

# CHEMICAL ENGINEERING MAJOR

## Program Tracking Sheet

Effective for students entering AY 2022-2023

Name:	Class Year:
Advisor:	2 <sup>nd</sup> Major:

NOTES: Minimum total academic credit = 15 units

Residency Req.: Min. of 8 units must be completed at WPI

### HUMANITIES AND ARTS (6/3 units)

All 5 HUA courses must be completed before beginning the Inquiry Seminar or Practicum.

#### Depth Component

Students must complete at least three thematically-related courses prior to the culminating Inquiry Seminar or Practicum in the same thematic area. At least one of the three courses should be at the 2000-level or above.

	Course	Term	Grade	Units
1				1/3
2				1/3
3				1/3
4	HU 3900 or HU 3910			1/3

#### Breadth Component

Students must take at least one course outside the grouping in which they complete their depth component. To identify breadth, courses are grouped in the following manner.

- i. art/art history, drama/theatre, and music (AR, EN/TH, MU);
- ii. foreign languages (AB, CN, EN, GN, SP);
- iii. literature and writing rhetoric (EN, WR, RH);
- iv. history and international studies (HI, HU, INTL);
- v. philosophy and religion (PY, RE).

Exception: May take all six courses in a foreign language

5				1/3
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#### Humanities Elective

6				1/3
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#### PHYSICAL EDUCATION (4 PE classes = 1/3 unit)

7				1/12
				1/12
				1/12
				1/12

#### SOCIAL SCIENCE (2/3 unit) ECON, ENV, GOV, PSY, SD, SOC, SS, STS, DEV and ID2050

8				1/3
9				1/3

#### THE INTERACTIVE QUALIFYING PROJECT (1 unit)

10				1/3
11				1/3
12				1/3

#### MATHEMATICS AND BASIC SCIENCE (12/3 units)

Must include differential and integral calculus and differential equations.

Must include 3 courses in chemistry, 2 courses in physics, and 1 course in biology or biochemistry.

13	MA			1/3
14	MA			1/3
15	MA			1/3
16	CH			1/3
17	CH			1/3
18	CH			1/3
19	PH			1/3
20	PH			1/3
21	BB or BC			1/3
22				1/3
23				1/3
24				1/3

#### ENGINEERING SCIENCE AND DESIGN (6 units)

All at 2000 or higher level with the exception of CHE 1101, includes graduate courses in BME, CHE, CE, ECE, FP, ME, MFE, MTE, RBE, and SYS.

Students may not count both CHE 1011 and ES 2002 as Engineering Electives

#### ENGINEERING STUDY OUTSIDE MAJOR (1/3 unit)

25				1/3
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#### MAJOR QUALIFYING PROJECT (3/3 unit)

26				1/3
27				1/3
28				1/3

#### CORE CHEMICAL ENGINEERING COURSES (12/3 units minimum)

Must include at least 4 units of core chemical engineering courses:

CHE 2011, 2012, 2013, 2014, 3201, 3501, 4401, 4402, 4403, 4404, 4405, 4410, ES 3004, 3003, 3002. Must include 1/3 unit of capstone design experience (e.g. CHE 4404, CHE 4410)

Students may not take both CHE 4404 and CHE 4410 as core classes.

29				1/3
30				1/3
31				1/3
32				1/3
33				1/3
34				1/3
35				1/3
36				1/3
37				1/3
38				1/3
39				1/3
40				1/3

#### ENGINEERING ELECTIVES (2/3 unit)

41				1/3
42				1/3

#### ADVANCED CHEMISTRY AND NATURAL SCIENCE (5/3 unit)

Any 2000 level and above BB, CH, PH, or GE courses and CH 1040.

Must include 3 advanced CH courses at 2000 level or above.

Up to 2/3 unit of Advanced Chemistry and Natural Science may be double counted under both Advanced Chemistry and Basic Science

43	CH			1/3
44	CH			1/3
45	CH			1/3
46				1/3
47				1/3