

# Option Requirements



## Institute Core for **ChE Option** (219 core units + 3 extra units)

Ma 1abc (Freshman Math)  
Ph 1abc (Freshman Physics)  
Ch 1ab (Freshman Chem)  
Bi 1 OR Bi 1x (Freshman Bio)  
Ch 3a OR Ch 3x (Freshman Chem Lab)  
Menu Class (9 units)

**Ch/ChE 9** (Additional Intro Lab, w/ 3 extra units)

**Ch/ChE 91 OR En/Wr 84** (Scientific Writing)

Humanities Courses (36 units)

**Ec 11 OR BEM 103** (Social Science Course)

Social Sciences Courses (27 additional units)

Additional HSS (36 units)

Physical Education (9 units)

May take BEM 102 to fulfill ChE requirement, but course does NOT count for Institute core social science course.

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## Adv. Science & Math for ChE Option (78 units)

Ma 2

Ph 2a

Ch 21ab

Ch 41ab

ACM 95ab

As of March 2021, Ch 21c and Ch 41c are no longer required courses, and these changes will first appear in the 2021-22 catalog. Students who matriculated in 2020 or earlier may petition to substitute any courses for Ch 21c and Ch 41c.

May substitute Ph 12b for Ch 21a

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## ChE Core (90 units)

ChE 15

ChE 62

ChE 63ab

ChE 101

ChE 103abc

ChE 105

ChE 126

ChE 10 moves to Fall term, beginning 2021.

Beginning 2021-22, ChE 15 moves to Winter term for freshmen. For Winter 2022, s'mores will also take ChE 15.

Beginning 2021-22, ChE 63a moves to Fall for s'mores. ChE 63b will be offered to s'mores in Spring '22 & Winters thereafter.

Fulfills oral communication requirement.

For study abroad in Fall term senior year, may later substitute ChE 120, ChE 128 OR ChE 130

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## ChE Track (72+ units)

	Biomolecular	Sustainability	Materials	Process Systems	Computational
<b>Project Course (OR ChE 90c)</b>	ChE 130	ChE 128 OR Ge 114a	ChE 128	ChE 128	fulfilled by final course of subject sequence
<b>Two Foundation Courses</b>	ChE/BE 163 & Ch/Bi 110	Two of [ChE 111; ESE 101, 102, 103]	One synthesis/processing [Ch/ChE 147#, ChE 115#, MS 133] & one structures/properties [Ch 120, ChE/Ch 148#, MS 115, MS/APh 122#, MS 131, MS 132]	ChE 118 & ChE 120	ACM/IDS 104 & ChE 141
<b>Track Electives, (May Include 18 Units of ChE 80 OR ChE 90ab)</b>	Bioengineering or biochemical engineering electives	Any 100-level ESE or EST course. Consider one policy course [BEM/Ec/ESE 119#, ME/EE/EST 117#]	Any MS course, ChE courses from [155#, 164, 165], or APh courses from [109, 114ab]	Any engineering course or any elective listed for other tracks	At least one subject sequence: Chem [Ch 121ab], Bio [ChE 163, BE 191a#], Env [ESE 101, ESE 136#], Fluids [Ae/ACM 232ab#], Thesis [ChE 90abc]
		BM, Sus & MS tracks: ChE 118, ChE 120 may be electives if design project contains a significant component related to track.			and any of ChE142 or approved IDS, ACM or CS courses
	<u>Petition ChE option rep to have a course approved as track elective from these programs (or others):</u>				
	Bi, Ch, Med E, other ChE	Ch, GPS, other ChE	Ch, other APh, other ChE	CS	Note: Ch/Bi 110 counts as track elective if complete ChE 163

#Course may not be regularly offered each year, so check catalog carefully and contact instructor(s).  
Course is new, not recently taught, or offered every other year.