

ARCHITECTURAL ENGINEERING MAJOR – Focus on the Structural Area
Program Tracking Sheet Based on AY 2015-16 Degree Requirements and Course Offerings

Name:	Class Year:
Advisor:	2 nd Major:

NOTES: Minimum total academic credit = 15 1/3 units
 Residency Req.: Min. of 8 units must be completed at WPI

HUMANITIES AND ARTS REQUIREMENT (2 units)

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 (SP, GN, AB, CN);
- iii. literature and writing rhetoric (EN, WR, RH);
- iv. history and international studies (HI, HU);
- v. philosophy and religion (PY, RE).

Exception: May take all six courses in a foreign language

5				1/3
Humanities Elective				
6				1/3

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

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

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

8				1/3
9				1/3

THE INTERACTIVE QUALIFYING PROJECT (1 unit)

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

FREE ELECTIVES (1 unit)

13				1/3
14				1/3
15				1/3

MATHEMATICS AND BASIC SCIENCES (4 units)

MATHEMATICS (7/3 unit) Courses with prefix: MA

16	MA 1021 (Calc 1)			1/3
17	MA 1022 (Calc 2)			1/3
18	MA 1023 (Calc 3)			1/3
19	MA 1024 (Calc 4)			1/3
20	MA 2051 (Diff Eqs)			1/3
21	MA 2611 (Applied Stats I)			1/3
22	MA 2621 (Probability for Applications)			1/3

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

23	PH 1110/1111 (Mechanics)			1/3
24	PH 1120/1121 (E&M)			1/3

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

25	CH 1010 (Chem 1) or 1020 (Chem 2)			1/3
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MATH AND BASIC SCIENCE ELECTIVES (2/3 unit)

Including 1/3 unit in Thermodynamics (Note 1)

26				1/3
27				1/3

ARCHITECTURAL ENGINEERING COMPLEMENTS (1 unit)

28	AR 2114 Mod Arch in the American Era			1/3
29	AREN 3001 Arch Graphics and Design			1/3
30	AREN 3002 Architectural Design			1/3

ENGINEERING SCIENCE AND DESIGN REQUIREMENT (13/3 units)

(Notes 2, 3)

GENERAL ARCHITECTURAL ENGINEERING (2/3 units)

31	AREN 2023 Intro to Arch Eng Systems			1/3
32	ES 3004 Fluids Mechanics			1/3

CONSTRUCTION/CONSTRUCTION MANAGEMENT (2/3 units)

33	CE 3020 or CE 3022			1/3
34	CE 3025 Project Evaluation			1/3

BUILDING MECHANICAL SYSTEMS (2/3 units)

35	AREN 3003 Principles of HVAC Design			1/3
36	AREN 3024 or AREN 3026			1/3

BUILDING STRUCTURAL ENGINEERING (3/3 units)

Select three of the following: CE 2000, 2001, 2002, 3041

37				1/3
38				1/3
39				

BUILDING ELECTRICAL SYSTEMS (2/3 units)

40	AREN 2025 Building Electrical Systems			1/3
41	AREN 3005 Lighting Systems			1/3

DESIGN FOCUS ON THE STRUCTURAL AREA (2/3 units)

Select two of the following: CE 3006, 3008, 3010, 4017

42				1/3
43				1/3

MAJOR QUALIFYING PROJECT (1 unit)

(Note 4)

44				1/3
45				1/3
46				1/3

Note 1: Can be satisfied with CH 3510 as a Mathematics and Basic Science Elective, or ES 3001, Introduction to Thermodynamics as a Free Elective, or other approved equivalent course.

Note 2: Must include 1/3 unit in Experimentation (fulfilled by AREN 3003, ME 3901, CE 3026 or approved equivalent).

Note 3: Courses in Engineering Science and Design Chart above can be replaced by other approved equivalents.

Note 4: Must include the Capstone Design Activity.