



EE204: Business Management for Electrical Engineers and Computer Scientists

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ABSTRACT

Business education has become increasingly valuable for engineers in today's multidisciplinary environment. In response to this belief, we sought to assess Stanford's EE204 course as a means of providing engineering students with useful tools that they can carry into their professional careers. Taught by practitioners in business, the hands-on style of the course is intended to provide multiple levels of learning about high-tech companies, tools of successful businesses, and communication skills.

In this paper, we examine the value of providing business education to students enrolled in graduate engineering programs at Stanford. We then discuss the ways in which EE204 has been restructured for 2012 to meet course goals, following the progression from product inception to launch and evaluation, using the case-method style of teaching. The new topics for 2012 are as follows:

- Seeing the Big Picture
- Creating New Markets with Customer-Centric Thinking
- Developing Successful Products
- Going to Market and Executing the Plan
- Measuring Results
- Leading and Managing Teams

We acknowledge the growing role of multidisciplinary teams and international companies, which are reflected in the set of readings and cases selected for 2012. Students meet learning objectives for the course through readings, participation in in-class discussions, and written assignments. The content of the course is intended to be relevant both to students planning to work for large companies after graduation, and to those planning to start their own companies.

We present the course goals and the development of the curriculum to meet these goals. We then examine the course structure, elaborating upon the main topic areas and describing activities and assignments, as well as the standards by which students are evaluated. Finally, we discuss the implications of EE204, and business education for engineers in general, including the possibility of a joint or dual degree between Electrical Engineering and the Graduate School of Business.

PART I – COURSE GOALS AND DESIGN

Course Goals

Engineering as a discipline is being repositioned in business as a multidisciplinary function requiring broad perspective and awareness. As an example, product development is no longer a sequential process in which the product is specified by the marketing department, then built by the engineering department (or vice versa). Rather, product teams today comprise people from marketing, sales, and engineering, who participate together in the design of a product and the discovery of new markets in an iterative process. This new framework is currently implemented in many large high-tech companies including Cisco, Hewlett-Packard, Apple, and Google. In order for engineers to be prepared for this new multidisciplinary environment, they must understand the functional roles of other team members and how these roles are integrated to achieve business objectives.

EE204 (formerly EE353) focuses on understanding the fundamental activities of businesses worldwide and how to manage them. Successfully performing these activities and producing innovative results requires leadership, teamwork, and integrating the many functional disciplines of business including R&D, Marketing, Finance, Manufacturing, Accounting, and Human Resources. Based upon the belief that engineering students must acquire an understanding of the multidisciplinary team, we have restructured the course for 2012, building upon the traditional heritage of functional categories and transitioning to a more action- and team-oriented approach.

We have identified three main learning objectives for the course. First, students should gain context for thinking critically about tech companies and the tech industry. Our hope is that this will additionally promote intellectual curiosity in business management in particular. Second, the course gives students an opportunity to refine their reading, writing, and especially speaking abilities—skills that may be under-emphasized elsewhere in the engineering curriculum. Finally, the course serves as a networking and community-building opportunity for students. The emphasis placed on in-class participation and teamwork provides students with opportunities for personal interaction not found in larger lecture courses.

Designing a Curriculum to Meet Course Goals

EE204 uses the tools of business teaching (the case method) and applies them in a hands-on process focused on problem solving. Taught by practitioners, the course is grounded in real-world business topics. Because EE204 is the only case-method course its students may encounter in their engineering curriculum, it is designed to build broad awareness of business and management concepts, and to promote the interdisciplinary mindset stated earlier. Topics are introduced in readings assigned for each class meeting. Each reading is paired with a case study, which provides an illustrative example of the topic at hand.

The case method of management instruction is based upon the belief that management is a skill. The best way to learn this skill is to experience it through a team simulation as opposed to a traditional lecture format. Each class session is conducted as a business

meeting. The objective of each meeting is to determine the best course of action and its implementation for the assigned case study. The collective knowledge and reasoning of the class determine the outcome of each session.

