AY2020 Chemical Engineering Program Exit Survey

Name: Brandon Anderson Date: 5/21/20

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☑
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☑
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☑
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☑
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☑
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☑
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☑
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☑

AY2020 Chemical Engineering Program Exit Survey

Name: Brandon Anderson Date: 5/21/20

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Separations

What was your least favorite course in the program? What would you change about it?

Controls, Nothing it was just hard

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

I liked the engineering managment program

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Anything is possible

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I don't have a master plan, my only wish is to be content.

AY2020 Chemical Engineering Program Exit Survey

Name: Robert Anderson Date: 5/22/2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	X	☐	☐	☐	☐
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	X	☐	☐	☐	☐
· Communicate effectively with a range of audiences.	X	☐	☐	☐	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	X	☐	☐	☐	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	X	☐	☐	☐	☐
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	X	☐	☐	☐
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	X	☐	☐	☐
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	X	☐	☐	☐	☐

AY2020 Chemical Engineering Program Exit Survey

Name:_____ Date:_____

Part II. Open questions.

What was your favorite course in the chemical engineering program? My favorite course was Process Control.

What was your least favorite course in the program? What would you change about it? My least favorite course was Reaction Engineering.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

I highly enjoyed all interactions with the faculty, and cadets outside of the classroom.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

I would not return to West Point under any circumstances, unless they wanted me to be the superintendant.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I plan on leaving the army after eight years, working in the private sector as an explosive arms manufacturer.

Biaglow, Andrew Dr.

From: Anderson, Robert B CDT 2020
Sent: Wednesday, May 27, 2020 11:10 AM
To: Biaglow, Andrew Dr.
Subject: Re: Reminder: Chemical Engineering Program Exit Survey

Dr. Biaglow,

That was a definite mistake! I meant the other way, so an inverted scale is what I would need. I must have not read the scale correctly I apologize.

v/R,

2LT Anderson

Get Outlook for iOS

From: Biaglow, Andrew Dr. <andrew.biaglow@westpoint.edu>
Sent: Wednesday, May 27, 2020 9:34:25 AM
To: Anderson, Robert B CDT 2020 <robert.anderson@westpoint.edu>
Subject: RE: Reminder: Chemical Engineering Program Exit Survey

2LT Anderson,

I am reviewing your responses to the program exit survey and they are all very low. That is, you checked "strongly disagree" for 6/8 outcomes and "disagree" for the other 2. I thought I should check this with you to confirm. If this was a mistake and you misread the survey, can you please write me to confirm your intent? You do not need to re-do the survey. I will just invert the scale. If these responses are correct, can you also please confirm that? Your responses will have more impact.

Thank you,
Dr. Biaglow

From: Anderson, Robert B CDT 2020 <robert.anderson@westpoint.edu>
Sent: Friday, May 22, 2020 7:34 PM
To: Biaglow, Andrew Dr. <andrew.biaglow@westpoint.edu>
Subject: RE: Reminder: Chemical Engineering Program Exit Survey

Dr. Biaglow,

Here is my ABET response sheet!

v/R,

CDT Robert Anderson

From: Biaglow, Andrew Dr. <andrew.biaglow@westpoint.edu>
Sent: Friday, May 22, 2020 7:35 AM
To: Anderson, Robert B CDT 2020 <robert.anderson@westpoint.edu>; Anderson, Ryan M CDT 2020

