

# ENVIRONMENTAL ENGINEERING MAJOR

## Program Tracking Sheet

Effective for students entering AY 2020-2021

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
<b>Humanities Elective</b>				
6				1/3

**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 (4 units)**

**MATHEMATICS (6/3 units)** Courses with prefix: MA

Must include differential and integral calculus, differential equations, statistics

13				1/3
14				1/3
15				1/3
16				1/3
17				1/3
18				1/3

**BASIC SCIENCE (6/3 units)** Courses with prefix: BB, CH, GE, PH

Must include 1/3 unit of BB, 3/3 unit chemistry CH, 1/3 unit earth science (GE 2341 recommended), 1/3 unit PH (calculus based).

19				1/3
20				1/3
21				1/3
22				1/3
23				1/3
24				1/3

**ADVANCED SCIENCE (1 unit)** Courses with prefix: BB, CH

Minimum of 1/3 unit in BB and 1/3 unit in CH.

Advanced BB courses: 2000-level or higher.

Advanced CH courses: CH 1040 and CH courses at the 2000-level or higher.

Courses may not be double-counted toward the basic science requirement

25				1/3
26				1/3
27				1/3

**ENGINEERING SCIENCE AND DESIGN (6 units) (Note 3)**

**THERMOFLUIDS (2/3 unit)**

Must include 1/3 unit in fluid mechanics (ES 3004 recommended) and 1/3 unit in thermodynamics (ES 3001, CHE 2013, or CH 3510)

28				1/3
29				1/3

**MECHANICS AND MATERIALS (2/3 unit)**

CE 2000 or ES 2501; CE 2001 or ES 2502; ES 2001; ES 2503

30				1/3
31				1/3

**CORE ENVIRONMENTAL ENGINEERING (3/3 unit)**

CHE 2011, CE 3059, CE 3062, CHE 3201

32				1/3
33				1/3
34				1/3

**EVE ELECTIVES: WATER QUALITY AND RESOURCES (3/3 units)**

CE 3060, CE 3061, CE 4060, CE 4061

35				1/3
36				1/3
37				1/3

**EVE ELECTIVES: AIR & LAND ENVIRONMENTAL SYSTEMS (2/3 units)**

CE 3041, CE 3074, CE 4600, CE/CHE 4063, CHE 4401

38				1/3
39				1/3

**EVE ELECTIVES: ENVIRONMENTAL MANAGEMENT (1/3 unit)**

CE 3020, CE 3070, CE 4071

40				1/3
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**MAJOR QUALIFYING PROJECT (3/3 unit)**

41				1/3
42				1/3
43				1/3

**FREE ELECTIVES IN ENGINEERING SCIENCE AND DESIGN (2/3 unit)**

Engineering (AE, AREN, BME, CHE, CE, ECE, ES, FPE, ME, RBE) at the 2000-level or above

44				1/3
45				1/3

Engineering Science and Design Notes: Curriculum must include:

-1/3 unit of environmental health issues (CE 3059, CE 3060, CE 3061, or approved experience through IQP, ISP, etc.).

-2/3 units with laboratory experimentation. Must include either CE 4060 or CHE 4401.

The remaining 1/3 unit may be CE 4060, CHE 4401, laboratory courses in CH (CH 2640 or CH 2650, which would satisfy Advanced Science course requirements), CE 3026, or CE 2020.

- 1/3 unit major design experience through the MQP, or other approved design experience in a course such as CHE 4403 or ME 4429.