**2021 Alumni Survey:
Chemical Engineering Program**
NCSU’s Chemical Engineering (ChE) program would like your feedback on its Program Educational Objectives (PEOs). PEOs are defined as what graduates of the ChE program are expected to achieve within five years of graduation. With this in mind, the ChE program expects its graduates to achieve one or more of the following within five years of graduation: Excel in engineering practices and/or entrepreneurship in various industries, including petrochemical, biochemical, pharmaceutical, fine chemical, environmental, semi-conductor, pulp and paper, advanced materials, and health care industries. Advance professionally in positions of increasing leadership responsibilities in their chosen career fields. Earn an advanced degree or certification leading to a career in academia, law, medicine, or research and development. Exhibit professionalism, a habit of continual learning, interest in contemporary issues of importance to society, appreciation of the impact of engineering development in society, and ethical responsibility–particularly in the context of environmental protection, process/product safety, financial accountability, and community well-being.

CHE1 **1. First, how important do you think it is that ChE students achieve each of these individual objectives within five years of graduating?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Very important (4) | Somewhat important (3) | Not very important (2) | Not at all important (1) |
| 1. Excel in engineering practices and/or entrepreneurship in various industries, including petrochemical, biochemical, pharmaceutical, fine chemical, environmental, semi-conductor, pulp and paper, advanced materials, and health care industries (1)  |  |  |  |  |
| 2. Advance professionally in positions of increasing leadership responsibilities in their chosen career fields (2)  |  |  |  |  |
| 3. Earn an advanced degree or certification leading to a career in academia, law, medicine, or research and development (3)  |  |  |  |  |
| 4. Exhibit professionalism, a habit of continual learning, interest in contemporary issues of importance to society, appreciation of the impact of engineering development in society, and ethical responsibility–particularly in the context of environmental protection, process/product safety, financial accountability, and community well-being (4)  |  |  |  |  |

CHE2 **2. How well do you think the ChE program prepared you to achieve each of these individual objectives?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Very well (4) | Somewhat well (3) | Not very well (2) | Not at all well (1) |
| 1. Excel in engineering practices and/or entrepreneurship in various industries, including petrochemical, biochemical, pharmaceutical, fine chemical, environmental, semi-conductor, pulp and paper, advanced materials, and health care industries (1)  |  |  |  |  |
| 2. Advance professionally in positions of increasing leadership responsibilities in their chosen career fields (2)  |  |  |  |  |
| 3. Earn an advanced degree or certification leading to a career in academia, law, medicine, or research and development (3)  |  |  |  |  |
| 4. Exhibit professionalism, a habit of continual learning, interest in contemporary issues of importance to society, appreciation of the impact of engineering development in society, and ethical responsibility–particularly in the context of environmental protection, process/product safety, financial accountability, and community well-being (4)  |  |  |  |  |

CHE3 **3. To what extent would you say you personally have achieved or are likely to have achieved these objectives within five years of receiving your undergraduate degree?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Completely (4) | Some-what (3) | A little (2) | Not at all (1) |
| 1. Excel in engineering practices and/or entrepreneurship in various industries, including petrochemical, biochemical, pharmaceutical, fine chemical, environmental, semi-conductor, pulp and paper, advanced materials, and health care industries (1)  |  |  |  |  |
| 2. Advance professionally in positions of increasing leadership responsibilities in their chosen career fields (2)  |  |  |  |  |
| 3. Earn an advanced degree or certification leading to a career in academia, law, medicine, or research and development (3)  |  |  |  |  |
| 4. Exhibit professionalism, a habit of continual learning, interest in contemporary issues of importance to society, appreciation of the impact of engineering development in society, and ethical responsibility–particularly in the context of environmental protection, process/product safety, financial accountability, and community well-being (4)  |  |  |  |  |

CHE4 **4. Please think about the objectives exactly as they are worded. How clear do you think they are in what is expected of students graduating with a major in ChE?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Very clear (4) | Somewhat clear (3) | Not very clear (2) | Not at all clear (1) |
| 1. Excel in engineering practices and/or entrepreneurship in various industries, including petrochemical, biochemical, pharmaceutical, fine chemical, environmental, semi-conductor, pulp and paper, advanced materials, and health care industries (1)  |  |  |  |  |
| 2. Advance professionally in positions of increasing leadership responsibilities in their chosen career fields (2)  |  |  |  |  |
| 3. Earn an advanced degree or certification leading to a career in academia, law, medicine, or research and development (3)  |  |  |  |  |
| 4. Exhibit professionalism, a habit of continual learning, interest in contemporary issues of importance to society, appreciation of the impact of engineering development in society, and ethical responsibility–particularly in the context of environmental protection, process/product safety, financial accountability, and community well-being (4)  |  |  |  |  |

CHE5 **5. How appropriate do you think it is for the ChE program to have these specific objectives for their undergraduate students?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Very appropriate (4) | Somewhat appropriate (3) | Not very appropriate (2) | Not at all appropriate (1) |
| 1. Excel in engineering practices and/or entrepreneurship in various industries, including petrochemical, biochemical, pharmaceutical, fine chemical, environmental, semi-conductor, pulp and paper, advanced materials, and health care industries (1)  |  |  |  |  |
| 2. Advance professionally in positions of increasing leadership responsibilities in their chosen career fields (2)  |  |  |  |  |
| 3. Earn an advanced degree or certification leading to a career in academia, law, medicine, or research and development (3)  |  |  |  |  |

CHE5 **5. How appropriate do you think it is for the ChE program to have these specific objectives for their undergraduate students?** **(continued)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Very appropriate (4) | Somewhat appropriate (3) | Not very appropriate (2) | Not at all appropriate (1) |
| 4. Exhibit professionalism, a habit of continual learning, interest in contemporary issues of importance to society, appreciation of the impact of engineering development in society, and ethical responsibility–particularly in the context of environmental protection, process/product safety, financial accountability, and community well-being (4)  |  |  |  |  |

CHE6a **6a. Please carefully read each objective. What, if any, suggestions do you have for changes to the objective? What revisions would you make? What’s missing? What could be dropped?**
   **Excel in engineering practices and/or entrepreneurship in various industries, including petrochemical, biochemical, pharmaceutical, fine chemical, environmental, semi-conductor, pulp and paper, advanced materials, and health care industries.**

CHE6b **6b. Advance professionally in positions of increasing leadership responsibilities in their chosen career fields.**

CHE6c **6c. Earn an advanced degree or certification leading to a career in academia, law, medicine, or research and development.**

CHE6d **6d. Exhibit professionalism, a habit of continual learning, interest in contemporary issues of importance to society, appreciation of the impact of engineering development in society, and ethical responsibility–particularly in the context of environmental protection, process/product safety, financial accountability, and community well-being.**

CHE7 7. **Finally, think about the objectives as a whole. Is there something you feel ChE program graduates should achieve within five years of graduation that is not included among the objectives? Please describe as thoroughly as possible.**
 Excel in engineering practices and/or entrepreneurship in various industries, including petrochemical, biochemical, pharmaceutical, fine chemical, environmental, semi-conductor, pulp and paper, advanced materials, and health care industries. Advance professionally in positions of increasing leadership responsibilities in their chosen career fields. Earn an advanced degree or certification leading to a career in academia, law, medicine, or research and development. Exhibit professionalism, a habit of continual learning, interest in contemporary issues of importance to society, appreciation of the impact of engineering development in society, and ethical responsibility–particularly in the context of environmental protection, process/product safety, financial accountability, and community well-being.