We have identified three levels of student engagement that promote the aforementioned learning objectives for the course. On the first, most basic level, students can read only the assigned cases. Each case is informative in its own right, and each provides useful information on a high-tech company. Assigned readings add a second level of learning. The readings provide basic tools and principles to apply to business problems, and have been paired with their respective cases in order to direct students' attention to a particular set of issues in each case. To facilitate this second step, we develop a set of study questions tailored to each reading-case combination, which students reflect upon in preparation for class. The third and most important step is verbal communication. Through discussion and teamwork, students learn to form and articulate detailed and organized analyses of the readings and cases. Students also learn to give and respond to criticisms and questions that arise as part of the class discussion.

Students will likely receive a passing grade by reading only the cases and participating minimally in class. However, our hope is that the broad range of topics, combined with a challenging but non-threatening classroom environment, encourages all students to fully realize all three learning objectives for the course.

In order to clarify the learning objectives, it was equally important for us to identify what we are not trying to accomplish in EE204. First and foremost, the course seeks to provide a broad introduction to a number of topics, rather than a deep exploration of a single area. To this end, EE204 is not a course on entrepreneurship, nor is it a guide on how to start a company. Stanford already offers numerous courses and seminars on this topic (e.g. EE203, ENGR245, MS&E71SI, and MS&E472). Second, because this is an Electrical Engineering course, assigned cases have typically focused on high-tech companies, and not on consumer products or even biotech. Third, while the topic of career planning is present throughout the quarter, this is not a course devoted to career planning. Finally, EE204 is not a course on writing style. Even though two-thirds of students' grades are based upon written assignments, grading of these assignments is done using a content-based metric, emphasizing inclusion of main points over finer stylistic details.

Course Listing and Students

EE204 fulfills a breadth requirement for Stanford's MS degree in Electrical Engineering (listed under "General Breadth"), and also counts as an elective course for the MS in Computer Science. The specific focus of these particular graduate-level programs underscores our motivation to both take advantage of students' strong technical backgrounds, and to be aware that our student base is composed of engineers and not business-school students. We thus recognize the need to teach business concepts to a population who may have no prior exposure to the subject matter or a participation-based classroom setting.

Graduate standing is the only eligibility requirement for EE204. The course is geared toward students who are about to enter the work force or who want to broaden their

career interests. Versions of the course could of course be created for undergraduates or even advanced high-school students, with different emphasis and material. But EE204 is tailored toward the high end—specifically for students who have chosen to pursue graduate studies in engineering to pursue careers in engineering fields. The student demographic tends to comprise mainly Electrical Engineering and Computer Science students, but the course does attract students from a wide range of academic departments not limited to the School of Engineering. Year of study ranges from first-year Masters to TGR PhD Candidates.

Preliminary feedback from former students has led us to identify two main motivations, beyond fulfilling degree requirements, for taking EE204. The first applies to students who intend to pursue careers with established tech companies after graduation. For students in this category, EE204 provides a useful supplement to their technical education by providing a wider framework through which to evaluate future employers, understand what business they are in, and to engage in a multidisciplinary approach in their initial job assignments. Students also gain exposure to the role of management, which, it has been reported, has led some to expand their own career goals to include the possibility of management roles.

The second motivation is entrepreneurship. For students in this category, the goal is to work for or even establish their own start-up company. These individuals report that EE204 provides useful information on how to build a company; the framework and structure of successful companies; and in particular what is essential for success beyond the product or service being developed. Students from both groups have described EE204 as an “engineering MBA in one quarter.”

PART II – COURSE CONTENT

Revisions for 2012

The 2012 EE204 course curriculum has undergone major revisions from the previous year. First, we have expanded the scope of the course material to include two new topic areas of increasing significance in today’s business landscape. First is the multidisciplinary approach mentioned earlier. This approach is necessary in order to solve today’s problems; we encourage it in our student population for the class, and it is hopefully reflected in the readings and study questions for 2012. Second, we have increased our focus on international issues and companies, with three classes devoted entirely to international topics and a wider representation of international companies in this year’s case collection. Exhibit 1 displays statistics on the course material for 2011 and projected for 2012.

In light of these new topic areas, and in order to structure the course around a more flow-oriented business perspective, we have re-worked the high-level topics of the course [Exhibit 2]. The standard categories from previous years (e.g. Strategy, Finance, Product Development) have been revised to follow more the action-oriented process of conceiving, developing, and launching products.

