

Fall 2022 Updates for CBE Undergraduate Students

Technical Tracks

We offer the **Advanced and Nano Materials Track** and the **Energy and Sustainability Track**.

Find out more here: <https://cbe.rutgers.edu/current-undergraduate-student-resources>

Undergraduate Research

Would you like to gain individual, hands-on research experience under the guidance of a CBE faculty adviser in a specific area of chemical or biochemical engineering? Find out more here:

<https://cbe.rutgers.edu/research-opportunities>

Internships/Co-ops

Are you seeking employment in industry over the summer or during the semester? Please find out more here: <https://cbe.rutgers.edu/internship-program-real-world-experience>

For questions about internships or co-ops, please contact Dr. Zhang, the new CBE internship coordinator, haoran.zhang@rutgers.edu

Combined BS/Masters Program

Are you interested in earning a MS or ME degree in CBE in a shorter time frame?

Find out more here: <https://cbe.rutgers.edu/bsmasters-chemical-and-biochemical-engineering>

Curriculum change

There has been a change to our curriculum for the Class of 2025 and beyond. We believe that this change will add flexibility and allow students to explore chemical science topics that are not covered by the current curriculum.

We have replaced the requirement to take Organic Chemistry II (01:160:308) with a new Chemical Science Elective (one out of a list of 6 courses) requirement.

Each student selects one out of a list of 6 courses:

01:160:308 (4 cr) Organic Chemistry II

[Prerequisites: 01:160:307 Organic Chemistry I or 01:160:315 Honors Org Chem I]

01:160:351 (3 cr) Inorganic Chemistry I

[Prerequisites: 01:160:307 Organic Chemistry I and 01:640:152 Calculus II]

16:155:541 (3 cr) Pharmaceutical Materials Engineering

[With permission from graduate program director]

16:155:571 (3 cr) Sustainable, Renewable, Clean Energy

[With permission from graduate program director]

14:635:205 (3 cr) Crystal Chemistry and Structure of Materials
[Co-requisite: 01:160:160 Gen Chem for Eng II]

14:635:440 (3 cr) Electrochemical Materials and Devices
[Juniors and seniors only]

Seniors:

The Senior class advisor is Dr. Celik, fuat.celik@rutgers.edu

Typical courses you will be registered for Fall 2022 are:

Process Engineering Lab I (14:155:415)

Process Simulation & Control (14:155:422)

Biochemical Engineering (14:155:411)

Juniors:

The Junior class advisor is Dr. Ramachandran, rohitrr@soe.rutgers.edu

Typical courses you will be registered for Fall 2022 are:

Transport Phenomena I (14:155:303)

Thermodynamics II (14:155:309)

Computational Methods (14:155:307)

Note that Computational Methods is now offered in the Spring semester as well, so that is another option for your schedule.

Organic Chemistry Lab (01:160:311)

Sophomores:

The Sophomore class advisor is Dr. Bertuccio, ajb399@soe.rutgers.edu

Typical courses you will be registered for Fall 2022 are:

Material and Energy Balances (14:155:201)

Professional Skills Development (14:155:298)

Organic Chemistry I (01:160:307)

Multivariable Calculus (01:640:251)

Analytical Physics II (01:750:227)

Analytical Physics II Lab (01:750:229)

For any students who are not able to register for Professional Skills Development (14:155:298) due to a conflict with Transport Phenomena I, there is an alternative course offered by SOE that you can register for instead. It is called Skills to Succeed (14:440:298) taught by Thomas Matlock (1 credit).

The Skills to Succeed Class course code is: 14:440:298

They have the following sections:

Mon 3:50 pm - 5:10 pm

Mon 5:40 pm - 7:00 pm

Tues 2:00 pm - 3:20 pm

If you have any further questions about any of these topics, please feel free to contact Dr. Shapley, CBE Undergraduate program director, at nshapley@soe.rutgers.edu .