ROBOTICS ENGINEERING MAJOR
Program Tracking Sheet
Effective for students entering 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 (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, DEV, 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 (7/3 units) Courses with prefix: MA
Must include Differential and Integral Calculus, Differential Equations, Linear Algebra, and Probability

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 2071 (Lin Alg)			1/3
22	MA 2621/2631 (Probability)			1/3

BASIC SCIENCE (4/3 units)
PHYSICS (2/3 unit) Courses with prefix: PH

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

OTHER SCIENCE (2/3 unit) Courses with prefix: BB/CH/GE/PH

25				1/3
26				1/3

ENTREPRENEURSHIP (1/3 unit)

27	ETR 1100/3633/Other			1/3

SOCIAL IMPLICATIONS (1/3* unit)
At least 1/3 unit of Social Implications in Technology (CS3043, GOV2302, GOV/ID 2314, RBE 3100)

43				1/3

ENGINEERING SCIENCE AND DESIGN (6 units)**
ROBOTICS ENGINEERING (5/3 units)
Must include at least 5/3 units in Robotics Engineering, including RBE 2001, 2002, 3001, 3002 or equivalent. RBE 3100 may not be used to fulfill this requirement.

28	RBE 1001†(Intro Robotics)			1/3
29	RBE 2001 (Unified Robotics 1)			1/3
30	RBE 2002 (Unified Robotics 2)			1/3
31	RBE 3001 (Unified Robotics 3)			1/3
32	RBE 3002 (Unified Robotics 4)			1/3

COMPUTER SCIENCE (1 unit)
At least 1 unit in Computer Science, including Object-Oriented Programming and Software Engineering

33	CS 1101/1102 (Intro Pg Des)			1/3
34	CS 2102 (Object Oriented)			1/3
35	CS 3733 (Software Eng)			1/3

ELECTRICAL AND COMPUTER ENGINEERING (2/3 unit)
At least 2/3 unit in Electrical and Computer Engineering, including Embedded Systems. ECE 2010 is a recommended course for RBE majors, but not required

36				1/3
37	ECE 2049 (Embedded Sys)			1/3

ENGINEERING SCIENCE (2/3 unit) Course with prefix: ES
At least 1/3 unit in Statics and 1/3 unit in Controls

38	ES 2501 (Statics)			1/3
39	ES 3011/ME3703 (Controls)			1/3

ENGINEERING SCIENCE AND DESIGN ELECTIVES (1 unit)
At least 2/3 unit must be at the 4000 level or higher.

40				1/3
41				1/3
42				1/3

MAJOR QUALIFYING PROJECT (1 unit)

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

** If GOV 2302, or GOV/ID 2314 are double-counted as meeting the Social Science Requirement and the Social Implications Requirement, then the Distribution Requirements total 10 units, otherwise the Distribution Requirements total 10 1/3 units.*

*** Specific courses listed above are given as examples only. Alternatives exist for all requirements, including equivalent courses, independent study/project work, experimental courses and graduate courses.*

† Students entering with a strong robotics background should substitute a more advanced RBE course.