The course will follow the following sequence of topics for 2012:

(1) Seeing the Big Picture

We have added this introductory component to the course in order to provide students with a meta-framework for subsequent topic areas. In this section, students familiarize themselves with the case method and become accustomed to preparing assigned readings in advance and participating in class discussions. Seminal readings on strategy and competitive forces are paired with cases examining wide-ranging topics and implications. This section includes an evening team-building reception, held during the second week of class.

(2) Creating New Markets with Customer-Centric Thinking

The second portion of the course focuses on potential markets—a key component of successful product development, but one that may be overlooked completely by product-driven companies. Topics include the innovator’s dilemma, introduction to financial statements, emerging markets, and marketing myopia—paired with illustrative cases. In this section, students also complete their first team activity, a Harvard Business School simulation on strategic innovation.

(3) Developing Successful Products

Product development extends beyond features of the device or service. We consider here such topics as the innovation ecosystem, the discipline of innovation, global product development, venture capital, and patents. This period also includes the first written assignment and mid-quarter participation feedback and evaluation.

(4) Going to Market and Executing the Plan

A natural continuation of product development is product launch. In this section, we cover marketing challenges, branding, and sales. The student-written CaseWiki takes place during this section of the course.

(5) Measuring Results

EE204 is not an accounting class, but we do include accounting in the course so that students acquire a basic vocabulary for measuring performance and results. In this single-session module, students use basic knowledge of accounting acquired initially in their introduction to financial statements in section (2), and subsequently built upon in their analysis of case exhibits.

This section departs from the prevailing reading/case framework of other class meetings and compels students to examine real-world SEC readings and public information in order to evaluate and compare performance of competing companies. Students perform a side-by-side comparison of two large tech companies using freely available information. The goal of this exercise is for students to learn (a) that within a given industry, there exist performance metrics unique to that industry, and (b) how to measure, relative to those metrics, the performance of a given company.

(6) Leading and Managing Teams

Operational effectiveness and focus is a theme underlying the entire curriculum of EE204. Specifically, it is emphasized in every class discussion as students are challenged to take on the mindset of the decision maker or team member. The final section of the course brings together all foregoing course content, culminating in both the final written assignment and a class reception, which takes place after the final meeting. The final class session devotes time to cultivating students' personal strategies for career advancement.

Course Materials and Assignments

Selection of the final set of topics, readings, and cases for 2012 was an iterative process. From one perspective, we sought to provide a new thematic framework for organizing the course. From another perspective, we undertook an open-ended exploration of the Harvard Business Publishing catalog, searching both by broad topic (e.g. "emerging markets", "innovation") and also by names of companies whose activities we thought might be relevant to the course. In all, we considered over one hundred possible cases and readings. A preliminary set was chosen based upon the following criteria: Potential fit in the course; quality and clarity of the case; and current relevance/recent publication. As main topics for the course solidified, we launched additional searches for appropriate course material.

Exceptional readings and cases, too, exerted influence on the course's overall structure. For example, new cases and readings on emerging markets and branding challenges in Asia were so compelling that room was made for them in the course schedule. Other cases were brought in as up-to-date complements to canonical readings. Special attention was paid to cases judged appropriate for one of the written assignments; as the due dates for these assignments are fixed in the schedule, it was sometimes necessary to reorganize a particular topic area in order to accommodate an especially pertinent case. Exhibit 1 includes statistics on case replacement for 2012.

Readings and Cases

Students are generally assigned one reading and one case for each class meeting. Exceptions include occasional short supplementary readings, and no readings assigned on the meetings for the CaseWiki and final written assignment. Students are expected to complete all readings, answer the study questions, and ideally meet with their team before each class meeting. Exhibit 3 contains the projected schedule of topics, cases, and readings for 2012.

Simulation

During the third week of class, students participate in the Back Bay Battery simulation on strategic innovation. This simulation gives students hands-on learning experience as they invest in disruptive technologies. Additionally, as the first team activity of the quarter, it serves as a useful team-building experience. The team whose investments yield the highest profit at the end of the stimulation receives extra credit, presents their investment strategy to the class, and is taken out to dinner as a reward.

Team Paper I

The first team paper is due at the end of Week 5 of the course. It is placed in the product development section, and for this year, is projected to cover a case on global product development. Teams of four to six students collectively produce and submit a single paper. The primary task of solving a problem is supplemented by the challenge for teams to incorporate contributions from all team members, reach a consensus, and organize and present all relevant points within the five-page limit.