<ryan.anderson@westpoint.edu>; Berry, Arthur E CDT 2020 <arthur.berry@westpoint.edu>; Clark, Michael T CDT 2020 <michael.clark2@westpoint.edu>; Dibiase, Matthew A CDT 2020 <matthew.dibiase@westpoint.edu>; Duffy, Brigit A CDT 2020 <brigit.duffy@westpoint.edu>; Garwick, Kyle E CDT 2020 <kyle.garwick@westpoint.edu>; Gouin, Christopher M CDT 2020 <christopher.gouin@westpoint.edu>; Holeman, John F CDT 2020 <john.holeman@westpoint.edu>; Lee, Seungchul CDT 2020 <seungchul.lee@westpoint.edu>; Madsen, Sawyer J CDT 2020 <sawyer.madsen@westpoint.edu>; Manweiler, Jacob W CDT 2020 <jacob.manweiler@westpoint.edu>; Moore, Devon M CDT 2020 <devon.moore@westpoint.edu>; Queen, Adaya D CDT 2020 <adaya.queen@westpoint.edu>; Romero, Aaron N CDT 2020 <aaron.romero@westpoint.edu>; Thornton, Alajia R CDT 2020 <alajia.thornton@westpoint.edu>; Walker, Kimi S CDT 2020 <kimi.walker@westpoint.edu>
Subject: Reminder: Chemical Engineering Program Exit Survey

Hello,

I sent you a program exit survey on Tuesday. I am writing to you because I have not heard back from you. Your help on this is important and would also be appreciated. The response rate is important to our ABET accreditation effort. Please take a few minutes and complete the survey and email it back to me as soon as possible.

Dr. Biaglow

From: Biaglow, Andrew Dr.
Sent: Tuesday, May 19, 2020 10:22 AM
To: Anderson, Brandon A CDT 2020 <brandon.anderson@westpoint.edu>; Anderson, Robert B CDT 2020 <robert.anderson@westpoint.edu>; Anderson, Ryan M CDT 2020 <ryan.anderson@westpoint.edu>; Berry, Arthur E CDT 2020 <arthur.berry@westpoint.edu>; Boylston, Payton A CDT 2020 <payton.boylston@westpoint.edu>; Clark, Michael T CDT 2020 <michael.clark2@westpoint.edu>; Dibiase, Matthew A CDT 2020 <matthew.dibiase@westpoint.edu>; Duffy, Brigit A CDT 2020 <brigit.duffy@westpoint.edu>; Fung, Jason CDT 2020 <jason.fung@westpoint.edu>; Garwick, Kyle E CDT 2020 <kyle.garwick@westpoint.edu>; Gascoigne, Thomas R CDT 2020 <thomas.gascoigne@westpoint.edu>; Gohil, Jayrajsinh K CDT 2020 <jayrajsinh.gohil@westpoint.edu>; Gouin, Christopher M CDT 2020 <christopher.gouin@westpoint.edu>; Hamilton, Alexander J CDT 2020 <alexander.hamilton@westpoint.edu>; Holeman, John F CDT 2020 <john.holeman@westpoint.edu>; Lee, Seungchul CDT 2020 <seungchul.lee@westpoint.edu>; Losch, Anchor R CDT 2020 <anchor.losch@westpoint.edu>; Madsen, Sawyer J CDT 2020 <sawyer.madsen@westpoint.edu>; Manweiler, Jacob W CDT 2020 <jacob.manweiler@westpoint.edu>; Marbach, Delaney A CDT 2020 <delaney.marbach@westpoint.edu>; Milanesa, Gabrielle M CDT 2020 <gabrielle.milanesa@westpoint.edu>; Moore, Devon M CDT 2020 <devon.moore@westpoint.edu>; Queen, Adaya D CDT 2020 <adaya.queen@westpoint.edu>; Romero, Aaron N CDT 2020 <aaron.romero@westpoint.edu>; Stephen, John A CDT 2020 <john.stephen@westpoint.edu>; Thornton, Alajia R CDT 2020 <alajia.thornton@westpoint.edu>; Tussing, Joseph T CDT 2020 <joseph.tussing@westpoint.edu>; Wagner, Ramsey R CDT 2020 <ramsey.wagner@westpoint.edu>; Walker, Kimi S CDT 2020 <kimi.walker@westpoint.edu>
Subject: Chemical Engineering Program Exit Survey

Hello,

I know I have asked you to complete a lot of surveys, but I need your help with one more. The attached survey is the chemical engineering program exit survey. The survey results are used to help prepare for our ABET visit in the fall and to identify areas where we can improve the program. Your input is greatly valued. If you could please take a few minutes and complete this survey for me, I would greatly appreciate that. Can you please complete and return the survey to me by Thursday 21 May?

