

Spring 2021

## CHE 101-102: Introduction to Chemical Engineering

Lisa Axe

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## CHE 101- INTRODUCTION TO CHEMICAL ENGINEERING SPRING 2021

Room: Campus Center Atrium  
Thursday 6:00-7:00 PM  
Chair and Professor Lisa Axe  
150 Tiernan Hall  
Phone: (973) 596-2477  
[axe@njit.edu](mailto:axe@njit.edu)

<https://njit.webex.com/njit/j.php?MTID=m371db1f0dbb56720e7973e6307f82dda> (Links to an external site.)

Thursday, Jan 21, 2021 6:00 pm | 1 hour | (UTC-05:00) Eastern Time (US & Canada) Occurs every Thursday effective 1/21

### Course Description:

An introduction to the field of chemical engineering and to the Otto H. York Department of Chemical and Materials Engineering. Topics include the curriculum, tours of department teaching laboratories and computing facilities, undergraduate research opportunities, cooperative employment, and student professional societies. Also included are visits by alumni who discuss their careers after graduation from the department.

### Course Goals:

- Introduce faculty and careers in chemical engineering
- Learn about experiential opportunities
- Gain familiarity with departmental policies
- Conduct an analysis on an ethical/professional issue based on concepts of ethics and professionalism presented by industry speakers
- Create an academic plan and resume

### Attendance:

This is a freshman-level course, and by university policy attendance is required and will be taken. Grading is S/U and is based on attendance and completing assignments.

### Course Deliverables:

- Submit your resume to CDS for sign off
- Submit your typed up Academic Plan that shows the courses (i.e., course number, title, and credits) you will take each semester beginning with your first semester at NJIT and needs to include at least one experiential learning experience due March 11<sup>th</sup>
- Submit how you will impact an NAE Grand Challenge in your career due April 22<sup>nd</sup>

### Tentative Schedule:

1	January 21	Introduction Chair and Professor Lisa Axe – Meet your Advisor Dr. Gordana Obuskovic	<a href="http://www.engineeringchallenges.org">http://www.engineeringchallenges.org</a> How will you impact an NAE Grand Challenge in your career? Required Submission: 1-page double space write up due April 22 <sup>nd</sup>
2	January 28	Meet the AIChE Student Chapter and the Student Chapter Advisor and Assistant Professor Roman Voronov	

3	February 4	CDS Preparing Your Resume: Ms. Casey Hennessey and Ms. Dominique Clarke	Develop Resume for the Career Fair –signed off by CDS
4	February 11	Faculty: Associate Chair for Undergraduate Study and Associate Professor Ecevit Bilgili	
5	February 18	Faculty: Director of the Materials Engineering Program and Professor David Venerus	
6	February 25	Co-op Presentations	Co-op presentations and panel
7	March 4	Faculty: Assistant Professor Joshua Young	
8	March 11	Faculty: Assistant Professor Meng-Qiang Zhao	Submit your Academic Plan with at least one experiential learning experience
9	March 18	Spring Break	
10	March 25	Feedback Session	
11	April 1	Co-op Presentations	Co-op presentations and panel
12	April 8	Industry Visit: Jack Shea, Director, Corporate Development Merck & Co., Inc. and Chair of the CME Advisory Board	
13	April 15	Faculty: Assistant Professor Gennady Gor	
14	April 22	Industry: Patrick J. Robinson, Ph.D. Process Controls and Modeling Team Lead, Digital Business Lead, Bayway Refinery, Phillips 66, and CME Advisory Board Member	<a href="http://www.engineeringchallenges.org">http://www.engineeringchallenges.org</a> How will you impact an NAE Grand Challenge in your career? Required Submission: 1-page double space write up due April 22 <sup>nd</sup>
15	April 29	Feedback	

## **AIChE Code of Ethics**

### **Board approved November 2015**

The Board of Directors of the American Institute of Chemical Engineers adopted this Code of Ethics to which it expects that the professional conduct of its members shall conform, and to which every applicant attests by signing his or her membership application. Members of the American Institute of Chemical Engineers shall uphold and advance the integrity, honor and dignity of the engineering profession by: being honest and impartial and serving with fidelity their employers, their clients, and the public; striving to increase the competence and prestige of the engineering profession; and using their knowledge and skill for the enhancement of human welfare. To achieve these goals, members shall:

1. Hold paramount the safety, health and welfare of the public and protect the environment in performance of their professional duties.
2. Formally advise their employers or clients (and consider further disclosure, if warranted) if they perceive that a consequence of their duties will adversely affect the present or future health or safety of their colleagues or the public.
3. Accept responsibility for their actions, seek and heed critical review of their work and offer objective criticism of the work of others.
4. Issue statements or present information only in an objective and truthful manner.
5. Act in professional matters for each employer or client as faithful agents or trustees, avoiding conflicts of interest and never breaching confidentiality.
6. Treat all colleagues and co-workers fairly and respectfully, recognizing their unique contributions and capabilities by fostering an environment of equity, diversity and inclusion.
7. Perform professional services only in areas of their competence.
8. Build their professional reputations on the merits of their services.
9. Continue their professional development throughout their careers, and provide opportunities for the professional development of those under their supervision.
10. Never tolerate harassment.
11. Conduct themselves in a fair, honorable and respectful manner.

[Read AIChE's Sexual Harassment Policy](#)

### **AIChE Diversity Statement**

**Board approved November 2015: AIChE is committed to creating an environment in the Institute and profession in which all members, regardless of characteristics such as gender, race, religion, age, physical condition, sexual orientation, nationality or ethnicity, are valued and respected.**

**Cell Phone Policy:** The use of cell phones is prohibited during exams. The use of cell phones, laptops and other electronic devices is prohibited during class time unless their use for educational activities has been explicitly approved and announced by the instructor. Exceptions include documented medical conditions that require the use of a device; please see the instructor.