

Bachelor of Science Program

Rutgers Chemical & Biochemical Engineering Curriculum

Biochemical Option

FALL

SPRING

Freshman Year

01:160:159	Gen. Chemistry for Eng.I	3.0	01:160:160	Gen. Chemistry for Eng.II	3.0
01:355:101	Expository Writing	3.0	01:160:171	Intro. Experimentation	1.0
14:440:100	Intro. To Eng'g	1.0	14:440:127	Intro. Computers for Eng.	3.0
01:640:151	Calculus I	4.0	01:640:152	Calculus II	4.0
01:750:123	Analytical Physics I	2.0	01:750:124	Analytical Physics I	2.0
__:__:__	Hum./Soc. Science Elective	<u>3.0</u>	14:440:221	Eng. Mechanics Statics	3.0
		16.0	__:__:__	Hum./Soc. Science Elective	<u>3.0</u>
					19.0

Sophomore Year

14:155:201	Material & Energy Bals.	M3.0	14:155:208	Thermodynamics I	M3.0
14:155:298	Professional Skills Develop.	M1.0 #	14:155:210	Biological Found. Chem. Eng.	M3.0
01:160:307	Organic Chemistry I*	4.0	01:160:308	Organic Chemistry II	4.0
01:640:251	Multivariable Calculus	4.0	01:640:244	Diff. Eqns. Engineering & Physics	4.0
01:750:227	Analytical Physics II	3.0	01:220:102	Microeconomics	<u>3.0</u>
01:750:229	Analytical Physics II Lab	<u>1.0</u>			17.0
		16.0			

Junior Year

14:155:303	Transport Phen. I	M3.0	14:155:304	Transport Phen. II	M3.0
14:155:307	Comp. Methods Chem. Eng.	M3.0	14:155:324	Separations Processes	M3.0
14:155:309	Thermodynamics II	M3.0	14:155:341	Kinetics	M3.0
01:447:390	Gen. Microbiology	4.0	14:694:301	Intro. Biochem & Molec Biol	3.0
01:640:421	Advanced Calc. for Eng.	<u>3.0</u>	01:694:313	Intro Biochemistry Lab	1.0
		16.0	__:__:__	Hum./Soc. Science Elective	<u>3.0</u>
					16.0

Senior Year

14:155:411	Biochemical Engineering	M3.0	14:155:416	Processing Engineering Lab II	M4.0
14:155:415	Process Engineering Lab I	M4.0	14:155:428	Design II	M4.0
14:155:422	Process Simul. & Control	M3.0	14:635:407	Mech. Prop. of Materials	3.0
14:155:427	Design I	M3.0	__:__:__	General Elective	<u>3.0</u>
__:__:__	General Elective	<u>3.0</u>			14.0
		16.0			

TOTAL: 130.0

* 01:160:315, 316 are accepted in place of 01:160:307, 308.

^01:160:309 (2.5 cr) is accepted in place of 01:160:311 (2.0 cr), and may be taken with 01:160:308.

#Moved to fall semester.

Revised 3/8/11, 7/13/12, 3/29/13, 4/16/15, 9/29/15, 3/16/16, 2/23/18