Thank you,
Dr. Biaglow

AY2020 Chemical Engineering Program Exit Survey

Name: Ryan Anderson Date: 05/26/2

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☒	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☒	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name:_____ Date:_____

Part II. Open questions.

What was your favorite course in the chemical engineering program?
Heat and Mass Transfer

What was your least favorite course in the program? What would you change about it?
MC312, get rid of it or have the Chemical Engineering program teach it.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)
The Chemical Engineering faculty was extremely talented and made the experience enjoyable.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?
I might be interested. I would like to be contacted.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?
I plan on leaving after company command or once I start a family. I would either do something with business or chemical engineering depending on what I am interested in at the time.

AY2020 Chemical Engineering Program Exit Survey

Name: Payton Boylston1 Date: 5.19.20

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☒	☐
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Payton Boylston Date:_____

Part II. Open questions.

What was your favorite course in the chemical engineering program?
mass and energy balances, chemical reaction engineering,

What was your least favorite course in the program? What would you change about it?
CH402 - I would have much preferred to choose my own capstone project that I could invest more interest in.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)
The AIADs were a good chance to see how a professional lab is run. However, I think we should have other

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?
Possibly, I don't want to close any doors. Who knows what I will want in 5 years

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?
I will probably stay in the army for at least 10 years. After that I will likely look into doing something with project management in some area that might put my chemical engineering degree to use (food industry?)

AY2020 Chemical Engineering Program Exit Survey

Name: Michael Clark Date: 5/22/20

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Michael Clark Date: 5/22

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Chemical Engineering Laboratory

What was your least favorite course in the program? What would you change about it?

Heat and Mass Transfer. At no fault of the the instructor the course lessons are very theoretical and difficult to conceptualize.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

The faculty in the ChemE Dept. are ALL about the success of cadets. I had a very demanding schedule with sports and instructors were always willing to conduct AI at a moments notice. I really appreciated their willingness to be available to us and connect with us on a personal, yet professional level.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes, please keep my contact information.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

Not sure how long I will stay in; however, I would like to work as a program manager and eventually lead in executive level positions.

AY2020 Chemical Engineering Program Exit Survey

Name: Matt DiBiase Date: 23 MAY 2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Matt DiBiase Date: 23 MAY 2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

CH402

What was your least favorite course in the program? What would you change about it?

MC300- I would replace it with a class to enhance students' programming skills

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

The research opportunities and mentors at west point

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes, this could be something I am interested in.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I am not certain. I see myself pursuing an MBA or Law degree.

AY2020 Chemical Engineering Program Exit Survey

Name: Brigit Duffy Date: 05/22/2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☒	☐
· Communicate effectively with a range of audiences.	☐	☐	☐	☒	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☒	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☒	☐
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☒	☐
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☒	☐

AY2020 Chemical Engineering Program Exit Survey

Name: Brigit Duffy Date: 05/22/2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

My favorite class was process dynamics and controls.

What was your least favorite course in the program? What would you change about it?

I really enjoyed all of the courses in my major, but if I had to pick a least favorite it would be the chemistry classes (CH101/102 and Organic Chem). For CH101/102 I found the Moog textbook and the teaching style surrounding that was very hard to work with. Additionally, this doesn't pertain to the courses in the department, but I did not enjoy taking electives outside of the major, it would have been nice to have some electives offered within Chemical Engineering.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

I really enjoyed my research experience. In the lab, I was able to learn more details about one aspect of chemical engineering, so I appreciated that opportunity. Beyond developing more knowledge, I really enjoyed the mentorship that came with research and the mentorship of the rest of the Chemical Engineering faculty.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

I would be interested in returning to teach and I would love if you contacted me.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

At this point, I am not sure if I plan to leave or make the Army a career. If I do leave, I am not entirely sure on a desired profession, but I would definitely like to further my education and go to grad school.

AY2020 Chemical Engineering Program Exit Survey

Name: Jason Fung Date: 19 May 2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☒	☐
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☒	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Jason Fung Date: 19 May 2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Mass and Energy Balance

What was your least favorite course in the program? What would you change about it?

