

**BIOMEDICAL ENGINEERING MAJOR**  
**Program Tracking Sheet Based on AY 2013-14 Degree Requirements and Course Offerings**

Name:	Class Year:
Advisor:	2 <sup>nd</sup> Major:

NOTES: Minimum total academic credit = 15 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
<b>Humanities Elective</b>				
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 (2/3 unit)**

13				1/3
14				1/3

**MATHEMATICS (6/3 units)**

Must include Differential and Integral Calculus, Differential Equations and Statistics.

15	MA 1021: Calculus I			1/3
16	MA 1022: Calculus II			1/3
17	MA 1023: Calculus III			1/3
18	MA 1024: Calculus IV			1/3
19	MA 2051: Diff. Eq.			1/3
20	MA 2610: Statistics I			1/3

**COMPUTER SCIENCE (1/3 unit)**

1/3 unit in basic computer programming (CS 1101, CS 1102, or equiv)

21				1/3
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**BASIC SCIENCE (7/3 units)**

**BIOLOGY (2/3 unit)**

At least 1/3 unit of BB coursework must be 2000+ level.

22				1/3
23				1/3

**CHEMISTRY (2/3 unit)**

24	CH 1010: Chem I			1/3
25	CH 1020: Chem II			1/3

**PHYSICS (2/3 unit)**

26	PH 1110: Mechanics			1/3
27	PH 1120: Electricity			1/3

**SUPPLEMENTAL SCIENCE (1/3 unit)**

1/3 additional unit from BB, CH, PH or FY courses that satisfy BB, CH, or PH

28				1/3
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**BIOMEDICAL ENGINEERING AND ENGINEERING (14/3 units)**

**ENGINEERING 2000+ LEVEL (3/3 unit)**

29				1/3
30				1/3
31				1/3

**ENGINEERING 3000+ LEVEL (2/3 unit)**

32				1/3
33				1/3

**BIOMEDICAL ENGINEERING (9/3 unit)**

**Biomechanics or Biofluids (1/3 unit)**

2000+ level

34				1/3
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**Biomaterials or Tissue Engineering (1/3 unit)**

2000+ level

35				1/3
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**Biosensors or Bioinstrumentation (1/3 unit)**

2000+ level

36				1/3
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**Experimental Measurement and Data Analysis (1/3 unit)**

2000+ level

37				1/3
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**BME Laboratories (2/3 unit)**

3000+ level (four 1/6 unit labs)

38				1/6
				1/6
39				1/6
				1/6

**BME Engineering with Living Systems Laboratory (1/3 unit)**

40	BME 3111 or equivalent			1/3
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**BME Design (1/3 unit)**

41	BME 3300 or equivalent			1/3
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**BME Elective (1/3 unit)**

42				1/3
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**MAJOR QUALIFYING PROJECT (1 unit)**

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

**Notes:**

- i. 2/3 unit in BME must be at or above the 4000 level, of which 1/3 unit must be at the 4000 level .
- ii. Only 1/3 unit may be ISP (syllabus and final report required)