In 2011, each team briefly summarized and presented the main points of their strategy to the class. This year we are adding, as part of the requirements for exhibits, a five-slide presentation that one would present to the company in the case. We will ask teams to volunteer to present their slides to the class for extra credit. Teams who score highest on the paper overall are treated to dinner.

Team Paper II

The second team paper serves as a culmination of the course. We choose for this paper a case that is larger in scope, and possibly more challenging to read, than previous cases. Students complete this paper in teams of two, again incorporating five slides intended for the company in the case. We will ask for volunteers to present slides in class for extra credit.

CaseWiki

The CaseWiki takes place over the weekend following Week 7 of the course. For this assignment, class members voluntarily and collaboratively write a case on a single company over the course of 48 hours. Collaboration takes place on an online wiki. The wiki begins as a very sparse outline of the case. The students create details of the structure, as well as all content. Students create anonymous logins and their contributions are tracked by our implementation system. The top five contributors receive extra credit and are hosted to lunch by the sponsoring company. The sponsoring company may also cover the costs of all students' reading material as a token of appreciation. The finished case is the case of focus for the next class meeting, and members of the sponsoring company attend the class in order to observe the discussion.

The CaseWiki is not a required assignment, but it offers significant extra-credit incentives to the top performers.

Grading

Students' grades are broken down as follows: 1/3 for participation and 1/3 for each of the two written assignments, with possible adjustment for extra credit.

Participation

The first component of the participation grade is attendance. Because of the interactive nature of the case method, and out of respect for other students, attendance and punctuality are mandatory. We understand that students face numerous scheduling commitments throughout the quarter, so under certain circumstances students are allowed to miss up to two classes without negatively affecting their grade. Students must follow set guidelines when missing a class.

The second component is classroom discussion. Students are expected to prepare for each class meeting and to actively participate throughout each meeting, contributing to the quality of the discussion. However, the frequency with which one speaks in class is not the key criterion for effective class participation. Rather, we use a set of five criteria for measuring effective class participation, which we review in detail with the class at the first class meeting. Exhibit 4 displays the metric for evaluation of in-class comments.

In addition to quality of comments, students are evaluated on their ability to participate effectively in classroom discussions, as they would in a business context. Criteria include acknowledging students whose comments are being responded to; politeness; cogency; waiting to be called on to speak; and refraining from hand-raising while their colleagues are speaking (i.e. effective listening before speaking).

Written Assignments

Students complete two written assignments, each given equal weighting. The first is completed midway through the course in teams of four to six students; the second is the final paper completed in teams of two. Each paper is a written analysis of an assigned case. The task is to recommend and justify a course of action using only the information given in the case, along with any other assigned cases and readings encountered previously in the course. Students are limited to five pages for the body of the paper, and are encouraged to create exhibits to illustrate their points (exhibits do not count toward the page limit).

So that expectations for the written assignments are as clear as possible, we provide thorough online documentation detailing both the guidelines and grading criteria for the papers. Students are graded on (a) Problem statement and recommended actions; (b) Analysis; (c) Exhibits; and (d) Overall criteria. As stated earlier, we do not grade on writing style; we do specify that the papers should be proofread and should be of the same quality one would provide to an actual manager in the company at hand.

Final Grading and Distribution

Final grades are assigned according to a fixed algorithm incorporating grades for participation and written assignments [Exhibit 5]; we do not assign final grades using a grading curve. The main implication of this practice is that grades provide an absolute measure of students' performance throughout the quarter, meaning that we can additionally use the distribution of final grades to evaluate our own performance in structuring and implementing the course, then make adjustments and improvements accordingly [see Exhibit 6 and Exhibit 7 for final grade distributions from 2011 and 2010, respectively]. For example, 2011 was the first year that we allowed the final paper to be completed in teams of two, and we saw overall performance on that assignment increase significantly. We are also incorporating feedback on the simulation exercise into our consideration of its continued use in coming years. Our goal is to have all students performing as well as possible, and to that end we structure the course in a way that best promotes learning and success.

Extra Credit

EE204 offers opportunity for extra credit. These options enable students to explore a topic of personal interest in greater depth. Additionally, they provide students with a chance to improve grade deficiencies due to, for example, inadequate classroom participation. To this end, much of the extra credit is centered on in-class presentations. As stated above, students may volunteer to present slides summarizing a written assignment. For 2012 we are also introducing the option of students giving short presentations on relevant current events. Extra credit is rewarded to top performers on the simulation and CaseWiki.