The MC300 was unnecessary. We didn't really need that course.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

More class trips to see chemical engineering in action like the trip to the oil refinery.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

I would be interested in returning to West Point as an instructor if I am still in the Army. I would like to be contacted.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I will stay in as long as I can possibly stay, but if not then I would pursue a profession in business.

AY2020 Chemical Engineering Program Exit Survey

Name: Kyle Garwick Date: 22MAY20

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☒	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☒	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☒	☐
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Kyle Garwick Date: 22MAY20

Part II. Open questions.

What was your favorite course in the chemical engineering program?

CH367 - Chemical Engineering Process Control was my favorite course in the program.

What was your least favorite course in the program? What would you change about it?

MC312 - Thermal Fluid Dynamics II was my least favorite class. It functions more as a lab based and writing oriented class as a SWE which we could complete with CH459. Only half of all lessons involve learning new course or engineering related material. I would remove it from the curriculum and replace it with a CH-3XX class like the program did with CH367.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

All of the faculty in the Chemical Engineering program were extremely cadet focused and went out of their way to develop you both in and out of the classroom.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes, I am very interested in coming back to the Academy to teach for either C&LS or the Math department. I believe I have a solid grasp on the dichotomy between BTD and Academics in the daily lives of CDTs after serving as a Company CO and Battalion XO. Please contact me if this is a possibility.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I plan on evaluating the decision to stay in the Army at the 8-10 year mark dependent on opportunities that arise as a CPT. If I choose to leave the Army I would likely seek a job in either the petroleum or pharmaceutical industries.

AY2020 Chemical Engineering Program Exit Survey

Name: Gascoigne, Thomas Date: 5/19/20

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☒	☐
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☒	☐	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Gascoigne, Thomas Date: 5/19

Part II. Open questions.

What was your favorite course in the chemical engineering program?

CH362

What was your least favorite course in the program? What would you change about it?

CH459 - All the work is very doable, however it needs to be worth more credits to coincide with the work required.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

The AIADs at ARL are good enrichment to the academic material.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Possibly. Yes.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

No

AY2020 Chemical Engineering Program Exit Survey

Name: Jayrajsinh K Gohil Date: 19MAY2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☒	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Jayrajsinh K Gohil Date: 19MAY2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Organic Chemistry

What was your least favorite course in the program? What would you change about it?

MC312. This course required way more time than the allocated out of class ratio. Additionally, the course was more focused on the mechanical engineering curriculum. Instead I would recommend combining at MC311 and MC312 or provide a separate Thermo and Fluid ChemE class.

Also, the AIAD to ARL was not particularly fun or very educational. Two to three weeks is not enough time to fully dive into a project. Although my mentors did the best they did to give me a project and teach me, I did a lot more waiting than actual experimentation.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

My ChemE peers and faculty/staff have been the greatest part of this program. The instructors are by far the best at the school. There is nothing they wouldn't do for their students. The peer group is also incredible close and makes for a greater experience.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

If I am still in the Army, I may be interested in returning as an instructor.
If that is the case, I would like the department to contact me.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

Yes, I plan on leaving the Army after my service obligation.
I want to be an inventor/entrepreneur.

AY2020 Chemical Engineering Program Exit Survey

Name: Christopher Gouin Date: 22MAY20

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☒	☐
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☒	☐
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☒	☐

AY2020 Chemical Engineering Program Exit Survey

Name: Christopher Gouin Date: 22MAY20

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Process Controls taught by LTC James

What was your least favorite course in the program? What would you change about it?

My least favorite course was Heat and Mass Transfer. We spent most of our classroom time deriving equations rather than understanding the components of heat transfer and being able to apply them to different scenarios. I recommend borrowing some tactics from ME480, CME's version of this course.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

I have said this throughout my time at USMA, ChemE has the best faculty by far. I have been exposed to many other departments as a ChemE, but I have yet to see one with the strong cadet-faculty relationships found in CLS.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

No

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

No, I plan on pursuing a slot as an Army Astronaut.

