

ARCHITECTURAL ENGINEERING MAJOR
Program Tracking Sheet
 Effective for students entering in AY 2025-2026

Name:	Class Year:
Advisor:	2 nd Major:

NOTES: Minimum total academic credit = 15 units
 Residency Req.: Min. of 8 units must be completed at WPI

HUMANITIES AND ARTS (6/3 unit)
 All 5 HUA courses must be completed before beginning the Inquiry Seminar or Practicum. The Humanities and Arts Department will accept a maximum of 1/3 unit of AP credit towards the Humanities and Arts requirement.

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, TH, MU);
 ii. modern languages (AB, CN, ISE, GN, SP);
 iii. literature and writing rhetoric (EN, WR);
 iv. history, humanities, and international and global studies (HI, HU, INTL);
 v. philosophy and religion (PY, RE).
 Exception: May take all six courses in a modern language.

				1/3
Humanities Elective				
5				1/3
6				1/3

WELLNESS AND PHYSICAL EDUCATION (4 WPE classes = 1/3 unit)

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

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

				1/3
8				1/3
9				1/3

THE INTERACTIVE QUALIFYING PROJECT (1 unit)

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

MATHEMATICS AND BASIC SCIENCES (4 units)
MATHEMATICS (7/3 unit) Courses with prefix: MA

13	MA 1021 (Calc 1)			1/3
14	MA 1022 (Calc 2)			1/3
15	MA 1023 (Calc 3)			1/3
16	MA 1024 (Calc 4)			1/3
17	MA 2051 (Diff Eqs)			1/3
18	MA 2071 (Lin Alg)			1/3
19	MA 2611 (Applied Statistics)			1/3

PHYSICS (2/3 unit) Courses with prefix: PH

20	PH 1110/1111 (Mechanics)			1/3
21	PH 1120/1121 (E&M)			1/3

CHEMISTRY (1/3 unit) Course with prefix: CH

22	CH 1010 (Chem 1) or 1020 (Chem 2)			1/3
----	-----------------------------------	--	--	-----

MATH AND BASIC SCIENCE ELECTIVES (2/3 unit)
 Must include 1/3 unit in Thermodynamics (Note 1). Must include 1/3 unit in fluid mechanics (can be fulfilled by ES 3004)

				1/3
23				1/3
24				1/3

ARCHITECTURAL ENGINEERING SCIENCE AND DESIGN (7 units)
(Note 2, 3, 4)
ARCHITECTURAL ENGINEERING COMPLEMENTS (2/3 units)

				1/3
25	AR 2114 Mod Arch in the American Era			1/3
26	AREN 2023 Intro to AREN Systems			1/3

CONSTRUCTION/CONSTRUCTION MANAGEMENT (2/3 units)

				1/3
27	CE 3025 or OIE 2850			1/3
28	CE 3022 or CE 3020			1/3

BUILDING MECHANICAL SYSTEMS (5/3 units)

				1/3
29	AREN 3024 Building Physics			1/3
30	AREN 3003 Principles of HVAC design for buildings			1/3
31	AREN 3006 Advanced HVAC Design			1/3
32	AREN 3020 Architectural Design IV-Building Energy Simulation			1/3
33	AREN 3022 Architectural Design V-Building Envelope Design			1/3

BUILDING ELECTRICAL SYSTEMS (2/3 units)

				1/3
34	AREN 2025 Building Electrical Systems			1/3
35	AREN 2004 Architectural Design II-Light and Lighting Systems			1/3

BUILDING STRUCTURAL ENGINEERING (5/3 units) (Note 2)

				1/3
36	CE 2000 Analytical Mechanics I			1/3
37	CE 2001 Analytical Mechanics II			1/3
38	CE 2002 Introduction to Analysis and Design			1/3
39				1/3
40				1/3

GENERAL ARCHITECTURAL DESIGN (2/3 units)

				1/3
41	AREN 2002 Architectural Design I			1/3
42	AREN 3002 Architectural Design III			1/3

MAJOR QUALIFYING PROJECT (1 unit) (Note 3)

				1/3
43				1/3
44				1/3
45				1/3

BS AREN / Master of Architecture

Students interested in pursuing the **4-year B.S. in Architectural Engineering/1-year Master of Architecture program** should [follow the additional criteria listed here.](#)

Note 1: Thermodynamics can be fulfilled by PH 2101 or other approved equivalent course such as ES 3001.

Note 2: The additional two structural engineering courses should be two design level structural engineering courses (such as CE 3006, 3008, 3010, or 3044)

Note 3: Must include the Capstone Design activity through the MQP that achieves design proficiency in either the structural or mechanical area.

Note 4: Must include 1/3 unit in Experimentation (fulfilled by AREN 3003, AREN 3020, ME 3901, CE 3026 or approved equivalent).

Note 5: GPS courses can only be used to fulfill the HUA, SSPS, or the Free Elective Requirements.



WPI

Office of
Academic
Advising

4-year Plan Template

Name:	Class Year:
Advisor(s):	Major(s)/Minor(s):

Year 1					
	A-term	B-term	C-term	D-term	E-term (optional)
Course 1					
Course 2					
Course 3					
Course 4 (optional)					

Notes:

Year 2					
	A-term	B-term	C-term	D-term	E-term (optional)
Course 1					
Course 2					
Course 3					
Course 4 (optional)					

Notes:

Year 3					
	A-term	B-term	C-term	D-term	E-term (optional)
Course 1					
Course 2					
Course 3					
Course 4 (optional)					

Notes:

Year 4					
	A-term	B-term	C-term	D-term	E-term (optional)
Course 1					
Course 2					
Course 3					
Course 4 (optional)					

Notes: