

ARCHITECTURAL ENGINEERING MAJOR – Focus on the Structural Area
Program Tracking Sheet Based on AY 2014-15 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)

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
----	-----------------------------------	--	--	-----

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 (16/3 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.