to global efforts towards sustainable development by creating new and improved technologies. Major areas where these engineers work include air pollution control, industrial hygiene, radiation protection, hazardous waste management, toxic materials control, water supply, wastewater management, storm water management, solid waste disposal, public health, utilities, energy, oil/gas, and land management. Organizations that recruit at Columbia include AECOM, CH2M Hill, Con Edison, Environmental Protection Agency, Hatch, Mott MacDonald, Hazen & Sawyer, Langan Engineering & Environmental Services, NYC Department of Environmental Protection, Parsons, and Stantec Consulting Services. Use CCE’s Engineering Industry pages to learn more about career options.
What do employers want?

In addition to your technical skills, which might include ArcGIS Desktop, OSCREEN, Cantera, Gaseq, Groundwater Modeling System (GMS), Hec-GeoHMS, Hec-HMS, Interactive Groundwater (IGW), MATLAB, Storm Water Management Model (SWMM), and WaterCAD, 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 Earth & Environmental Engineering majors bring?

According to Earth & Environmental Engineering Department at Columbia, the curriculum helps you to develop the ability to do the following, including:

- Design/conduct experiments and analyze/interpret data.
- Design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health, and safety, manufacturability, and sustainability.
- Function on multidisciplinary teams and communicate effectively.
- Identify, formulate, and solve engineering problems.
- Understand the impact of engineering solutions in a global, economic, environmental, and societal context.

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 17-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/ isso/visa/F-1/index.html) and view CCE’s International Students webpage at careereducation.columbia.edu/students/International-Students.