The amount of extra credit rewarded varies from task to task. The CaseWiki awards the highest amount, pushing borderline students into the next grading bracket for their final grades for the quarter. Other tasks improve one or more days' worth of participation grades.

PART III – IMPLICATIONS

Providing an Effective Fit for Business Education in Engineering

EE204 is based upon an independent view of the role of business education for engineers. The course is not restricted in scope to the study of entrepreneurship, and instead takes the view that business knowledge is essential for companies small and large. This high-level view has proven to be valuable for students both beginning the job interview process and seeking to establish their own companies.

Our focus has been on the need for engineers to be exposed to business education. But the converse is true as well: Technical literacy is fundamental in management positions today. Given the growing role of technology-backed business activity—from social marketing to supply-chain management—more and more positions in industry benefit from having a technical background. It is essential to know what technology can do in order to be an effective participant and leader.

Future Initiatives

MSEE/MBA Degrees at Stanford

In our view, a promising educational opportunity exists to offer additional business courses for engineers at Stanford, including the possibility of a joint or dual degree between Electrical Engineering and Stanford's Graduate School of Business. Many such cross-departmental programs already exist at Stanford, promoting collaboration among, for example, GSB, Law, Medicine, and Design [see Exhibit 8 for selected dual and joint degrees for engineers at Stanford]. These disciplines already recognize the advantages of offering their students a multidisciplinary education. From our standpoint, a natural implication is the possibility of a joint or dual degree between the Stanford GSB and Electrical Engineering department.

There is much research that needs to be done on this topic. First, courses already offered through Stanford's engineering departments must be carefully examined in order to determine whether there is in fact an unmet need for students seeking a strong foundation

in both engineering and management. Second, one must determine whether a joint degree—single courses counting toward both degrees—or dual degree—single courses counting toward only one degree or the other—would be most appropriate and effective for an MSEE/MBA education. Finally, research into similar offerings at other top engineering universities may provide useful information on the implementation of a joint or dual MSEE/MBA venture at Stanford.

Case Writing

Writing cases, as opposed to reading and analyzing existing cases, is introduced in the CaseWiki assignment for EE204. We feel that this single instance of case writing is sufficient for the course given its fit into the aims of EE204, and have no plans to incorporate more case writing into the curriculum. However, depending on interest in the topic, we are exploring the possibility of pursuing small-group case writing by students, independently of EE204.

Assessment of Benefits of EE204

Over the years, EE204 has received an excellent response rate for feedback on the course, which is given by students at the end of the quarter in which they are enrolled. We use this feedback to make improvements on both the teaching and the content of the course. In the broader sense, though, assessment of the strengths and weaknesses of EE204, and business education of engineers in general, might be done better after students have finished their graduate education and entered the work force. To this end, we plan to begin contacting working course alumni and conducting brief interviews. In addition to obtaining feedback on EE204 in particular, we seek to assess their current positions on business education for engineers, as well as what they feel is necessary for engineering students to contribute successfully to their fields in a business environment.

Distance Learning

One objective of EE204 is to share the learning experience of its curriculum with the broadest possible base of students. The material is chosen to reflect the global interdependence of 21st-century business and to enhance the relevance to our students around the world. Business problems in the 21st century require mastering distance collaboration skills.

Class sessions of EE204 in 2011 were videotaped with the possibility of future offerings to enrolled distance-learning students through the Stanford Center for Professional Development (SCPD). We are currently researching possible models for conducting EE204 as a distance course.

EXHIBITS

Exhibit 1: Statistics on Readings and Cases, 2011/2012

	2012		2011	
	#	%	#	%
Total Number of Readings	17		18	
Total Number of Cases	17		17	
New Readings	8	47.1	NA	NA
Reused Readings	9	52.9	NA	NA
New Cases	13	76.5	NA	NA
Reused Cases	6	35.3	NA	NA
Hardware Cases*	13	76.5	12	70.6
Software Cases	5	29.4	8	47.1
International Cases	7	41.2	5	29.4
Silicon Valley Cases	6	35.3	10	58.8
HBS Cases	9	52.9	12	70.6
HBS/HBR Readings	13	76.5	17	94.4
# Pages - Readings	213	39.5	227	36.9
# Pages - Cases (including exhibits)	326	60.5	389	63.1
# Pages - Total	539		616	

* Some cases fit under both hardware and software.

