

ARCHITECTURAL ENGINEERING MAJOR – Focus on the Mechanical Area
Program Tracking Sheet Based on AY 2016-17 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)
 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
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

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

15	MA 1021 (Calc 1)			1/3
16	MA 1022 (Calc 2)			1/3
17	MA 1023 (Calc 3)			1/3
18	MA 1024 (Calc 4)			1/3
19	MA 2051 (Diff Eqs)			1/3
20	MA 2071 (Lin Alg)			1/3
21	MA 2621 (Probability for Applications)			1/3

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

22	PH 1110/1111 (Mechanics)			1/3
----	--------------------------	--	--	-----

23	PH 1120/1121 (E&M)			1/3
----	--------------------	--	--	-----

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

24	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)

25				1/3
26				1/3

ARCHITECTURAL ENGINEERING COMPLEMENTS (1 unit)

27	AREN 2002 Architectural Design I			1/3
28	AR 2114 Mod Arch in the American Era			1/3
29	AREN 3002 Architectural Design			1/3

ENGINEERING SCIENCE AND DESIGN REQUIREMENT (13/3 units)
 (Notes 2, 3)

GENERAL ARCHITECTUAL ENGINEERING (2/3 units)

30	AREN 2023 Intro to Arch Eng Systems			1/3
31	AREN 3024 Building Physics			1/3

CONSTRUCTION/CONSTRUCTION MANAGEMENT (2/3 units)

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

BUILDING MECHANICAL SYSTEMS (2/3 units)

34	AREN 3003 Principles of HVAC Design			1/3
35	FP 3080 or AREN 3026			1/3

BUILDING STRUCTURAL ENGINEERING (3/3 units)
 Select three of the following: CE 2000, 2001, 2002, 3041

36				1/3
37				1/3
38				

BUILDING ELECTRICAL SYSTEMS (2/3 units)

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

DESIGN FOCUS ON THE MECHANICAL AREA (2/3 units)
 Select two of the following: AREN 3006, AREN 3025, ES 3005, FPE 3070

41				1/3
42				1/3

MAJOR QUALIFYING PROJECT (1 unit)
 (Note 4)

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

Note 1: Can be satisfied with PH 2101 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, AREN 3025, 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.