

PROGRAM OF STUDY FOR THE S.B. DEGREE IN ENGINEERING SCIENCES\*

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

COLLEGE ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

CLASS: \_\_\_\_\_ E-MAIL ADDRESS: \_\_\_\_\_

HONORS ONLY: 20 half courses. Harvard College requires a total of 32 half courses for graduation. The S.B. Program requires 20 half courses (see below). In addition, students must take 7 courses for the Core Curriculum (see Handbook for Students) and must meet the language and expository writing requirements.

1. REQUIRED COURSES	GRADES
a. Mathematics 1a	_____
Mathematics 1b	_____
Applied Mathematics 21a	_____
(or Mathematics 21a or 23a)	
Applied Mathematics 21b	_____
(or Mathematics 21b or 23b)	
b. Physics 11a (or 15a or 16)	_____
Physics 11b (or 15b)	_____
c. Life Sciences 1a	_____
Physical Sciences 1a	_____
d. Computer Science 50	_____
e. <i>Electronics</i> : One half course from the following: Engineering Sciences 154, Computer Science 141 or Physics 123.	
_____	_____
f. <i>Mechanics</i> : One half course from the following: Engineering Sciences 120, 123, or 125.	
_____	_____
g. <i>Materials</i> : One half course from the following: Engineering Sciences 181, 190, Physics 143a, Chemistry 160, or Applied Physics 195.	
_____	_____

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\* By vote of the S.B. Committee, June 11, 1985, "Proposed programs with more than three courses from an outside institution will not ordinarily be approved".

h. *Applied Mathematics*: One half course from the following:  
Applied Mathematics 105a, 105b, 106, 107, or 111.

\_\_\_\_\_

i. *Probability and Statistics*: One half course from the following:  
Engineering Sciences 101, 102, 150, or Statistics 110.

\_\_\_\_\_

j. *Engineering Design*: Engineering Sciences 96 and 100 or 100hf.  
Engineering Sciences 96 \_\_\_\_\_  
Engineering Sciences 100 or 100hf \_\_\_\_\_

k. At least four additional half courses chosen to develop an area of specialization  
(see 5a-d of Fields of Concentration for guidelines):  
(Circle One)

- i. Biomedical Sciences and Engineering (bioengineering – mechanical, electrical, or chemical and materials tracks)
- ii. Electrical Engineering and Computer Science
- iii. Environmental Sciences and Engineering
- iv. Mechanical and Materials Science and Engineering

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Adviser recommends approval: \_\_\_\_\_ Date: \_\_\_\_\_  
Signature

Please indicate if a petition is needed:      Yes      No

Committee on Undergraduate Studies approval:

\_\_\_\_\_ Date: \_\_\_\_\_

**9/06      PLEASE RETURN TO ACADEMIC OFFICE - PIERCE HALL 110**

**ABET DISTRIBUTION REQUIREMENT FOR THE 20 REQUIRED COURSES**

DATE: \_\_\_\_\_

NAME: \_\_\_\_\_

CLASS: \_\_\_\_\_

NOTE: S.B. Program in Engineering Sciences should contain 8 half-courses in mathematics and basic sciences and 12 half-courses in engineering topics (engineering sciences and engineering design)

**\*Circle only if taken at Harvard. If not taken at Harvard, circle at bottom of next page.**

**COURSES**

<b>REQUIRED COURSES</b> (Circle course and % for course you are taking or plan to take in each category.)	<b>Math.</b>	<b>Sci.</b>	<b>Engr. Topics</b>
Mathematics 1a*	1.00		
Mathematics 1b*	1.00		
Applied Mathematics 21a (or Mathematics 21a or 23a) and Applied Mathematics 21b (or Mathematics 21b or 23b)	1.00		
Physics 11a (or 15a or 16) and 11b (or 15b)		1.00 1.00	
Life Sciences 1a		1.00	
Physical Sciences 1a		1.00	
Computer Science 50*			1.00
<b>CIRCLE ONE</b> <i>(Electronics)</i> Engineering Sciences 154 Computer Science 141 or Physics 123			1.00 1.00 1.00
<b>CIRCLE ONE</b> <i>(Mechanics)</i> Engineering Sciences 120 Engineering Sciences 123 Engineering Sciences 125			1.00 1.00 1.00
<b>CIRCLE ONE</b> <i>(Materials)</i> Engineering Sciences 181 Engineering Sciences 190 Physics 143a Chemistry 160 Applied Physics 195		.40 .40	1.00 1.00 .60 .60 1.00

<b>REQUIRED COURSES</b> (Circle course and % for course you are taking or plan to take in each category.)	<b>Math.</b>	<b>Sci.</b>	<b>Engr. Topics</b>
CIRCLE ONE ( <i>Applied Mathematics</i> ) Applied Mathematics 105a Applied Mathematics 105b Applied Mathematics 106 Applied Mathematics 107 Applied Mathematics 111			1.00 1.00 1.00 1.00 1.00
CIRCLE ONE ( <i>Probability and Statistics</i> ) Engineering Sciences 101 Engineering Sciences 102 Engineering Sciences 150 Statistics 110	.50		1.00 1.00 1.00 .50
CIRCLE TWO ( <i>Engineering Design</i> ) Engineering Sciences 96 Engineering Sciences 100hf (or Engineering Sciences 100)			1.00 1.00
Courses for Specialization: At least four half courses Fill in % from Table III, S.B. Concentration Guidelines Booklet 1. 2. 3. 4. 5. 6. 7.			
ABET Distribution Credit for college level prerequisites completed out of residence 1. Mathematics 1a 2. Mathematics 1b 3. Computer Science 50	1.00 1.00		1.00
<b>TOTALS</b>			