Exhibit 2: Topic Areas, 2011/2012

2012	2011
Seeing the Big Picture	Introduction
Creating New Markets with Customer-Centric Thinking	Strategy
Developing Successful Products	Financial Analysis
Going to Market and Executing the Plan	Product Planning & Marketing
Measuring Results	Product Development
Leading and Managing Teams	

Exhibit 3: Projected Topics, Readings, and Cases, 2012

Week	Date	Reading	Case	Notes
Seeing the Big Picture				
1	4/3/12	Note to the student: How to study and discuss cases	Kindle Fire	
	4/5/12	What is strategy?	Google	
2	4/10/12	The five competitive forces Product lifecycle Price/features matrix	Wii encore	Team building reception - Stanford Faculty Club
Creating New Markets with Customer-Centric Thinking				
	4/12/12	Innovator's dilemma Order of magnitude analysis	Dropbox	Introduce simulation
3	4/17/12	Financial statements: The elements of managerial finance	Financial statement analysis: Identify the industry	
	4/19/12	Finding great ideas in emerging markets	LG	
4	4/24/12	Marketing Myopia Rule of 72	Entrepreneurs at Twitter	Simulation results & presentation
Developing Successful Products				
	4/26/12	Match your innovation strategy to your innovation ecosystem	HP: Flight of the Kittyhawk (A)	
5	5/1/12	The discipline of innovation	Samsung Electronics	
	5/3/12	The practice of global product development	Gold Peak Electronics	Written assignment I due
6	5/8/12	How venture capital works	Nantero	Mid-quarter participation feedback Mid-course evaluation
	5/10/12	Patent Sharks	Intellectual Ventures	
Going to Market and Executing the Plan				
7	5/15/12	Note on marketing strategy Marketing analysis toolkit: Breakeven analysis	Emotiv	
	5/17/12	Branding challenges in Asia	Asus	
8	5/22/12		TBD	Student CaseWiki report
	5/24/12	Selling as a systematic process	Siebel Systems: Anatomy of a sale	
Measuring Results				
9	5/29/12	SEC readings and public information	[Google vs. Apple]	
Leading and Managing Teams				
	5/31/12		Nissan	Written assignment II due
10	6/5/12	What's your personal social media strategy Creating a personal brand	A bomb in your pocket: Nokia India	Class party - California Café

Exhibit 4: Evaluation Metric for In-Class Comments

1	Is the comment clear and relevant to the current discussion?
2	Does the student support and comment well using case facts and tools developed in the class?
3	Does the student explore all the implications and the importance of the comment?
4	Is the comment insightful? Does it broaden the discussion and clarify the issues?
5	Are the comments complete and concise? Do they cover the point as well as possible in as few words as possible?
I	Average comment satisfies (1) and part of (2).
II	Good comment satisfies (1) - (3).
III	Excellent comment satisfies (1) - (5).

Exhibit 5: Algorithm for Final Grades

Grade	Criteria
A+	Any two of the following: Paper I score of 20; Paper II score of 20; 3 rating in classroom participation
A	{Paper I score of 20 or Paper II score of 20} and 2 rating in classroom participation
A	{Paper I score of 19 or Paper II score of 19} and 3 rating in classroom participation
A-	{Paper I score of 19 or Paper II score of 19} and 2 rating in classroom participation
A-	{Paper I score of 18 or Paper II score of 18} and 3 rating in classroom participation
B+	{Paper I score of 18 or Paper II score of 18} and 2 rating in classroom participation
B+	{Paper I score of 17 or Paper II score of 17} and 3 rating in classroom participation
B	Remainder

Exhibit 6: Final Grade Distribution, 2011 (46 Students)

