# **Employer Survey Results, Summer 2007**

Successful responses: 6

## Question 1: How effectively did the program prepare the graduate for the job?

- 1. Generally very positive across the spectrum of graduates.
- 2. Across all 4 MSU graduates employed in this company, technical skills are superior to other schools. A suggested area for improvement is in written communication.
- 3. Responder found it difficult to assess this because the graduate is performing duties in a narrow field as an instrument and controls engineer. *Possible improvements in technical drafting of Piping and Instrumentation diagrams and Process flow diagrams.*
- 4. The program prepared graduate very effectively/very well.
- 5. The graduate came in with the necessary tools skills to solve problems.
- 6. The responder gives the program the highest rating possible.

## Question 2: How well prepared are our graduates to perform basic chemical engineering skills?

- 1. Across the spectrum of MSU graduates, they are well prepared.
- 2. The preparation is outstanding. Graduates are also skilled in non-traditional areas more aligned with nuclear engineering.
- 3. Graduates are well prepared and strong in fluid dynamics, heat transfer, mass transfer. Good background in process controls- well versed to ask the right questions.
- 4. The fundamental areas mentioned support the graduate's job very well.
- 5. Traditional chemical engineering skills are not applied in this position. However, knowledge of hazardous waste and disposal of waste is extraordinary and exceptional.
- 6. The responder believes the graduates are "perfect" and is very happy with skills in process work and environmental problem solving.

#### Question 3: How well prepared are our graduates to solve engineering problems.

- 1. Very well prepared. They were especially adept at "Project Engineering and Management" including defining the project and executing independent action.
- 2. Their level of preparation is above average. One graduate with a background in microbial induced corrosion was tasked with piping design which required ASME code familiarity. A suggested area for improvement involved further training in technical drafting packages that mechanical engineers are more familiar with.
- 3. MSU graduates are equal to graduates of other institutions. Summer work experience and internship experience account for a lot. A strength of graduates is the ability to "ferret" out information when data is not well organized.
- 4. Very well prepared. The graduate is solving high tech engineering problems- designed, built and tested an experimental system to test rock/porous media cores under high pressure and temperature for supercritical CO2 extraction.

- 5. The graduate was very well prepared. He had a fundamental understanding of problems, approaches and solutions. He prepared solutions for mixed waste as a result of agents introduced into rad. processes.
- 6. Graduates are very well prepared and the responder gives the highest rating possible. Their skills are well above regulatory standard. Graduates get a very good reception from clients and in fact, agencies have called back to ask where the engineering designers went to school.

## Question 4: How do our graduates function on multi-disciplinary teams?

- The graduates are generally well prepared. They function in an environment that requires
  collaboration of chemical, mechanical, environmental engineers and attorneys. Although
  graduates do not have a legal background they are flexible enough to understand political
  realities of this multi-disciplinary environment.
- Graduates are great process engineers who are flexible enough to bridge gaps when other team members need it. All graduates employed in this company are proactive and take leadership roles when required.
- 3. Graduates are very well prepared. Their work involves interaction of process engineers, equipment technicians and operational engineers.
- 4. Graduates are very well prepared for functioning in a team of engineers (chemical/civil) microbiologists and geochemists. Graduate has effectively learnt skills from each discipline.
- 5. Graduate's performance was outstanding in an environment that involves chemical, mechanical, structural and radiation/nuclear engineers.
- 6. Graduates perform very well multi-disciplinary teams that include geologists, chemical/civil engineers, hydrologists, geochemists. It is a necessity for a small firm where people need to be cross-trained.

#### Question 5: How well prepared are our graduates to function in an ethical and professional manner?

- There are no serious concerns about graduates from an ethical and professional sense. A
  previous CEO implemented a statement of corporate ethics which the graduate agreed to by
  signing.
- 2. Graduates are above average. The responder feels that all engineering graduates could use more equal opportunity training because they appear to be unaware of rules.
- 3. Graduates are adequately prepared- responder has not witnessed any shortcomings. Graduates take their work seriously and are eager to learn.
- 4. Graduates are extremely well prepared. This graduate's degree of honestly and integrity to work is exemplary.
- 5. Graduates are well prepared to practice in a workplace that has high standards.
- 6. Graduates are very ethical and aware of roles and responsibilities. The responder believes graduates go well beyond the regulatory standard eg. The company received a "closure letter" for cleanup and graduates voluntarily went out to gather more data and samples despite the fact that it was not necessary.

#### Question 6: How sensitive are graduates to global and societal issues?

- 1. They understand issues well. All are skeptical about non-scientific assumptions that are being made by current political establishment regarding global warming. All are aware of the impacts upon their company.
- 2. Difficult to assess because graduates appear to be apolitical- especially concerning foreign politics.
- 3. Responder has not had the opportunity to observe fully but graduates appear to pay attention to environmental aspects.
- 4. Graduates are very sensitive especially with regard to environmental issues such as CO2 sequestration.
- 5. Graduates are sensitive to global and societal issues and tend to think on large scales with grand solutions.
- 6. Graduates are very sensitive to global and societal issue especially with political awareness and recycling.

## Question 7: How interested are graduates in sustaining their careers through lifetime learning?

- Across the spectrum of graduates they are oriented on career development and keep up technically. They are quick to avail themselves of development opportunities offered by the company.
- 2. Graduates are absolutely outstanding. They are constantly submitting technical training requests, seminar, conference and textbook requests.
- 3. Graduates are very interested. Most graduates realize that techniques for solving problems are dynamic.
- 4. Graduates are "very much" interested and are involved in workshops, teaching in classroom, independent learning.
- 5. Graduate is pursuing PE in chemical engineering and takes classes offered at workplace. Independent learning is a priority for this graduate.
- 6. Graduates are very interested and many enroll in Masters degrees at the University of Alaska.