

# ME 218a Smart Product Design Fundamentals

Tues., Thurs., 11:15 am - 1:05 pm, Terman 556, 5 Units

<http://spd1.stanford.edu/>

## Personnel

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### Instructor

Ed Carryer  
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### Lecturer/SPDL Lab Manager

Matt Ohline  
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### Laboratory Coaches

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## Prerequisites

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No specific course numbers. We are assuming that everyone has had at least 1 course in circuit analysis ( Ohms law, etc.) and 1 programming course (preferably C , Pascal or other block structured language). As a result we will do only a quick review of circuit analysis, and will not try to teach you to program. We will introduce 2 programming languages, but will assume that you are familiar with basic programming constructs and methodology.

If you feel, after looking over the syllabus, that you already know the material we will be covering but are still interested in taking 218B please see the instructor after the first class meeting. ME 218A is a firm prerequisite for 218B, unless prior arrangements are made.

## Textbooks

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The Art of Electronics, second edition, Horowitz & Hill (Stanford bookstore)

Starting Forth, second edition, Brodie (Optional if you are know Forth)(SPDL)

The Art & Science of C, Roberts (Optional if you are fluent in C, same as CS106a)( Stanford bookstore)

## Grading

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<b><u>Course</u></b>	50% Labs and Project	
	50% Homework, Quizzes, and Exams	
<b><u>Homework,</u></b>	15%	Mid-Term, 10/23-10/26, Take Home
<b><u>Quizzes, and Exams</u></b>	20%	Final 12/6-12/13, Take Home
	10%	Quizzes
	5%	Homework
<b><u>Labs and Project</u></b>	6%	Lab 0
	6%	Lab 1
	6%	Lab 2
	6%	Lab 3
	11%	Lab 4
	15%	Project
<b><u>Late Policy</u></b>	1 day	90% Credit
	2 days	70% Credit
	3 days	50% Credit
	4 days	25% Credit
	>5 days	10% Credit

## Laboratory

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<b><u>Lab Fee:</u></b>	Thornton Center (Terman Annex) 201 723-7209
	Open 24Hrs./ 7 Days a week.
	Staffed by a lab coach week-nights approx. 7-10pm
	Sign-up for workstations on the SPDL web site
	Sign up on the sheets in the lab during the first week for your quarter-long guaranteed slot.
	\$75. Covers parts kit and proto-board required to do the labs.
	\$15. Covers cost of photocopying.
	Total \$90 check made payable to Stanford University
	<b>No Cash</b>
	Pay and Pick up kits and Notes in Thornton 203, No fees accepted until the class list is posted,
	<b>No lab kits issued w/o payment!</b>