ARCHITECTURAL ENGINEERING MAJOR
Program Tracking Sheet
Effective for students entering in AY 2021-2022

Name: ________________________ Class Year: ____________
Advisor: ________________________ 2nd 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.

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

Humanities Elective

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

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

THE INTERACTIVE QUALIFYING PROJECT (1 unit)

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).

23 1/3
24 1/3

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

ARCHITECTURAL ENGINEERING COMPLEMENTS (2/3 units)

CONSTRUCTION/CONSTRUCTION MANAGEMENT (2/3 units)

BUILDING MECHANICAL SYSTEMS (5/3 units)

BUILDING ELECTRICAL SYSTEMS (2/3 units)

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

GENERAL ARCHITECTURAL DESIGN (2/3 units)

MAJOR QUALIFYING PROJECT (1 unit) (Note 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: 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 3025, 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.