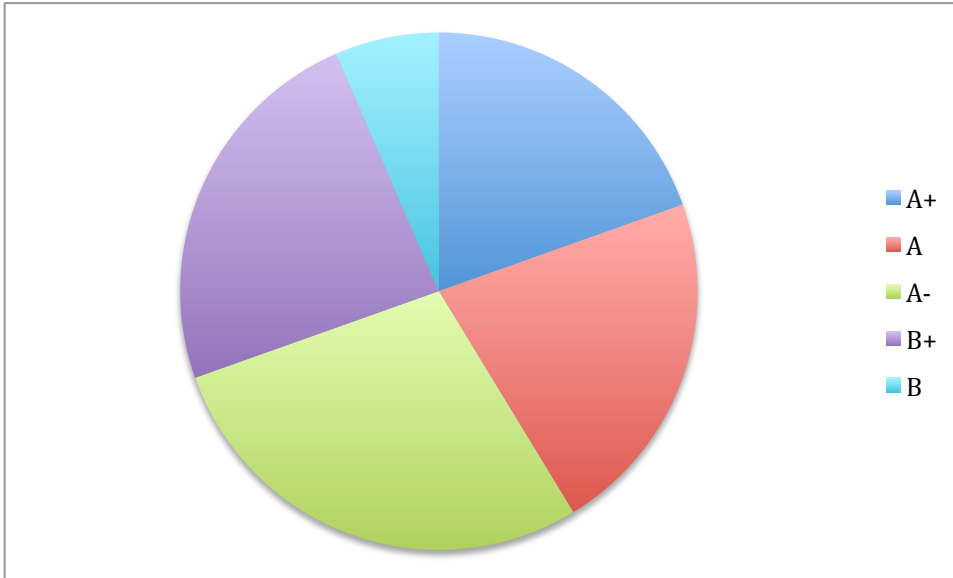


Exhibit 7: Final Grade Distribution, 2010 (47 Students)

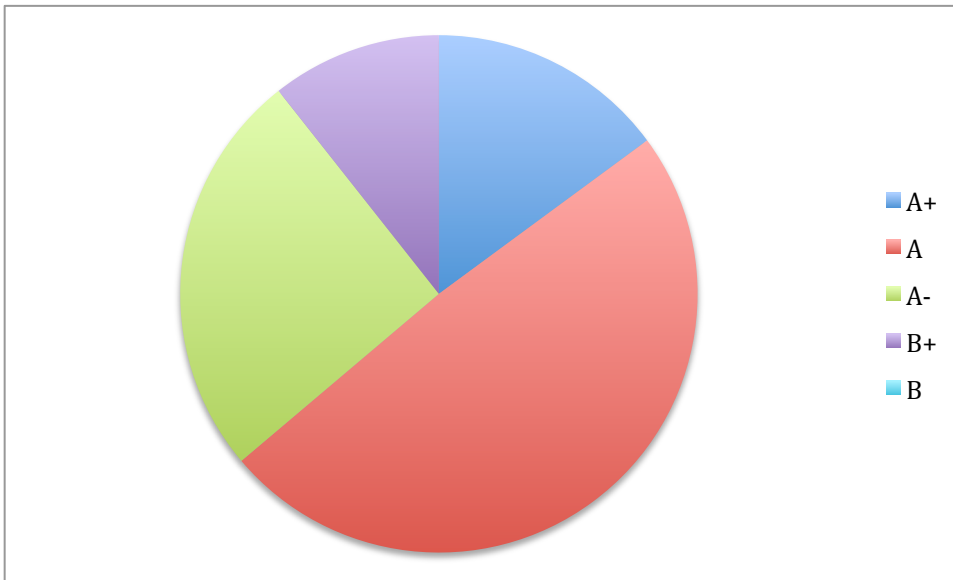


Exhibit 8: Stanford Engineering Dual and Joint Degrees

External School	Degree	Engineering Dept.	Degree	Type
Graduate School of Business ¹	MBA	Bioengineering	MS	Dual
Graduate School of Business	MBA	Environment & Resources	MS	Joint
School of Law ²	JD	Bioengineering	MS, PhD	Joint
School of Law	JD	Computer Science	MS	Joint
School of Law	JD	Electrical Engineering	MS	Joint
School of Law	JD	Environment & Resources	MS, PhD	Joint
School of Law	JD	Management Science & Engineering	MS, PhD	Joint
School of Medicine ³	MD	Bioengineering	PhD	Joint
School of Medicine	MD	Biomechanical Engineering	PhD	Joint

¹ http://www.gsb.stanford.edu/mba/academics/joint_dual_degrees.html

² http://www.law.stanford.edu/program/degrees/joint/#joint_degrees

³ http://med.stanford.edu/combined_degree/