AY2020 Chemical Engineering Program Exit Survey

Name: Alex Hamilton Date: 5.19.2(

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Alex Hamilton Date: 5.19.2(

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Separations- The course content was full of valuable information and the capstone project was arguably the first opportunity to apply what we had learned to Chemical Engineering. This was the Crude Oil Refinement Capstone for which my group completed a refinement process for ExxonMobil's Aasgard Blend.

What was your least favorite course in the program? What would you change about it?

Reactions- I believe this class had a large workload that did not yield very many points. Problem sets would take so long that it made the 35 point allotment for some of them seem unfair. I think I would just make the problems sets worth more points to accurately account for the time spent on them.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

I had great experiences with 2 AIADs through the department. One at Southern Polymer in Georgia and another at Picatinny Arsenal in New Jersey. Both were well carried out and provided further insight into chemical engineering as well as the business side of marketing engineering product.,

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

The thing I like about our department is the effort put into and the opportunities afforded by the research program. I am happy to have researched with the department for over 2 and a half years and would love the opportunity to come back and expand the research program as well as teach and develop future Army officers. Feel free to contact me with any teaching propositions.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I am definitely interested in exploring my options, but have not made a concrete decision as of now. I would probably aim for something that incorporates chemical engineering and possibly a management job.

AY2020 Chemical Engineering Program Exit Survey

Name: Holeman, John, x02598 Date: 19 MAY 2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☒	☐
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☒	☐
· Communicate effectively with a range of audiences.	☐	☐	☒	☐	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☒	☐	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☒	☐
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☒	☐	☐
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☒	☐	☐
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☒	☐	☐

AY2020 Chemical Engineering Program Exit Survey

Name: Holeman, John, x02598 Date: 19 MAY 2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Separations, I truly felt I was given the opportunity to master some of the concepts in this course rather than rushing through them.

What was your least favorite course in the program? What would you change about it?

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

Independant research was very enjoyable, especially when getting to sit down with faculty and dicuss topics in greater depth

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

No, thank you.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I would like to become a patent attorney, starting an intellectual law program shortly after my obligation is done.

AY2020 Chemical Engineering Program Exit Survey

Name: LOSCH, ANCHOR Date: 19MAY2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☒	☐
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☒	☐
· Communicate effectively with a range of audiences.	☐	☐	☐	☒	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☒	☐	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☒	☐	☐
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☒	☐
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☒	☐
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☒	☐

AY2020 Chemical Engineering Program Exit Survey

Name: LOSCH, ANCHOR Date: 19MAY2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

CH364 - CHEMICAL REACTIONS ENGINEERING
This course was awesome.

What was your least favorite course in the program? What would you change about it?

CH400, CH459, OR CH485
CH400 - Some students didn't even have to take this class; it was weird.
CH459 - This should be worth more credit hours; the labs were long and tedious, and frankly we didn't learn much of anything.
CH485 - This class is ROUGH. Maybe we should pair up with CME and take their class.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

Research - 10/10, research is incredible. I don't think that I would be where I am today without the research opportunities this provided.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes, I am interested in returning as an instructor.
Yes, I would like to be contacted.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I don't currently plan on having a full Army career. I would like to move into governance related to water policy, working for World Resources Institute, the State Department, or maybe even the United Nations.

AY2020 Chemical Engineering Program Exit Survey

Name: Sawyer Madsen Date: 5/22/20

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☒	☐
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☒	☐

AY2020 Chemical Engineering Program Exit Survey

Name: Sawyer Madsen Date: 5/22/20

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Either CH362 or CH450

What was your least favorite course in the program? What would you change about it?

CH364. It felt like too many learning objectives were crammed into the 40 lessons of class-time. We were not given nearly enough time for practice and reflection on new content because of the large workload.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

I greatly enjoyed and appreciated faculty and cadet interactions outside the classroom. The program is small, which makes a more tight-knit group of individuals

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

If I am still in the Army (which I doubt), I would love to return to West Point as an instructor. I would like you to contact me.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I am currently keeping an open mind, but for the sake of starting a family and raising kids, I do not believe I will stay in the Army. I am unsure about a desired profession, but I would like to work for a DoD contractor such as Lockheed-Martin, or Raytheon. In all honesty, I pursued a degree in Chemical Engineering to open up options for career opportunities and I have never had one profession in mind.

AY2020 Chemical Engineering Program Exit Survey

Name: Delaney Marbach Date: 05/21/2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☒	☐
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☒	☐
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☒	☐

AY2020 Chemical Engineering Program Exit Survey

Name: Delaney Marbach Date: 05/21/2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Process Controls and Dynamics

What was your least favorite course in the program? What would you change about it?

Heat and Mass Transfer; It would be beneficial to take this closer to Engineering Math because most people forgot the math behind each concept. We struggled to relearn the math and apply it at the same time.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

Research; My individual research was one of the most impactful parts of my academic experience and it set me up for success. It also introduced me to different aspect of chemical engineering that is less 'process' focused and more research focused.
Cadet and faculty interaction also had a huge impact. This is one of the tightest groups of individuals and caring group of instructors.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes, I would be interested in returning. I would like to be contacted.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I am unsure of my desired profession as of now; however, I am interested in potentially opening a brewery at some point or researching in thermal sensor drones for search and rescue (or something like this, using chemical engineering knowledge to develop better search and rescue equipment).

AY2020 Chemical Engineering Program Exit Survey

Name: Ellie Milanesa Date: 19May2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Ellie Milanesa Date: 19May2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

I really enjoyed MC311 and MC312.

What was your least favorite course in the program? What would you change about it?

CH402. I would make the instruction more geared toward teaching the content so that the students understand it better and know how to do the problems on their own rather than doing the problems for them and not having them fully understand how it happened and having to teach themselves how it is done on their own time later. As much as walking through examples is helpful, its not as beneficial when the solution is done so fast that I can barely keep up and do not have time to fully understand what happened or why.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

I loved research. Dr. Nagelli was a fantastic advisor and mentor. I learned a lot from him both academically and personally. I also loved the AIAD opportunities. I was able to go work at Sandia National labs for a couple of weeks, which was a very eye opening experience.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes. I would love to be considered. I absolutely loved my time here at West Point and would appreciate an opportunity to give back to the institution that did so much for me by teaching, mentoring, and developing the next generation of the long gray line.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

As of now, I would like to stay in the Army as long as possible (20+ years).

AY2020 Chemical Engineering Program Exit Survey

Name: Adaya Queen Date: May 22,2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☒	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☒	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☒	☐
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☒	☐

AY2020 Chemical Engineering Program Exit Survey

Name: Adaya Queen Date: May 22,2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

CH459 and CH402

What was your least favorite course in the program? What would you change about it?

CH485. I would change the structure of the course to include complete examples to reference and provide explanations for solutions and methods.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

I enjoyed the interactions between both the cadets and the instructors in this program. I strongly believe that we have the best staff and faculty in the chemical engineering program at USMA.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes, I would be interested in coming back as an instructor and would like to be contacted.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

As of right now, I do not plan on leaving the Army after my service obligation.

AY2020 Chemical Engineering Program Exit Survey

Name: Aaron Romero Date: 5/22/20

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☒	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☒	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☒	☐
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Aaron Romero Date: 5/22/20

Part II. Open questions.

What was your favorite course in the chemical engineering program?

CH362, Mass and Energy Balances.

What was your least favorite course in the program? What would you change about it?

MC300. This class taught some important fundamental concepts, but I feel that we should take this class earlier in our cadet career.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

I really enjoyed the culture of the department. All the staff and faculty were always more than willing to help cadets; whether it be chemical engineering related or something else.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes, I would be very interested in coming back to teach as an instructor.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I want to eventually go and get my master's degree in either chemical, mechanical or aerospace engineering and maybe even a doctorate's degree at some point. After the Army, I really want to work in the power or aviation industry; whether this be on the power generation side with Pratt & Whitney/GE/Rolls Royce or the development side with companies such as Boeing/ Airbus/etc.

AY2020 Chemical Engineering Program Exit Survey

Name: John Stephen Date: 21 May 20

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☒	☐
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☒	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: John Stephen Date: 21 May 20

Part II. Open questions.

What was your favorite course in the chemical engineering program?

CH402 because of the final CAPSTONE project

What was your least favorite course in the program? What would you change about it?

CH364

I would take a lesson at the beginning of the course to show a road map/overview of everything that the course will teach because it becomes very overwhelming very quickly

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

The research opportunities with the department are second-to-none and the professional, yet friendly relationships with the teachers and my peers made the entire experience well worth it.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes and yes.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

Yes. Chemical Process Engineer.

AY2020 Chemical Engineering Program Exit Survey

Name: Alajia Thornton Date: 27 May 2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☒	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Alajia Thornton Date: 27 May 2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

CH485

What was your least favorite course in the program? What would you change about it?

CH367

The instructor started to make changes halfway through which worked, but this class was difficult to understand when taught solely by powerpoint. Maybe some classes should be mini labs in order for us to gain a slightly better understanding.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

The ChemE's are a close group of cadets and that made the experience more enjoyable and fun. I gained some of my best friends and really good friends from this department. I also love the faculty and they were important mentors throughout my time.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

No

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

Yes; I want to work in the field of renewable energy.

AY2020 Chemical Engineering Program Exit Survey

Name: Tussing, Joseph Date: 19 May 2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Tussing, Joseph Date: 19 May 2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

CH459

What was your least favorite course in the program? What would you change about it?

CH367,

It would have been nice to have more labs that tied in the process controls to experimentally determined data.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

Faculty were the most professional and caring of any department I interacted with, and I especially enjoyed research and ChemE events like meeting up with the faculty at the Firstie, the tailgates after the football games, and our cadet groupme.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes, and I would be interested in the Chemical engineering department.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

Yes, though I am flexible on what time period I will leave.
I am unsure of what career I might take up, but if I leave the army then I will likely want something where I can stay in one place for a long time.

AY2020 Chemical Engineering Program Exit Survey

Name: Ramsey Wagner Date: 5/19/2(

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☑
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☑
· Communicate effectively with a range of audiences.	☐	☐	☑	☐	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☑
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☑
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☑
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☑
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☑

AY2020 Chemical Engineering Program Exit Survey

Name: Ramsey Wagner Date: 5/19/2(

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Chemical Reactions

What was your least favorite course in the program? What would you change about it?

Heat Transfer or Controls because they were the most difficult classes for me to understand and comprehend.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

I really appreciated and enjoyed all my teachers in the chemical engineering program. The AIChE club was fun and supportive. My ChemE classmates formed a good friendships and were very helpful with homeworks, problem sets, and studying for tests and quizzes.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes. I really want to come back to West Point as an instructor. Please contact me! Thank you.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I do not plan on leaving the Army after my obligation is complete.

AY2020 Chemical Engineering Program Exit Survey

Name: Kimi Walker Date: 19MAY2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☒	☐
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☒	☐
· Communicate effectively with a range of audiences.	☐	☐	☐	☒	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☒	☐	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☒	☐
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☒	☐

AY2020 Chemical Engineering Program Exit Survey

Name: Kimi Walker Date: 19MAY2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Reactions and controls were my favorite courses in the program.

What was your least favorite course in the program? What would you change about it?

MC300 was my least favorite course because I feel that it did not add any value to my chemical engineering education. It would be more beneficial to add another math class to the program instead of MC300.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

Getting to know the wonderful faculty and make life long bonds were another aspect that I really enjoyed. I also really liked having the opportunity to take environmental engineering courses.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

I would be interested in returning to West Point as an instructor and would like to be contacted.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I plan on staying after my service obligation.

AY2020 Chemical Engineering Program Exit Survey

Name: Devon Moore Date:_____

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☒	☐
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☒	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☒	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☒	☐	☐
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☒	☐
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☒	☐
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Devon Moore Date:_____

Part II. Open questions.

What was your favorite course in the chemical engineering program?

CH485

What was your least favorite course in the program? What would you change about it?

MC312, I did not see the correlation that helped me be a better chemical engineer

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

possibly

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

No, but upon retirement i would like to be a distiller

AY2020 Chemical Engineering Program Exit Survey

Name: Arthur Berry Date: 27MAY20

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☒	☐
· Communicate effectively with a range of audiences.	☐	☐	☐	☒	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☒	☐
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☒	☐
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Arthur Berry Date: 27MAY20

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Reactions

What was your least favorite course in the program? What would you change about it?

Lab course. It was far too much work for the amount of hours given to it. If it had more weight in regard to credit hours, it would be more reasonable.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

Kicking Mule. It provided real use of chemical engineering, I learned a valuable hobby and life skill, and I was able to create something that was sold at a real bar which is incredibly rewarding

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

Yes and yes.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

Not sure yet.

AY2020 Chemical Engineering Program Exit Survey

Name: Jacob Manweiler Date: 27MAY2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☒	☐
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: Jacob Manweiler Date: 27MAY2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

Chemical Engineering Laboratory. I'm glad we got to use all of the knowledge that we acquired in the classroom and applied it in the laboratory.

What was your least favorite course in the program? What would you change about it?

Heat and Mass Transfer. This semester was just really credit intensive to begin with and I was not able to process all of the material for this class as a result. I would move it to an earlier semester when our calculus skills are more sharp and course load is lighter.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

I enjoyed my AIAD at SUNY Cobleskill greatly! The staff and faculty in this department were always readily available to help and often went out of their way to do so.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

I would be very willing to return and instruct within this department and would like to be contacted in the future!

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

I am not sure yet...I would like to see how my Army experience goes before I decide.

AY2020 Chemical Engineering Program Exit Survey

Name: SeungChul Lee Date: 29 MAY 2020

Part I. Student Outcomes. Check the box that most closely represents your opinion.

The program has prepared me to:	**Strongly Disagree**		**Neutral**		**Strongly Agree**
· Identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics	☐	☐	☐	☐	☒
· Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, & welfare, as well as global, cultural, social, environmental, and economic factors.	☐	☐	☐	☐	☒
· Communicate effectively with a range of audiences.	☐	☐	☐	☐	☒
· Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	☐	☐	☐	☐	☒
· Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	☐	☐	☐	☐	☒
· Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	☐	☐	☐	☐	☒
· Acquire and apply new knowledge as needed, using appropriate learning strategies.	☐	☐	☐	☐	☒
· Understand the chemical engineering curriculum, including advanced chemistry, material & energy balances, safety and environmental factors, heat, mass, and momentum transfer, chemical reaction engineering, separation processes, process dynamics and control, modern experimental and computing techniques, and process design.	☐	☐	☐	☐	☒

AY2020 Chemical Engineering Program Exit Survey

Name: SeungChul Lee Date: 29 MAY 2020

Part II. Open questions.

What was your favorite course in the chemical engineering program?

CH402 - The applicability and the related working programs that could be utilized in industry had huge impact on what we could do as Chemical Engineers.

What was your least favorite course in the program? What would you change about it?

My least favorite course was CH400. I think that the course was focused on the FE and while it was beneficial, it could have been integrated into some of the other courses throughout the program.

Other than courses, was there any aspect of the program you particularly enjoyed? (i.e., AIADs, research, club, faculty and cadet interactions outside the classroom, etc.)

The best part of the program was the instructors. Every single one of them were amazing individuals who took time to take care of the students and ensure that they were successful.

Projecting ahead 6-8 years, do you think you would you be interested in returning to West Point as an instructor if you are still in the Army? If so, would you like us to contact you?

I would be interested. I would like to be contacted.

Do you plan on leaving the Army after your service obligation, and if so, what is your desired profession?

If I leave the Army, I imagine that I would like to work at a brewing company or otherwise managerial position at a larger chemical processing company.